European Commission

Studies to support the development of sea basin cooperation in the Mediterranean, Adriatic and Ionian, and Black Sea

CONTRACT NUMBER

MARE/2012/07 - REF. NO 2

REPORT 1 - ANNEX 2.7

COUNTRY FICHE

ITALY

JANUARY 2014

EUNETMAR
European Networking Group for Integrated Maritime Policy

COGEA
Consulenti per la Gestione Aziendale

Poseidon Aquatic Resource Management Ltd

AND International

azti tecnalia

Alma Mater Studiorum Università di Bologna

Eurofish International Organisation

Centro Tecnológico del Mar

Contents

0. General overview

Morphological structure of the coastline

- Italy has a coastline of 9.136 km which constitutes 6,7% of the total coastline length of the EU-22 coastal.
- The country's coastal zone (within a range of 10 km from the coast) covers 47.267 km^2, representing 11,4% of the corresponding EU's coastal area.
- Coastal region[1] is 181.289 km^2, which is approximately 10% of EU coastal region, while the Italian coastal region is approximately 60% of the national territory.
- As regards islands, besides the two major islands (Sardinia and Sicily), several other islands and archipelagos are scattered along Italian coasts, which can be grouped in 15 main archipelagos. In general, among hundreds of islands, 77 of these are inhabited (ISTAT-CENSUS, 2001).

Population and related social condition for maritime areas

- Total population of Italian coastal regions (coastal NUTS 3) consisted approximately of 33,5 million inhabitants in 2011, which is 55% of Italian population.
- Persons employed in coastal NUTS 2 (age 20-64) cover around 70% of total persons employed in Italy. On the other hand, employment rate in coastal regions is lower than Italy as a whole (around 58% against 61% in 2012), sensibly affected by low employment rates of southern regions.
- Unemployed persons in Italian coastal NUTS 2 cover around 80% of the total unemployed persons in Italy. Unemployment rate in coastal NUTS 2 was 11,86% in 2012, vs. 10,4% in Italy as a whole. With respect to 2011, strong increases of unemployment rates were registered in 2012 for coastal NUTS 2 and in general in Italy. However, this increase was mostly registered by coastal regions, whose unemployment grew almost by 4 points vs 2 points at national level.

Economic role of maritime areas over the national total

- In 2010, GDP per capita in coastal NUTS 3 amounted to more than EUR 21.000, lower than national total, accounted to more than EUR 25.000.
- In 2010, more than 48 % of the National GDP originated from coastal NUTS 3.

NACE Sector	GVA (million EUR)		Employment (in 1000 persons)	
	Coastal areas	% on Country total	Coastal areas	% on Country total
Agriculture, forestry and fishing	16.611	63,1%	621,4	63,8%
Manufacturing	84.278	38,9%	1.625,3	36,3%
Construction	48.530	56,0%	1.006,8	52,5%
Wholesale and retail trade; transport; accommodation and food service activities; information and communication	181.335	53,2%	3.418,8	52,3%
Total NACE	**727.357**	**53,1%**	**12.472,2**	**50,6%**

Source: elaboration of EUROSTAT data

[1] According to EUROSTAT definition, an EU coastal region is a statistical region of the European Union (EU), at NUTS level 3, defined according to one of the following criteria: (i) the region has a sea border and (ii) the region has more than half of its population within 50 km from the sea and (iii) the Hamburg region has been included. See the following link: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Coastal_region

1. Marine and maritime activities

Table 1–Indicators of relevant marine and maritime activities in Italy

Function/activity		GVA (EUR, billion)	Employment (*1000)	Number of enterprises	Further indicators	Source & Reference year
0. Other sectors						
0.1	Shipbuilding and ship repair	1,45	38,4	3.666	----	EUROSTAT (2010)
0.2	Water projects	0,5	8,2	434	270 ports	EUROSTAT (2010)
1. Maritime transport						
1.1	Deep-sea shipping	0,91	12,2	661 (only water transport activities).	93 million tonnes transported (23% of maritime transports)	EUROSTAT (2010)
1.2	Short-sea shipping (incl. Ro-Ro)	3,05	40,9		311 million tonnes transported (77% of maritime transports)	EUROSTAT (2010)
1.3	Passenger ferry services	1,49	29,9		41 million passengers	EUROSTAT (2010)
1.4	Inland waterway transport	0,06	2,3	926	Passenger transport in Venetian Lagoon not included (100 million passengers yearly)	EUROSTAT (2010)
2. Food, nutrition, health and eco-system services						
2.1	Fishing for human consumption	3,51	111,9	9.789 fishing, 397 fish processing	224.758 tonnes of landings; 940.000 tonnes imported;	EUROSTAT, STECF, IREPA (2010)
2.2	Fishing for animal feeding	0	0	0	----	EUROSTAT, STECF, IREPA, (2010)
2.3	Marine aquaculture	0,15	4,2	754 (including freshwater aquaculture)	114.800 tonnes of production	FAO, API, JRC (2010)
2.4	Blue biotechnology	n.a.	n.a.	n.a.	----	----
2.5	Agriculture on saline soils	0,73	92,7	n.a.	Around 619.000 ha, of which 47.1000 cultivated	EUROSTAT, EEA, JRC (2010)
3. Energy and raw materials						
3.1	Offshore oil and gas	2,10	5,83	3	Offshore production of gas cover around 75% of the national total. Only marginal production of offshore oil	EUROSTAT (2010) Ministero dello sviluppo economico
3.2	Offshore wind	0	0	0	No offshore installation	----
3.3	Ocean renewable energy	0	0	0	No installation	----
3.4	Carbon capture and storage	0	0	0	3 explorations have been licensed. No concrete economic activities have been implemented	----
3.5	Aggregates mining (sand, gravel, etc.)	0	0	0	Marine aggregates are not extracted in Italy	----
3.6	Marine minerals mining	0	0	0	No marine minerals mining in Italy	----
3.7	Securing fresh water supply (desalination)	0,09	0,995	29	Italy's installed desalination capacity amounts	EUROSTAT (2010) Global water Market (2010)

Function/activity		GVA (EUR, billion)	Employment (*1000)	Number of enterprises	Further indicators	Source & Reference year
					to approximately 650,000 m³/d.	
4. Leisure, working and living						
4.1	Coastal tourism	5,34	166	53.000	Nights spent in coastal areas accounts to almost 60% of the national total	EUROSTAT (2010) Unioncamere (2011)
4.2	Yachting and marinas	0,34	10,68	711	Total GVA (including also satellite activities) amount to around EUR 5 billion and around 143.000 employed	EUROSTAT (2010) UCINA (2012)
4.3	Cruise tourism	1,49–2,11	29,9–42,4	238	----	EUROSTAT (2010), European Cruise Council (2010)
5. Coastal protection						
5.1	Protection against flooding and erosion	0,28	2,81	n.a.	Public expenditure has been estimated as a proxy of GVA. A ballpark figure of EUR 100.000 per employee has been adopted to estimate employment	Own elaboration based on PRC (2009)
5.2	Preventing salt water intrusion	n.a.	n.a.	n.a.	----	----
5.3	Protection of habitats	0,76	7,6	n.a.	590,5 km of coastal protected areas	Own elaboration based on EUROSTAT (2010) and EEA (2012, 2013)
6. Maritime monitoring and surveillance						
6.1	Traceability and security of goods supply chains	0,71	6,4	n.a.	----	Italian national accounts (2010)
6.2	Prevent and protect against illegal movement of people and goods					
6.3	Environmental monitoring					

It has been estimated that 50% of “cargo handling”, “warehousing and storage” and “other transportation support activities” are related to maritime transport
tonnes

Table 2 - Overview of relevant marine and maritime activities in Italy

Function/activity		Activity overview	Socio economic indicators	Source & Reference year
0. Other sectors				
0.1	Shipbuilding and ship repair	Shipbuilding and ship repair is an important maritime activity in Italy, also considering the high number of enterprises (3.666), most of which are SMEs. On the other hand, only 21 enterprises play a major role and among these, FINCANTIERI is the most important and one of the leading company in the world. As regards shipbuilding specialisations, Italian shipyards produce all types of carriers (from liquid tanks to RO-RO), but building of cruise ships represents indeed the key specialisation of "Italian shipbuilding brand". Military vessels and leisure boats are also important products of the shipbuilding sectors. Shipbuilding of leisure boats represents approximately 23% of the total GVA. Italian shipyards are first in the world for the building of super yachts (383 super yachts were in construction in 2010, representing 50% of world production): 8 Italian enterprises are included in the "Top 20" world list; however, Ferretti, the world leader in 2011, have recently acquired by a Chinese group.	Shipbuilding sector in Italy is significantly suffering the economic crisis. Construction of new ships is reporting since 2008 decreasing trends both in terms of total GRT and number of units produced. The socio economic impact of this crisis largely affected occupation in those areas strongly linked to shipbuilding activities. Especially as regards FINCANTIERI, the group announced a reduction in staffing of around 1/8 of total employed persons. The shipbuilding sector of leisure boats is the most affected branch: the total turnover of the activity fall by nearly 60% between 2008 and 2012. This fall was generated by declining sales of leisure boats to external and internal markets. Almost 90% of Italian leisure boats are sold abroad. (source: UCINA). As a consequence, in the latest 3 years, CAGR is -23,5% for GVA, and -9,6% for employment.	Ministry of Infrastructure and Transport (2012)
0.2	Water projects	Besides the importance of ports construction and related maintenance/upgrading activities (in 2012, 546 ports - commercial and leisure - are located in the Italian coastline, increasing by 9,6% from 2007), the most important water project in terms of budget allocation and impact is the Mo.S.E. in the Venetian Lagoon. This system allows the prevention of tidal peaks ("acquaalta") for a max of 3 meters in the city of Venice by isolating the Lagoon from the Adriatic Sea. This system will not affect the activities of the port of Venice, whose accessibility will be granted by a navigation lock.	Both GVA and employment have sensitively dropped in the latest 3 years (CAGR is respectively -18,3% and -6,8%). At present (July 2013) there are 5 significant water projects under development, 4 of which relate to the upgrade of commercial or cruise hubs (around EURO 564 million) and one relate to the Mo.S.E. project aimed at the protection of Venetian Lagoon (around EUR 5,5 billion). The construction of two marinas is currently managed by Italia Navigando (a network of Italian marinas, owned by the government agency INVITALIA)	Ministry of Infrastructure and Transport (2013) Osservatorio Nautico Nazionale (2012)
1. Maritime transport				
1.1	Deep-sea shipping	The geographical position of Italy along one of the main deep-sea routes – strongly reconsidered from 2000s following the stunning increase of trade flows from Far East to Europe– has supported the investments of private companies in strategic transhipment hubs (Gioia Tauro, but also Taranto and Cagliari) or in gateway ports (Genoa, Naples, Trieste). Most of Italian ports are characterised by limited intermodal facilities, despite in recent years significant steps forward have been done. All ports are specialised to handle specific cargos according to the type of industries in close inland locations. Around 40% of deep-sea cargoes are covered by liquid bulk (oil and gas) and around 20% by container.	After a crisis period in 2008 and 2009, whose transported goods plummeted to the lowest volume levels of the last 10 years, gross weight of transported goods registered a steady recovery from 2009 to 2011 by 26%. This good performance was mainly attributed to the container sector, whose traffic registered important increase in 2010 and 2011, especially in gateway ports rather than in transhipments. Despite the sector is registering remarkable increases in term of GVA in the last three years (CAGR + 12,89%), this increase was not reported also in terms of occupation, whose CAGR is – 5,99%.	Ministry of Infrastructure and Transport (2012) Cassa di depositi e prestiti (2012)
1.2	Short-sea shipping (incl. Ro-Ro)	Within the European context Italy is the country with the highest volumes of transported goods by Short-Sea Shipping (39,2% of total goods transported in Europe by Short-Sea Shipping) and plays a pivotal role within the network "Motorways of the Sea", especially in relation with Balkan and Northern African countries. Ro-Ro traffic cover also an important role, taking into account the weight of connection between the continent and Italian islands (Sicily and Sardinia, but also other important "tourist" archipelagos)	Despite the importance of Italy in terms of transported goods by short-sea shipping, this activity registered decreasing performance in 2011 (-4%) in terms of volumes. Declining trends were also registered in terms of occupied persons, whose CAGR in the last three years marginally decreased by around 1%. On the contrary, in terms of GVA, CAGR reporting increasing value (+18%).	----
1.3	Passenger ferry services	In 2010, Italy is the second ranked in the EU (after Greece) in terms of passenger transported (exc. cruise). Most of the passenger traffic is concentrated along national coastline and from/to main islands and archipelagos. Main ports are Messina, Naples and Olbia, but also ports like Ancona and Bari are gaining	The activity is suffering a difficult crisis, due to increasing supply and reduced demand. Furthermore, higher operating costs has reduced the competitiveness of this transport modality compared to others (air, railway). However, the activity covers an important role in terms of occupation and	Ministry of Infrastructure and Transport (2012)

Function/activity		Activity overview	Socio economic indicators	Source & Reference year
		relevance in passenger transport from/to Balkan countries (Croatia, Montenegro, Albania, but also Greece). Public companies had a leading role in the past, which progressively has been reduced. In general, Italian ferry fleet is very old: around 40% of ships is 25 or more years old.	many maritime activities (especially shipbuilding, and coastal tourism) benefit from it. In the latest three years CAGR is -1,6% for GVA and -4,3% for employment.	
1.4	Inland waterway transport	Inland waterways transport is exclusively concentrated in northern Italy. Total navigable waterways length amount to 1562 km, most of which are concentrated in the Padano-Veneto Waterway System. A significant role is covered by the Venetian Lagoon and Veneto in general, whose transported goods represent almost half of all goods transported in inland waters. Emilia-Romagna is the region which is reporting the most significant growth in the recent years	The sector does not cover an important role as mode of transport and poor information exists. However, recent sources pointed out significant growths of transported goods in inland waters in Lombardy, Emilia Romagna and Veneto. Especially in Emilia-Romagna, transported goods jumped from 87.000 tonnes in 2009 to more than 800.000 tonnes in 2010. It is difficult however to estimate how this could impact on the jobs and value added.	Ministry of Infrastructure and Transport (2012) Conto Nazionale delle Infrastrutture e dei Trasporti
2. Food, nutrition, health and eco-system services				
2.1	Fishing for human consumption	In 2011 the Italian fishing fleet consisted of 14.714 registered vessels, with a combined gross tonnage of 185 thousand GT and total power of 1,2 million kW and an average age of 28,5 years. The largest segment within the fleet is represented by small-scale fishing (8.764 vessels), followed by trawlers (2.525 vessels), hydraulic dredges (706), passive polyvalent gears (186), purse seiners (268) and mid-water pair trawlers (132). The canning sector is the main segment of the Italian fish processing industry. The main products are canned and preserved tunas (for which industry is heavily dependent on imports) although there are also a significant number of companies that process anchovies, sardines and shellfish. Some Italian canned tuna brands have been acquired by foreign companies, especially Spanish. This means that Italy imports from Spain finished products (50% of the overall production in 2007) and only distributes them in the market.	This activity shows very different performances considering the different stages of the supply chain. Italian fisheries followed in 2010 and 2011 the path of the general decline seen in the last few years. The sustained rise in intermediate costs, combined with a fall in production, eroded value added and profits, further weakening a marginal sector already in recession. New restrictions imposed by the Mediterranean Regulation 1967/2006 also had a first impact on production, imposing changes in fishing activities. Vessel withdrawals continue under the Adjustment Plan of Fishing Effort adopted in April 2010, and profitability is very low. Many fish stocks are considered overexploited. Processing, wholesale and retail stages are only marginally affected by problems in the primary sector, considering the dominant role of imports for Italian processing and consumption (import propensity is around 80%). Actually, processing industry GVA increased in the latest three years (CAGR +5,1%), but not employment (CAGR -3%).	EUROSTAT, STECF, IREPA,(2011)
2.2	Fishing for animal feeding	Not existing in Italy	Not existing in Italy	----
2.3	Marine aquaculture	The Italian marine aquaculture sector produced 114.800 tonnes in 2010 (of which 101.000 tons of shell fish). This production was valued EUR 228 million. The Italian aquaculture sector is represented 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 co-operative organisations, where every worker is also a member of the organisation, and consortiums operate through a government grant aimed at managing the marine environment.	After several decades of fast development, Italian aquaculture seems to have reached a ceiling to its further expansion (CAGR of GVA +4% in the latest three years). Still before the economic crisis, problems linked to the small dimension of farms, high and unpredictable costs, and foreign competition have been the most serious causes of current stagnation. Recently, the number of small size enterprises has decreased and, in many cases, larger firms have taken over these smaller ones. On the other hand growth potential of shellfish farming can be considered unlimited. Only recently there has been an interest by the processing industry to process raw materials from aquaculture, as an opportunity to decrease the dependency from imports.	FAO. JRC (2013) Cataudella, Spagnolo (2011)
2.4	Blue biotechnology	Italy does not have a dedicated Marine Biotechnology strategy, plan or policy. The RITMARE flagship project, however, includes a specific subproject regarding blue biotechnology with the following activities: • Development of physico-chemical-biological technologies and instruments for	Very few national institutes (CNR) with specific research units, and a pair of private companies are currently involved in very blue biotechnology. Neither the CSA Marine Biotech Project (which realised a survey of blue biotechnology activities in Europe) nor the ASSOBIOTEC (the Italian	CNR, ASSOBIOTEC, CSA Marine Biotech (2013)

Function/activity		Activity overview	Socio economic indicators	Source & Reference year
		deep extreme environments • Biodiversity associated with extreme deep environments • Bioprospecting for the detection of molecules and biological processes with potential applications in biotechnology For marine research activities, in 2012, Italy operates 12 local/coastal vessels from 10m to 42,40 m; 2 regional vessels of 35,3m and 44,8m (Universitatis, Dallaporta); 1 oceanic of 61,3m (Urania); and 2 global vessels of 72,63 and 130m (Italica, OGS-Explora) registered at the European Research Vessels Infobase. Furthermore, Italy maintains about 3 large marine research equipments registered in the European large Exchangeable instruments database.	Association for the Development of Biotechnology, which publishes a yearly report on biotech enterprises) have been able to quantify the weight of private enterprises in blue biotechnology, which appears still negligible.	
2.5	Agriculture on saline soils	Northern Adriatic, close to the Po delta and Venetian Lagoon is the most affect area by salinity. Different causes are recognised: subsidence of the soil, intrusion of marine waters in rivers and aquifers, irrigation waters with high salt concentration.	Salinity problems are increasing in the Northern Adriatic, where high rent cultures (such as horticulture) are particularly affected. The problem is considered increasing due to the elevated extraction of freshwater from the aquifers and increased temperatures causing evapotranspiration.	ARPAV (2012)
3. Energy and raw materials				
3.1	Offshore oil and gas	Currently, there are 114 offshore platforms dedicated to the extraction of natural gas (10 of which actually have no productive wells). Platforms are located almost entirely in the Adriatic Sea. In particular, more than 70 are operating in the North Adriatic (Zone A), 33 in Central Adriatic (Zone B) and 6 in the Ionian Sea (Zone D and F). Platforms located in the Adriatic operate at an average depth of about 37 meters, with a range that goes from 9 meters to a maximum of 117 meters. The main platforms for oil extraction (16, one of which with no productive wells), are located in the Strait of Sicily and in the Adriatic, while one is in the Ionian Sea.	According to the data of the Ministry of Economic Development, in 2012 were extracted from the Italian seabed about 6 billion cubic meters of natural gas, which corresponds to approximately 72% of national gas production (8.5 billion cubic meters). Always according to data of the Ministry of Economic Development today there are proven reserves of natural gas amounted to 103 billion cubic meters (which are estimated in another 160 billion cubic meters through new geological surveys and exploration). This makes it possible to envisage a significant increase of the gas production, primarily from offshore platforms with important socio-economic impact on the coastal areas. The offshore oil production was in 2012 around 0,5 million tonnes (10% of the total production).	Ministry of Economic Development, (2012)
3.2	Offshore wind	At the end of 2012 8.144 MW was the wind power installed in Italy but no offshore sources for this (EWEA, 2012). In total, Italy has 11,686 km² of sea surface suitable to offshore wind installations and most of these areas are ideal for the production of this type of energy, especially in central-southern Italy. With the aim to accelerate also the realisation of offshore wind farms, the Ministerial Decree of 6 July 2012 established new ways of encouraging the production of electricity from plants using renewable energy sources other than solar PV, with a power not exceeding 1 kW. It has to be taken into account however that strong administrative burdens and environmental restrictions, as well as the frequent opposition of local communities is limiting the development of this activity.	No indicators, the activity does not exist in Italy	EWEA, (2012)
3.3	Ocean renewable energy	No installation. Ongoing studies (University of Florence and Instituto Superior Técnico of Lisbon) confirmed that the area with the most availability of average annual power is that to the West of the islands of Corsica and Sardinia.	No indicators, the activity does not exist in Italy	University of Florence, Instituto Superior Técnico of Lisbon, (2012)
3.4	Carbon capture and storage	It entered into force on September 14, 2011 Legislative Decree No 162, with which Italy is establishing the legal framework for geological storage of carbon dioxide (CO2). 3 explorations have been licensed and another one is ongoing. No concrete economic activities have been implemented except for “SIBILLA” that is the 1st	No indicators, the activity does not exist in Italy	Ministry of Economic Development, (2012)

Function/activity		Activity overview	Socio economic indicators	Source & Reference year
		Exploration Licensee presented by Independent Gas Management srl.		
3.5	Aggregates mining (sand, gravel, etc.)	Marine aggregates are not extracted in Italy	No indicators, the activity does not exist in Italy	----
3.6	Marine minerals mining	No marine minerals mining in Italy	No indicators, the activity does not exist in Italy	----
3.7	Securing fresh water supply (desalination)	Italy's installed desalination capacity amounts to approximately 650,000 m³/d, divided among 130 different desalination plants. Largest plants are installed in the Southern Italy (Reggio Calabria, Syracuse and Gela). This developed of this activity has been driven by the industrial sector.	No clear plans have emerged in recent years despite the fact that Southern Regions (Apulia and Sicily first) put into evidence their intention to develop new plants. The activity in general has a low impact on occupation and value added.	Global Water Market, (2011)
4. Leisure, working and living				
4.1	Coastal tourism	Coastal tourism, because of the multiple links with other marine and maritime activities and their socio-economic impact, is the most important maritime economic 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 Euros (Source: NTWO). Seaside and beach resorts continue to represent the main tourism attraction in Italy for the domestic market, 47% of the total overnight stays, but are the second type of destination for the international market, 27% of the total overnight stays, 17% of the total arrivals (Source: OECD). The Italian hotel market (33.911 unit, 2.252.636 bed places in 2011, source: ISATAT) 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 are low quality (1 or 2 stars). Independent hotels are traditionally located on the coast, and that therefore are operating only in the summer period.	The total contribution of Travel & Tourism to GDP was EUR161.2bn (10.3% of GDP) in 2012, of which almost a third from coastal tourism (Source: WTTC). In 2012, the total contribution of Travel & Tourism to employment, including jobs indirectly supported by the industry, was 11.7% of total employment (2.681.000 jobs, source: WTTC). Relating industries (food and culture for example) support the tourism cluster and incentives to visit Italy coasts with a large involvement on local economies in terms of income and jobs generation for people who lives in coastal areas.	UNTWO, 2011 OECD, (2011) ISTAT, 2011 WTTC, (2012)
4.2	Yachting and marinas	With more than 9.000km of coast, berths for a yacht are easy to find, there is a good number of modern and abundantly equipped marinas all along the coast (105 small ports and marinas, 128.042 moorings, 14,9 Mooring places per km of coast. Source: OECD, 2009). All the marinas offer a high level infrastructure and services that meet the requirements of all visitors. The great organization and modernization of the marinas contribute to the development of nautical tourism in Italy.	In terms of socio-economic impacts, the contribution of the activity to the overall Italian GDP between 2008 and 2012 dropped by 50% (from 3‰ to around 1,5 ‰). The same trend was also observed in terms of employment: all main branches of yachting activities (shipbuilding, ship repair, accessories production and engines) registered a reduction of employees. Since 2011, America (mainly US, Virgin Islands and Cayman Islands) is the first destination market, covering around 50% of exports value. Asia is covering a growing importance for the EU market, while exports towards EU countries keep on reducing their share (from 2010 to 2012 EU shares dropped by more than 50%).	Intesa San Paolo, 2009 UCINA, (2012)
4.3	Cruise tourism	Italy is by far the first country in the EU in terms of cruise passengers (4,5 million passengers in 2011, EUROSTAT) covering almost 40% of total cruise passengers in the EU. 8 ports among the top 20 in terms of cruise passengers are Italian. In terms of volume, Civitavecchia is the most important port (+30 in 2012 compared to 2011), followed by Venice, Naples and Genova. Italy is very important as "departure hub": Venice, but also Genova and Civitavecchia are departure ports and this contributes to increase the economic impact of this activity. Despite it is owned by the US company "Carnival", Costa Crociere is the leading company in Italy and one of the important in Europe. All Costa vessels are registered in Italy.	Italy is among the top three countries that benefit of the increasing of European cruise sector. 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 (ECC, 2012). 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.	European Cruise Council (2012)

Function/activity		Activity overview	Socio economic indicators	Source & Reference year
5. Coastal protection				
5.1	Protection against flooding and erosion	In Italy, the organisation and administration of coastal defence is the responsibility of the 15 coastal regions. National authorities have only a limited role in coastal defence since the regions organise coastal protection policies and adaptation measures independently. The main responsibility of the national government is to provide policy guidance and financial support. An exception to the regional decentralization is the safeguard of Venice, accepted by the government as a national commitment. Actually Venice safeguard is being implemented by the Venice Water Authority of the Ministry of Infrastructure and Trasport, through the Consorzio Venezia Nuova (consisting of a group of construction companies).	The main tool used to protect coasts is currently the beach-nourishment with marine deposits of relict sand available close to the places where replenishment is needed. First dredging and use of relict sands was realized in 1994. Between 1994 and 2004 more than 7 million m^3 of relict sands have been used to nourish several beach sites in the province of Venice. Important beach nourishment works (more than 7 million m^3) have been realized also along Lazio coasts between 1999 and 2007. Minor operations are frequently carried out along other coasts especially in Emilia Romagna, Marche, Abruzzo and Sardinia. Beach nourishment is expected to continue at regular intervals in the next future.	ISPRA (2011)
5.2	Preventing salt water intrusion	Specific interventions to prevent water intrusion are not known. Monitoring of the problem is committed to the "regional agencies for the prevention and the environment" (ARPA). Farmer consortiums "Consorzi di bonifica" may have an impact regulating the distribution of irrigation water.	No indicators available.	----
5.3	Protection of habitats	In Italy there are 24 National parks, 152 regional parks, 147 marine reserves, 418 regional reserves, 572 other protected areas. Part of all those areas can be located also inside the 2299 SACs (Special Areas of Conservation) or 609 SPAs (Special Protection Areas) or Ramsar sites (source: Federparchi, 2013). According to our elaboration on EEA (European Environment Agency) datasets of Nationally designated areas (CDDA) and Natura 2000 sites, coastal protected areas with almost 12.000 km^2 cover in Italy 18,7% of the total continental protected areas (64.000 km^2).	This activity is managed by regional administrations, which have legislative authority on this sector. Regional activities are often supported by specialised regional agencies, whose competences encompass different aspects relatively to protection of coastal habitats and landscapes (from formulation of recommendations to monitoring and conservation activities).	----
6. Maritime monitoring and surveillance				
6.1	Traceability and security of goods supply chains	It is difficult in Italy to clearly separate the three activities, since the subject involved often have competencies for all of them indistinctively. Main activities carried out in Italy related to maritime monitoring and surveillance are: enforcement of safety of navigation, marine environment protection, and fisheries control. A very important effort is taken to prevent and fight illegal movement of people, especially illegal immigrants from non-EU Mediterranean countries, for whom Italy represents the gateway to the EU.	----	Italian Coastguard, (2013)
6.2	Prevent and protect against illegal movement of people and goods			
6.3	Environmental monitoring			

2. Breakdown of marine and maritime activities at regional level (NUTS 2) and selection of most relevant regions

Four regions have been identified as most relevant maritime in Italy, ranked as follows:

Table 3 - Ranking of the 4 most relevant maritime regions in Italy

Region	score
SICILIA	5,04
VENETO	4,15
LIGURIA	4,00
EMILIA-ROMAGNA	3,96

For the sake of brevity of this fiche, all tables ("Indicators of relevant marine and maritime activities" and "Overview of relevant marine and maritime activities") related to each of the four regions listed above have been included in the Country fiche Annex.

3. List of the 7 largest, fastest growing and with most future potential marine and maritime activities

3.1 Ranking order of the 7 largest marine and maritime activities

Table 4 - Ranking order of the 7 largest marine and maritime activities in Italy

Rank	Marine and maritime activities	GVA (million EUR)	Employment (*1000)	Score
1	Coastal tourism	5,34	166	**109,7**
2	Fishing for human consumption	3,51	111,9	**73,5**
3	Short-sea shipping (incl. Ro-Ro)	3,05	40,9	**35,7**
4	Cruise tourism	1,8	36,15	**27,08**
5	Shipbuilding and ship repair	1,45	38,4	**26,45**
6	Passenger ferry services	1,49	29,9	**22,4**
7	Deep-sea shipping	0,91	12,20	**10,7**

Coastal tourism

Italy has been one of the most visited countries in the world for centuries. 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, more than 32 billion Euros (Source: NTWO). In light of this, it does not come as a surprise that coastal tourism is the largest maritime economic activity in Italy. Being a peninsula, almost 60% of the country is coastal and endowed with beautiful beaches that attract millions of tourists each year. The warm Mediterranean climate makes it possible to have a relatively long tourist season. The Italian hotel market (33.911 unit, 2.252.636 bed places in 2011, source: ISTAT) is the second biggest in the world. In 2012, the total contribution of Travel & Tourism to employment, including jobs indirectly supported by the industry, was 11,7% of total employment (2.681.000 jobs, source: WTTC).

Fishing for human consumption

Despite the restructuring of the sector, fishing for human consumption continues to be the second largest marine activity. Actually, it has to be considered that this activity include both the production (fishing) and the successive stages of the supply chain (processing, wholesaling, retailing). Thus, while the fishing sector is suffering a structural crisis due to overexploited stocks and overcapitalised fleets (but also high costs, especially for fuel), processing and trade can continue thanks to imported products (especially tuna). GVA

and employment for primary activity (fishing) are estimated to be EUR 653 million and about 29.000 persons, while fish processing counts approximately EUR 298 million and 5.600 persons.

Short-sea shipping

Short-sea shipping includes, apart from shipping, port services. Shipping alone counts EUR 1,6 billion of GVA (52% of the activity) and 9.900 persons employed (24% of the marine activity). Considering the origin and destination of goods (gross freight weight), it has been estimated that short-sea shipping represents 77% of maritime shipping, showing that Italy is particularly tied to Mediterranean relationships (and to transhipment ports in Southern Mediterranean Sea).

Cruise tourism

As with coastal tourism, also in this case it is no surprise that this activity ranks among the 7 largest in Italy. Italy is by far the first country in the EU in terms of cruise passengers (4,5 million passengers in 2011, EUROSTAT) covering almost 40% of total cruise passengers in the EU. 8 ports among the top 20 in terms of cruise passengers are Italian.

Shipbuilding and ship repair

Shipbuilding and ship repair have been suffering a dramatic crisis in the last few years. Despite that, they continue to be an important economic sector for Italy. Shipbuilding represents approximately 52% of GVA and 46% of persons employed (Italy is the fourth EU country in this activity), the remaining part being represented by ship repair (value added 24%, persons employed 26%) and shipbuilding of leisure boats (value added 23%, persons employed 28%). Ship repair is suffering less the crisis period and is consequently increasing its relative importance; furthermore 56% of enterprises are included in this branch.

Passenger ferry services

Passenger ferry services also include, apart from transport, port services. Passenger ferry transport alone counts EUR 777 million of GVA (52% of the activity) and 7.170 persons employed (24% of the activity). Passenger ferry service is very important for a country which counts of two major islands and a high number of minor islands and archipelagos. Considering the number of passengers, the economic weight of passenger ferry service is approximately the same of cruise services.

Deep-sea shipping

Despite the sector is registering remarkable increases in term of GVA in the last three years (CAGR + 12,89%), this increase was not reported also in terms of occupation, whose CAGR is – 5,99%. Around 40% of deep-sea cargoes are covered by liquid bulk (oil and gas) and around 20% by container. After a crisis period in 2008 and 2009, whose transported goods plummeted to the lowest volume levels of the last 10 years, gross weight of transported goods registered a steady recovery from 2009 to 2011 by 26%. This good performance was mainly attributed to the container sector, whose traffic registered important increase in 2010 and 2011, especially in gateway ports rather than in transhipments.

3.2 Ranking order of the 7 fastest growing marine and maritime activities

Table 5 - Ranking order of the 7 fastest growing marine and maritime activities in Italy

Rank	Marine and maritime activities	GVA (CAGR)	Employment (CAGR)	Score
1	Securing fresh water supply (desalination)	252,07%	205,69%	**228,88**
2	Short-sea shipping (incl. Ro-Ro)	18,58%	-0,95%	**8,81**
3	Cruise tourism	17,08%	-1,40%	**7,84**
4	Deep-sea shipping	12,89%	-5,99%	**3,45**
5	Fishing for human consumption	7,04%	3,74%	**5,37**
6	Maritime monitoring and surveillance	4,97%	-1,83%	**1,57**
7	Inland waterway transport	7,37%	-4,56%	**1,41**

Securing fresh water supply (desalination)

This activity reports an extremely high score. This is due to the fact that our source provides an extremely high figure for one of the years of our time series of reference. We have reported the score for the sake of consistency, although in our opinion, this value should be considered abnormal.

Short-sea shipping

Short-sea shipping is showing fast increasing figures of GVA, despite the number of persons employed has decreased. Besides national transport, which is increasing, data indicate that the Mediterranean Sea is the main area of exchange with further potential growth: Turkey, in particular, is the Italian main partner and its share in the exchanges looks growing.

Cruise tourism

Sales of cruises in Europe have been increasing at a steady pace in the last few years, despite the economic crisis. Italy, the main cruise destination in the EU, has been following the trend. Interestingly, in comparison with other countries, Italy has been recording a slightly lower growth. This is probably due to the fact that Italy has been an established cruise destination for quite some time now, while other countries have been recorded a boost in their cruising sectors only recently.

Deep-sea shipping

Deep-sea shipping is also growing (but data on employment are not good at all), despite at lower rates compared with short-sea shipping. The Italian limits regarding this activity are due to port infrastructures which are not suitable for deep-sea shipping (e.g. in Northern Adriatic) and to competition of ports in the Southern Mediterranean Sea. On the other hand perspectives of International trade are good, and the weight of country as USA and China is increasing.

Fishing for human consumption

Fishing for human consumption is highly dependent on biologic fluctuations which affect fish stock sizes and fishing catches. Thus, short-run good results of fishing in 2010 compared to 2008 must no mislead. Actually, number of boats, value of landing and persons employed are all constantly decreasing in the last decade. On the other hand, other activities related with fisheries are increasing. CAGR of processing industry is +5,1% for GVA (but -3% for persons employed).

Maritime monitoring and surveillance

The score for this activity has been calculated based on public expenditure (rather than GVA) and employment. While employment has been decreasing due to public sector jobs reduction, public expenditure has been increasing despite the financial crisis. This is on the one hand a consequence of the

great attention placed on marine environment protection in Italy (also because it is connected to important economic activities such as tourism), and on the other it is related to the great effort in limiting illegal movement of people and goods (for its geographic position in the Mediterranean, Italy is subject to massive flows of illegal immigrants, as well as smuggled goods).

Inland waterway transport

Inland waterway transport is not very developed in Italy. However some development can be distinguished, as the Padano-Veneto Waterway System has been included into the "Comprehensive Network" of the TEN-T, and some interesting project concerning inland waterways, such as “RIS”, has been carried out.

3.3 Ranking order of the 7 marine and maritime activities with most future potential

Table 6 - Ranking order of the 7 marine and maritime activities with most future potential in Italy

Rank	Functions /activity	Score
1	Short-sea shipping (incl. Ro-Ro)	++++
2	Passenger ferry services	++++
3	Marine aquaculture	++++
4	Protection of habitats	++++
5	Coastal tourism	++++
6	Cruise tourism	++++
7	Protection against flooding and erosion[2]	+++

Short-sea shipping (incl. Ro-Ro)

- **Innovativeness:** Significant *in*vestments have been done in recent years in the short sea shipping sector, focused at reducing the environmental impact of ships by using clean fuel and streamlining operations at docks, especially for Ro-Ro traffic, by updating infrastructural facilities in several ports. On the other hand, not all ports are growing at the same rate. Ports in the Northern Adriatic cannot still have direct routes with far-east depending on transhipment ports; for other regions i.e. (Liguria, Naples, Trieste) inland connections are made difficult due to both morphological problems of the territory and viability problems of the towns. **Score assigned: 0**
- **Competitiveness:** Italian authorities are strongly intentioned to increase the competitiveness of northern ports in the Adriatic and Tyrrhenian Sea with respect to North Europe countries, and the competitiveness of transhipment ports with respect to ports located in Northern Africa. A third objective is the strengthening of Adriatic connections, taking advantage of the future development of eastern Pan-European corridors using the port of Ploče, Bar, Durres and Igoumenitsa as Adriatic terminals. The North Adriatic Port Association, including the ports of Rijeka, Koper, Trieste and Venice, is trying to develop a coordinated strategy to compete with North Europe countries. On the other hand, current situation is not easy especially for transhipment ports (Gioia Tauro, Taranto and Cagliari), which suffer the competition of new structures in the South of the Mediterranean (Port Said, Tanger Med, Enfidha) characterised by lower operating costs. At the same time, the high number of Italian port is a constraint compared with the situation of ports in Slovenia and Croatia, where national interests are focused on few sites. **Score assigned: 0**
- **Employment:** This maritime activity is already in fourth position in the rank of activities with most persons employed. A further growth of short-ship maritime traffic is predictable, linked to the

[2] Albeit scoring the same as Protection against flooding and erosion, Blue biotechnology has been excluded from the maritime activities with most future potential. The reason why is that the sector is still too small in Italy, and at the time of writing it is not credible to assess it as having an actual future potential. As a matter of fact Blue Biotechnology has scored high mostly because of intrinsic characteristics of the sector (e.g. innovativeness, sustainability), rather than because of its positive outlook in Italy.

development of Mediterranean and Balkan Countries, and to the substitution of road transports. This will lead to a further increase of employment. **Score assigned: +**

- **Policy relevance:** As previously outlined, Italian policies are explicitly interested to the development of shipping. Strategies and objectives are included in the National Plan of Logistics 2011/2020; furthermore specific interventions and projects are funded with specific national programs and laws. The Ministry of Infrastructures and Transports - DG Maritime and Inland Transport, also coordinates the Italian 'Mare' Technology Platform – PTNM, involving all stakeholders related to the sea (either economic, scientific or institutional), aimed at reaching a consolidated networking among actors, a shared vision in terms of technological growth, and developing initiatives of national relevance. **Score assigned: +**
- **Spill-over effects:** Development of new technologies, for reducing the environmental impact and promoting ICT platforms, generally requires the involvement of shipbuilding enterprises which benefit of specific projects and funds. Many enterprises developing technologies, not exclusively, linked to maritime transports are also involved in this process. Infrastructural development (both physical and technological) of ports represents a horizontal improvement for all activities that makes uses of such infrastructures, especially in the cases of ports that are not specialised (which is very common in Italy). **Score assigned: +**
- **Sustainability:** Italy has been for long time very focused in protecting and developing its maritime industry and, considering the National Plan of Logistics 2011/2020, it is intentioned to maintain this approach. Short-ship shipping is essential for a country like Italy which counts of two very populated islands and a plenty of minor islands and archipelagos. Due to its geographical position, Italy plays a pivotal role within the network Motorways of the Sea, especially in relation with Balkan and Northern African countries. The development of Adriatic routes, such as routes with Spain, represents an opportunity to decreases the role of road traffic, and the reduction of emissions will have a positive impact on environment. **Score assigned: +**

Passenger ferry services

- **Innovativeness:** Improvements previously outlined for reducing the environmental impact of ships and for developing smart technologies, are also widespread to the passenger ferry services, especially if we consider that many ships may realise freight and passenger transport at the same time. **Score assigned: 0**
- **Competitiveness:** For a long time the public sector in this activity used to play a major role. The main public company was Tirrenia, which was privatised in 2012. Thus, private enterprises begun to be relevant only recently and it is soon for drawing results of this liberalisation process. Many routes, especially with minor islands, have to be maintained, regardless of economic results, to guarantee basic movement facilities to inhabitants. **Score assigned: 0**
- **Employment:** Consequences of the privatisation of Tirrenia must to be judged in the next years. However most of basic routes must be maintained by private companies. Further development of more tourist routs will probably depend on development of the economic crisis; on the other hand, both mayor and minor islands have a recognised tourist potential both for Italian and foreign travellers, so it is expected that, when economic situation improves, number of routes will increase with a positive effect on employment. **Score assigned: +**
- **Policy relevance:** A specific strategy for passenger ferry services misses. However the centrality of this activity is clear considering the recent changes of the sector, and more specifically the privatization of the public company Tirrenia. The public authority established agreements with private enterprises to ensure basic routes with island. **Score assigned: +**
- **Spill-over effects**: As in the case of short-ship shipping, development of new technologies, for reducing the environmental impact and promoting ICT platforms, generally benefits enterprises of the shipbuilding sector, and also technology enterprises not specifically included in the maritime

clusters. Passenger ships, for example, require the involvement of furniture enterprises. New, more frequent, fast and low-cost route would have a large impact in the development of island tourism. **Score assigned: +**

- **Sustainability:** Passenger ferry services is an economic activity that cannot be limited in a Country with so many mayor and minor islands, for the movement of both island inhabitants and tourists. Moreover, considering the geographic position of Italy, it is expected that the number of passenger will increase with neighbour countries. The process of EU expansion in Balkan countries should increase the opportunities of travel between Italy and Croatia, Montenegro and Albania. Spain, Malta, Greece and North Africa are also natural destinations for passenger ferry services: the development of these routes in substitutions of other transport means (by road and air) may cause a sensitive decrease of emissions. **Score assigned: +**

Marine aquaculture

- **Innovativeness:** Innovativeness is a continuous process in aquaculture to develop new farming methods and trying to farm new species. Italian research has been very advanced in this sector and many ideas developed in Italy in the past have been successively applied to develop aquaculture in other counties such as Croatia and Greece. In these years, Italian research institutes are playing a major role trying to develop a complete farming system for tuna, including the reproduction stage. **Score assigned: +**
- **Competitiveness:** Competitiveness is currently a problem for Italian aquaculture. Enterprises are generally very small compared to other countries and profits highly depend on prices of inputs. **Score assigned: 0**
- **Employment:** After several decades of fast development, Italian aquaculture seems to have reached the peak of its expansion. Recently, the number of small sized enterprises has decreased and, in many cases, larger firms have taken over the smaller ones. On the other hand, the potential is still very high, both for shellfish, which does not need external feeding, and for the introduction of new farmed species (e.g. researches with tuna). **Score assigned: 0**
- **Policy relevance:** Relevance of aquaculture is increasing compared with fishing in national and EU strategies. This is due to a situation of overexploited natural stocks and chronic dependence of EU consumption from imported fish products. The case of Italy is in line with this general situation. Thus, EU (e.g. EFF) and national funds promote aquaculture development. A problem, for Italy, can be represented by the regional jurisdiction for aquaculture, which leads to non-homogenous situations of rules enforcement between different regions. **Score assigned: +**
- **Spill-over effects:** Development of aquaculture in marine waters can represent a mean to reduce pressure on natural stocks. Development in research may find some application and spill-over effect for blue-technologies. Finally, positive effects of mussels farming on coastal protection have been studied, while tourism is positively affected by extensive aquaculture in brackish lagoons. **Score assigned: +**
- **Sustainability:** The EU seems intentioned to strength his attention on aquaculture, trying to reduce its dependency of fish from abroad. Different forms of aquaculture do exist, each of them with different characteristics; this diversity is already a positive index for sustainability. The potential for shellfish mariculture is almost unlimited, considering that it does not need external feeding, but polluting effects must be carefully considered. 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. **Score assigned: +**

Protection of habitats

- **Innovativeness:** Although it may seem unusual to consider this activity as “innovative”, a few characteristics of how protection of habitats is carried out in Italy might point to this direction. First

of all, it should be considered that management bodies of protected areas autonomously elaborate their own development and management plans, including research activities. This makes them very independent from the central and regional government. In addition, the National strategy for Biodiversity, elaborated in 2010, contains addressed to the development and innovation of habitat protection mechanisms (monitoring activities, actions to improve and restore ecological functions, programmes and initiatives aimed at preventing the introduction and invasion of alien species, etc.). There are also e-learning education and training programmes managed by a public agency (ISPRA). **Score assigned: +**

- **Competitiveness**: Being an inherently public activity, it would be very difficult to consider it as competitive. **Score assigned: 0**
- **Employment:** Same as above, it would be very difficult evaluate this activity in terms of its impact on employment. It should be noted that employment registered a decline by 3.5% during our time series of reference (see Country fiche Annex). However, this is mainly due to the fact that employment has been calculated as a proxy based on the level of public expenditure. **Score assigned: 0**
- **Policy relevance:** Habitat protection is matter of great concern in Italy. This can be easily detected by simply looking at the – sometimes overwhelming – legislation produced in this field (see §4.3 of this Country Fiche). Policy relevance has been increasing over the years, and this has reflected in a tremendous increase of marine protected areas, which went from the 801 sq.km of 1990, to the amazing 27.037 sq. km of 2010 (+3.275% in 20 years). The sector is entirely public, and its management is almost entirely a responsibility of the Regions. **Score assigned: +**
- **Spill-over effects:** Habitat protection has important spill-over effects on activities highly dependent on the quality of the environment, such as coastal tourism and agriculture, increasing the natural capital of goods and services. Besides being significant economic activities, both tourism and agriculture are supported by powerful and well-organised sector associations, and this could explain, inter alia, why protection of habitats is so politically relevant. Especially as regards tourism, in the last few years a new niche has emerged, with some tourists that tend to privilege environmentally pristine locations. This is only one (and probably the most economically evident) of the multiple spill-over effects that protection of habitats has on other economic activities. Protection of marine habitats (especially through artificial barriers) in Italy is also having a positive impact on small-scale and recreational fisheries, in that it makes it possible repopulate stocks, diversifying fauna, and increase available income for fishermen. **Score assigned: +**
- **Sustainability:** The activity is to be considered intrinsically sustainable, in that it aims to preserve the natural environment and its fauna. **Score assigned: +**

Coastal tourism

- **Innovativeness:** Despite interesting e-tourism initiatives supported by public bodies such as the Ministry of Cultural Heritage and tourism, small enterprises and coastal destinations often work uncoordinated, and due to budget reasons tend not to associate innovation to a potential enlargement and enhancement of their tourist offer. **Score assigned: 0**
- **Competitiveness:** Italy can count on beautiful landscapes, beaches, historical towns, long tourist season (due to the Mediterranean climate), and excellent infrastructure. Despite suffering the competition from less expensive neighbouring countries, its unique features make it an extremely competitive tourist market. **Score assigned: +**
- **Employment:** In 2012, the total contribution of Travel & Tourism to employment, including jobs indirectly supported by the industry, was 11.7% of total employment (2.681.000 jobs, source: WTTC). There is no reason to believe that this situation is going to change in the near future. **Score assigned: +**

- **Policy relevance:** As one of the most important industries in the country, coastal tourism receives particular attention from the public sector, and is a subject of several different policies and strategies both at central and local level. In some cases, policies and regulations are still not sufficiently supportive of the development of the sector, but that does not alter the fact that coastal tourism remains at the centre of the political agenda of all levels of governments. **Score assigned: +**
- **Spill-over effects:** Restaurants, local transport, shops, museums to and several others take advantage of the impact of coastal tourism in Italy. Also regional and local institutions, associations, press, universities and research institutes are involved to complete a value chain in the fields of planning, legislation, research and studies, education and human training. Last but not least, coastal tourism is an important driver for urban planning, in that it push cities to rethink and renovate spaces, in order to be more "tourist-friendly". **Score assigned: +**
- **Sustainability:** Despite several efforts, coastal tourism remains an activity that exerts great pressure on the coastal environment. There is a good number of initiatives aimed at improving and promoting the sustainability of coastal tourism (e.g. the so-called "Blue-flag beaches"), but the results are still uncertain. **Score assigned: 0**

Cruise tourism

- **Innovativeness:** Several innovative projects and/or products are being developed in the hospitality segment, including food & beverage companies and equipment, IT, communication and entertainment systems. Italy is the lead market for cruise tourism, and thus it is natural that it is trying to drive innovations in order to keep its competitive advantage, especially against emerging and less expensive markets. **Score assigned: +**
- **Competitiveness:** The competitiveness of the Italian cruise sector is probably unquestionable. Established destinations, excellent infrastructures, long tourist season, and constant innovations, and – last but not least – a deep-rooted tradition make Italy an almost unbeatable competitor for many countries. **Score assigned: +**
- **Employment:** Despite a slight decline in the last few years (most certainly due to an automatic readjustment during the economic crisis), the cruise sector is an impressive source of jobs in Italy, with estimated 13.583 Italian residents employed as crew and administrative staff, and not considering satellite industries. **Score assigned: +**
- **Policy relevance:** Despite the importance of the sector, public policies seems focused more on transport and education policies, although on the other hand it should be noted that public bodies are often involved in the construction and management of port infrastructures. **Score assigned: 0**
- **Spill-over effects:** Several operators take advantage of the impact that the sector has on the local economies: hotels, restaurants, local transport, shops, museums to and several others. Also regional and local institutions, associations, press, universities and research institutes are involved to complete a value chain in the fields of planning, legislation, research and studies, education and human training. **Score assigned: +**
- **Sustainability:** The debate over cruise tourism sustainability has received much attention in the last year, as a consequence of the Costa Concordia accident, which on 13 January 2013 partly sank after striking a rock off the eastern shore of the Isola del Giglio, in Tuscany. Since then, several initiatives aimed at improving sustainability in the sector have been carried out (e.g. Venice Blue Flag II, and "eco-sustainability memorandum of understanding" between cruise lines, the Venice Council, the passenger terminal and the port authority). **Score assigned: 0**

However, several concerns still remain as to the impact on the territory and resources depletion.

Protection against flooding and erosion

- **Innovativeness:** Italian research is very advanced in protection against flooding and erosion. Several international projects (e.g. SHAPE, BEACHMED) have been performed by regional authorities, universities and research centres in collaboration with European partners. National programs are also very focused in this field (RITMARE project). In the latest years, the main tool used against erosion has been beach-nourishment using marine deposits of relict sand available close to the places where replenishment is needed. Protection of Venice and its lagoon is a hot spot issue which is also requiring very advanced technologies. **Score assigned: +**
- **Competitiveness:** As outlined, Italian research has a good tradition in coastal protection issues. On the other hand, most of the projects are realised as separate units and many of them have not a final application. It is not easy to manage the large amount of results obtained and it is difficult to make comparisons with other countries. **Score assigned: ?**
- **Employment:** The number of persons employed in this sector is very limited. The larger project currently carried out is the MOSE project in the Venice lagoon that will be concluded in a few years. **Score assigned: -**
- **Policy relevance:** Coastal protection is a key prerequisite for the development of Italian coastal areas. Actually, no economic activity could be developed without the safety of the area where they are realised. Most of the coastal regions have developed "Integrated Coastal Management Zone" (or similar names) approaches (guidelines, plans, etc...), although some regions are more advanced than others. **Score assigned: +**
- **Spill-over effects:** Coastal protection has direct or indirect benefits on all marine and maritime activities, and on other (non-marine) activities realised in coastal areas. Beach nourishment has probably the most direct effect on touristic activities. The future of a historical city like Venice and the habitat of its lagoon completely depend on the results of coastal protection measures. **Score assigned: +**
- **Sustainability:** Actually, the very scope of coastal protection is to guarantee the sustainability of all other economic activities. Protection of natural habitats is also highlighted in Italian projects of coastal protection. **Score assigned: +**

4. Growth scenarios for the 6 most relevant and promising marine and maritime activities

Table 7 - Sets of top-7 activities ranking in order of size/growth/future potential

Top-7 current size	Top-7 recent growth	Top-7 future potential
Coastal tourism	Securing fresh water supply (desalination)	Short-sea shipping (incl. Ro-Ro)
Fishing for human consumption	Short-sea shipping (incl. Ro-Ro)	Passenger ferry services
Short-sea shipping (incl. Ro-Ro)	Cruise tourism	Marine aquaculture
Cruise tourism	Deep-sea shipping	Protection of habitats
Shipbuilding and ship repair	Fishing for human consumption	Coastal tourism
Passenger ferry services	Maritime monitoring and surveillance	Cruise tourism
Deep-sea shipping	Inland waterway transport	Protection against flooding and erosion

Table 8 - 6 most relevant and promising marine and maritime activities

6 most relevant and promising marine and maritime activities
Short-sea shipping (incl. Ro-Ro)
Passenger ferry services
Marine aquaculture
Protection of habitats
Coastal tourism
Cruise tourism

4.1 Overview of the 6 most relevant and promising marine and maritime activities

Short-sea shipping (incl. Ro-Ro)

Within the European context, Italy is the country with the highest volumes of transported goods by short-sea shipping (74%) and plays a pivotal role within the Motorways of the Sea network, especially in relation with the Balkan and Northern African countries. According to the National Plan of Logistics 2011/2020, Italian authorities are strongly interested in further developing this maritime sector. The Ministry of Infrastructures and Transports (DG Maritime and Inland Transport), works in strict collaboration with sector operators, and coordinates the Italian 'Mare' Technology Platform – PTNM, involving all stakeholders related to the sea (either economic, scientific or institutional), aimed at reaching a consolidated networking among actors, a shared vision in terms of technological growth, and developing initiatives of national relevance. This activity appears between both the 7 largest and 7 fastest growing maritime activities.

Passenger ferry services

Italy is the second ranked in the EU (after Greece) in terms of passenger transported. 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 process of EU expansion in Balkan countries should increase the opportunities of travel between Italy and Croatia, Montenegro and Albania. Spain, Malta, Greece and North Africa are also natural destinations for passenger ferry services: the development of these routes in substitutions of other transportation means (by road and

air) may cause a sensitive decrease of emissions. “Passenger ferry services” is currently between the 7 largest maritime activities.

Marine aquaculture

Mariculture is currently neither between the 7 largest nor between the 7 fastest growing activities. However its potential is very high along the Italian coasts, and the research sector is very dynamic in the development of new technologies (e.g. tuna farming). Significant steps forward have been done in recent years on the increasing quality of aquaculture products, certified by high standards all along the production process. Policy relevance of aquaculture is increasing compared with fishing in national and EU strategies. This is due to a situation of overexploited natural stocks and chronic dependence of consumption from imported fish products.

Protection of habitats

Despite not being strictly speaking an economic activity, protection of habitats in Italy is deemed to have an interesting future potential. The activity is seen as a pivotal precondition to ensure the correct and sustainable development of important maritime economic activities such as, for instance, coastal tourism. The activity operates on habitats and more widely on marine/coastal environments which are one of the most important attractors for leisure activities on coastal areas, generating indirect effects on other transversal activities (ferries and Ro-Ro from/to islands, yachting, etc).

There have been budget cuts in the last few years as a consequence of the economic crisis, nonetheless it is believed that the current level of public spending will remain stable in the near future. The main reason is that both the public sector and the public opinion are particularly sensitive to the matter.

Coastal tourism

Despite the economic crisis, in 2011 coastal tourism registered a remarkable increase of around 3 million more tourists compared with 2010. This increase was almost entirely due to international tourism and only marginally to internal flows. This means that the sector is continuing to grow. At present there is no reason to believe that the trend is going to stop in the near future. The traditional characteristics that make Italy an attractive tourist destination are still there, and this is why coastal tourism, albeit being a mature activity, still has great future potential for growth.

Cruise tourism

The reasoning here is the same as coastal tourism. The cruise sector has been growing in the whole EU for a decade now. Italy remains by far the first country in the EU in terms of passengers disembarked. Even the infamous Costa Concordia accident had only a negligible and temporary effect on image of Italy as one of the most popular cruise destinations in the world. It is believed that the sector will continue to grow in the near future.

4.2 Description of the nature of each of the 6 marine and maritime activities and their value chain

Short-sea shipping (incl. Ro-Ro)

Around 60% of imported and exported goods to and from Italy are transported by sea. Thus, considering the important role of trade for the Italian economy, shipping should be considered as a key sector for the national economic growth. Excluding deep-sea shipping and internal routes (which represents respectively 23% and 35% of maritime transports), most exchanges are realised in the Mediterranean and Black Sea areas.

Although a large amount of goods directed to Europe transits through the Mediterranean Sea, Italy has not been able to take the opportunity given by its favourable geographical position, especially for container traffic. This lack can be ascribed to infrastructural delays of ports and ashore connections. 13 ports in Italy

register important container flows and three of these, Gioia Tauro, Taranto and Cagliari, are almost entirely focused on transhipment, and are currently in a very difficult situation, having to compete with new structures in the South of the Mediterranean (Port Said, Tanger Med, Enfidha) characterised by lower operating costs. On the other hand, ports located in Northern Tyrrhenian and (to a lesser extent) in Northern Adriatic have more positive perspectives. Beside the prevalence of Mediterranean transports, the expected difficulties for Italian ports to win the competition of south-Med transhipment ports, can be viewed as a key aspect in considering short-sea shipping more promising than deep-sea shipping.

As far as Ro-Ro is concerned, both Adriatic and Tyrrhenian ports could take advantage of their key positions in the Mediterranean context: Adriatic ports cover an important role as they represent the Italian gateways to the Balkans and Turkey; on the other hand, Tyrrhenian ports represent important gateways to North-Africa countries and Spain.

Domestic short-sea shipping is mainly oriented towards major islands. Despite good initiatives have been implemented aimed at moving road transport to the sea (e.g. “Motorway of the Seas”), no significant improvements have been made in this specific context.

The Italian fleet[3] can count (in 2010) on 347 ships for liquid bulk goods, and 339 ships for dry goods and containers. The number of ships has been continuously increasing in the last decade, and can represent a problem of overcapacity if demand does not continue growing at the same rate.

Only a limited share of goods passing through Italian ports is transported by Italian logistic enterprises: this share is 3% for containers, 27% for Ro-Ro, between 13% and 18% for other kinds of products.

Passenger ferry services

Considering the shape of Italy and the presence of two major islands (Sardinia and Sicily) as well as further 77 smaller but inhabited islands, passenger ferry services are a key sector both for residents and tourists. The public authority was actively involved in this service in order to guarantee the mobility of the population. Some maritime routes considered to be “essential” must be necessarily provided by maritime companies, with a certain regularity and specific characteristics of the ships.

The role of the public sector in this activity used to play a major role. The main public company was Tirrenia, privatised in 2012. The new company “Tirrenia Compagnia Italiana di Navigazione” at present operates between the mainland and major islands, with a fleet of 23 vessels. Tirrenia Group included until 2011 Siremar (Sicilia Regionale Marittima), which connects Sicily with the Aeolian Islands, Aegadian Islands, Ustica, Lampedusa and Pantelleria.

Italian fleet[4] counts (in 2010) with 377 ships for transport of passengers and passengers and goods. The number of ships has been quite stable in the last few years, but the passenger fleet is older than cargo fleet (119 ships are older than 30 years).

Marine aquaculture

Italy has a historical tradition in aquaculture that can be dated back to Romans and Etruscans. Traditional extensive aquaculture is still carried out in the “valli” which are brackish lagoons, especially in North-eastern regions. More modern aquaculture techniques for marine species include ashore intensive farms, cage systems in the sea (mariculture) and, in the case of shellfish, cultivation on ropes and bags (mussels), or directly on the intertidal substrate (clams). Aquaculture is developed along all Italian coasts but with higher density along the Adriatic coasts.

After several decades of fast development, Italian aquaculture seems to have reached the peak of its expansion. Even before the economic crisis, problems linked to the small dimension of farms, high and unpredictable costs and foreign competition have been the most serious causes of current stagnation.

[3]Only ships over 100 GT are considered.
[4]Only ships over 100 GT are considered.

Recently, the number of small sized enterprises has decreased and, in many cases, larger firms have taken over the smaller ones.

It should be noted that this stagnation has mainly economic origins, since from a technical and biological perspective, aquaculture potential (especially for finfish and shellfish mariculture) is still remarkable. Much attention is currently being paid to research studies to develop bluefin tuna mariculture. 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.

Several concerns linked to pollution are also a major issue of discussion, and restrictive regulations may have caused a loss of competitiveness. However, the situation are very different depending on farm characteristics (extensive vs. intensive, mariculture vs. ashore farms) and would require further analysis.

Protection of habitats

This activity should not be considered as an "economic activity" given that the public sector is in general the only subject involved in it, as regards both regulatory and financial aspects. For this reason, the standard value chain analysis cannot be applied.

However, some sectors undoubtedly benefit from "protection of habitats": handicraft industry, traditional farming and forestry, tourism (and related specific activities such as hiking and environmental tourism) and aquaculture.

As specifically regards the protection of marine and coastal habitats, the concrete management of these areas, as well as their creation, is almost entirely demanded to local authorities (Regions). However, the central administration could also establish new areas, but its most important role is to provide the strategic direction for effectively implementing environmental protection rules at local level.

Coastal tourism

Generally speaking, it is difficult to exactly gauge the actual size and related economic impact of this activity in the Italian economy, given the complex structure of the value chain and the high number and assortment of subjects involved. Furthermore, it is also difficult to separate this activity from other maritime activities, not only from those strictly linked with the "leisure" function, but also from the others (e.g. Passenger ferry services, Protection of habitats, short-sea shipping including Ro-Ro).

However, the wide tourism offer of Italy and its extended variety of cultural, landscape, archaeological and beach attractors represent the key elements that make Italy one of the most popular coastal tourism destination in Europe and worldwide.

Among different tourism segments, coastal tourism is by far the most important, given that:

- the incomes generated by coastal tourists' expenditure is the highest, compared with other tourism segments (36,7%, against the second ranked which is "art cities" at 26,3%[5]);
- coastal accommodation establishments cover more than 30% of total occupancy in Italy (both national and international). The activity is subject to seasonality: occupancy rates during the summer period (June-July-August) fluctuate from 50% in June to almost 77% in August, decreasing during the Autumn at around 25%.

The most important destinations are Liguria (15,8% of market share), Emilia Romagna (11,7%) and Sicily (10,5%).

Thanks to several programmes (national and international) intended to award "eco-labels" to beaches and marinas (e.g. Blue Flag, run by the Foundation for Environmental Education), the quality of the sea and related locations have sensibly increased in recent years. To this regard, the polluted coastal areas decreased from 3,6% in 2000 to 3,3% in 2008.

[5] Source: Unioncamere, Osservatorio nazionale del Turismo, Competitività del settore turistico italiano, 2010.

Cruise tourism

In Italy there are many types of companies and operators involved in cruise tourism. Generally speaking, the value chain is mainly structured in 2 segments: (i) vessels production and maintenance and infrastructural facilities, and (ii) tourists services.

The first one refers to the set of activities designed to create the conditions needed (vessels and infrastructure) for the creation of the product. Cruise shipbuilding is a sector that revolves around a few large and specialized companies, but at the same time it also involves a myriad of small satellite companies which contribute to the production of internal components and technical/engineering gears.

Because of massive cruise flows in Italy, and given the ever-increasing size of vessels, cruise tourism has also impacted on ports infrastructural facilities, which have progressively developed infrastructural specializations devoted to this type of traffic and have also generated hundreds of small companies (shipping agents, pilots, mooring, bunkering companies…) taking advantages of this specialisation.

From the point of view of integrated local development, several operators take advantage of the impact that the sector has on the local economies: hotels, restaurants, local transport, shops, museums to and several others. Also regional and local institutions, associations, press, universities and research institutes are involved to complete a value chain in the fields of planning, legislation, research and studies, education and human training.

Italy is the most important country in Europe in this activity, both in terms of total passengers embarked/disembarked and in transit and in terms of navigation companies. Costa Crociere is one of the most important companies (especially taking into account that all its vessels are registered in Italy).

4.3 Description of economic and infrastructural scenario

Short-sea shipping (incl. Ro-Ro)

In 2011, around 74% of total maritime flows of goods in Italy were transported in short-sea-shipping modality. Even though it still constitutes a significant part of total transported goods, since 2006 transported volumes in short-sea shipping have been steadily decreasing (from more than 323 million tonnes to around 298.000[6]).

Around 73% of landed goods originate from international traffic, while only 50% of departed goods is directed to external markets. In terms of volumes, “Petroleum products” is the most important cargo typology (46% in weight), although manufacture products (16%) are quickly increasing. Furthermore, manufacture products represent the most important type of good loaded (34%).

In terms of Ro-Ro traffic, total transported goods amount to around 80 million tonnes per year, except in 2009 when the level of transported goods dropped to around 76 million tonnes. A feeble decrease by 1,4% was registered in 2011 with respect to 2010.

In terms of volume, Trieste is the first port in Italy (37 million tonnes[7] in 2011), followed by Genoa (31 million tonnes in 2011). As for Trieste, following two years of peak in which short-sea shipping volumes were around 40 million tonnes, in 2011 around 3 million tonnes of goods transported in short-sea shipping modality were registered as deep-sea shipping, showing therefore a change in the transport mode. On the other hand, Genoa has been registering stable increasing trends in short-sea shipping (+3% from 2008 to 2011), while deep-sea shipping keeps on reducing its role in the port (-32% from 2008 to 2011).

As mentioned above, Italian ports devoted to short-sea shipping are strongly linked with the industrial specialisation in the related port’s influence area, determining the type of goods mainly handled. Therefore, GioiaTauro – besides containers transhipment – mainly handles agriculture and manufacture products, Taranto deals with metallurgic products, Trieste (whose around 80% of short-sea shipping is

[6] EUROSTAT, 2011.
[7] EUROSTAT, 2011.

liquid bulk) and Porto Foxi (Cagliari) for petroleum products; only a few Italian ports, as Genoa for example, deal with different many different types of goods.

The infrastructural scenario for short-sea shipping in Italy is fragmented and presents differences between the North and the South, not only as specifically regards port facilities, but also when it comes to the different levels of intermodal facilities. Thanks to its location close to main Northern Italy markets and supported by well-structured intermodal connections, the Tyrrhenian arch (Genova, La Spezia, Savona, Livorno) is progressively extending its role in the area, reaching other markets traditionally out of its scope. Good growth potential can also be detected for Northern-Adriatic ports, especially taking into account the strengthening of connections between the Balkans, Italy and the rest of Europe. As for the Southern ports, these are generally affected not only by insufficient water infrastructural facilities but also by limited intermodal connections and poor efficiency of ports services. Southern transhipment ports (Gioia Tauro, Taranto and Cagliari), will suffer more and more the competition of new structures in the South of the Mediterranean (Port Said, Tangier Med, Enfidha).

Thanks to the economic growth of Mediterranean and Balkan countries, to the process of EU expansion and to development of Pan-European transport corridors, short-sea shipping looks destined to an interesting growth in the next years, although uncertainties remain due to the current crisis period and the uncertain political situation of some Mediterranean countries (i.e. Egypt). In the case of Balkan routes in particular, it is not conceivable that traffic could further congest the road system, and public authorities should find specific policies to further incentivise less polluting means of transportation. Therefore, while the Tyrrhenian basin remains essential for national routes (south-north routes, island services), Adriatic ports, which have no direct deep-sea routes, will develop traffic with Mediterranean countries and transhipment ports, either ports in Southern Italy or in Southern Mediterranean countries (thus intercepting also growing exchanges with Far East). The national framework related to short-sea shipping 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 many goods. 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.

Passenger ferry services

Excluding the cruise sector, passengers embarked and disembarked in all Italian ports were about 77 million[8] in 2011, decreasing by 8% with respect to 2010 (almost 84 million passengers).

The most important ports are Messina (8,03 million passenger in 2011, - 24% compared with 2010) and Reggio Calabria (7,7 million passengers in 2011, -22% compared with 2010), because of ferry connections between the mainland and Sicily. The third and fourth ports are Naples (7,5 million passengers in 2011, -4% compared to 2010) and Capri (6,5million passengers, stale compared to 2010). Other ferry connections (to/from Sardinia and Isola d'Elba) cover a minor importance.

Despite most of the Italian passenger traffic is concentrated in Sicilia, Calabria and Campania (almost 40% of passengers in Italy), the terminal surface dedicated to ferry services in these regions covers on the overall around 12% of the national total, while Puglia (25% of the national total) and Lazio (19% of the national total) dedicate wider spaces to passenger terminals.

This lack of equipped surfaces dedicated to passenger services is linked to the fact that passenger terminals are historically located in the centres of the related cities, where they can take advantage of other infrastructural facilities and connections such as railways. But at the same time, this favourable position significantly limits a possible expansive development because of saturation.

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

[8] EUROSTAT, 2011.

islands. Both activities are mutually connected and both can benefit from the development and the strengthening of the other.

Coastal navigation with main (Sardinia, Sicily) and minor islands were characterised by the presence of private companies and public companies such as "Gruppo Ferrovie dello Stato" (public) and Tirrenia (now private). Grimaldi is a private company specialised in Mediterranean and international connections for both passengers and goods. Connection with minor islands are mainly managed by public companies

Marine aquaculture

Marine aquaculture production in Italy was 114.800 tonnes in 2010, of which 13.800 tonnes was finfish and 101.000 tonnes shellfish. Finfish production has been extremely constant in the last decade (since 2002) while shellfish production is subject to fluctuations. The most important marine finfish species (seabass and seabream) reached their maximum production in 2001, while the current production is about 25% lower. Shellfish (mussels and clams) represents approximately 80% of marine aquaculture GVA[9].

Italian mariculture suffered the competition from neighbouring farming industries (Greece and Turkey). Seabass and seabream farms in Italy are lagging behind when it comes to reconverting land-based to offshore production, especially because of significant environmental and bureaucratic restrictions. On the other hand, in order to meet an ever-increasing and exigent demand, significant steps forward have been taken in marine aquaculture in recent years, not only on the number of productive plants but also on the quality of aquaculture products, certified by high standards all along the production process.

The potential for shellfish mariculture is almost unlimited (considering that it does not need external feeding) and product differentiation should be favoured (e.g. oysters, due to high internal competition on mussels) 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.

Protection of habitats

In Italy there are 24 National parks, 152 regional parks, 147 marine reserves, 418 regional reserves, 572 other protected areas. Part of all those areas can be located also inside the 2299 SACs (Special Areas of Conservation) or 609 SPAs (Special Protection Areas) or Ramsar sites (source: Federparchi, 2013).

According to our elaboration based on EEA (European Environment Agency) datasets of Nationally designated areas (CDDA) and Natura 2000 sites, coastal protected areas with almost 12.000 km^2 cover in Italy 18,7% of the total continental protected areas (64.000 km^2). Offshore marine protected areas have been excluded because we assume that the national/regional expenditure for marine sites protection is a small part of total governmental expenditure for habitat protection that was 4.179 millions of Euros in 2011, of which 780,2 for coastal protection, that means around 7.800 jobs in the sector (source. Elaboration on EUROSTAT data).

Although excluded from our calculations about public sector efforts in protecting habitats, 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). All these areas are of extraordinary historic, archaeological, natural and scientific interest. Some of them are UNESCO environmental and cultural world heritage, such as the Cinque Terre Marine Protected Area, and were created to protect the natural features, value and peculiarity of the submerged and emerged territory. Others, like Miramare Marine Reserve, represent field tests for the experimentation of new educational and scientific methods regarding the knowledge and conservation of the marine

[9] Cataudella, Spagnolo, 2011, Lo stato della pesca e dell'acquacoltura nei mari italiani, Ministero delle Politiche agricole, alimentari e forestali.

ecosystem. Others are unique ecosystems as far as their extent and diversity are concerned, characterised by an high morphological variability (alternation of rock areas and sand bottoms) that allows many fish species and a varied marine vegetation to settle in, characterised by great variety of animal populations, by a coast with precious and, in some cases, unique environmental situations and landscapes, geological formations, naturalistic features, and historical-archaeological evidences, like Porto Cesareo where it is possible to find coralligenous formations at low depths and not far from the coast.

Coastal tourism

Despite the economic crisis, in 2011 coastal tourism registered a remarkable increase of around 3 million more tourists compared with 2010. This increase was almost entirely due to international tourism and only marginally to internal flows.

Tourist flows (arrivals) in accommodation establishments in coastal areas in the last 10 years reported stable increasing trends, mainly generated by growing international flows from EU countries.
In 2011, considering all types of accommodations, Italy recorded nearly 104 million arrivals, and some 387 million overnight stays. The average length of stay of visitors is 3,73 nights, a feeble decrease if compared with the previous year. (-0,07 nights). The decrease is to be put into the context of a ten-year trend, in which the average length of stays has been constantly reducing in the overall tourism sector, and in coastal tourism alike.

Despite the huge potential of the Southern regions in terms of attractiveness and season duration, coastal tourism in the South of Italy seems “less attractive” to international tourists. This is also due to the poor infrastructure endowment (especially as regards airport and related connections to final coastal destinations) as well as to limited international connections with main potential markets. Only in recent years, the development of “low coast flights” has contributed to partly improving this scenario, despite significant changes have not yet been observed.

However, a lower number of overnight stays in the South does not imply an equally lower average length of stay. With the exception of Sicily and Molise, Southern regions in fact are characterised by a higher length of stay than the Italian average. Calabria and Sardinia (whose tourism can be regarded as almost entirely costal) are the regions with longer stays, with an average respectively 5, 6 and 5,1 nights.

As regards internal tourist flows, in 2011 83,417 million arrivals were recorded, with a total of 527,811 million nights. Compared with the previous here, once again, one can detect a slight decrease (-16,6%), especially when it comes to southern destination (-25,7%), although coastal tourism seems to be increasing. Considering the three-month period from July to September, the most visited regions in the central north are: Emilia Romagna (15,1% of summer holidays trips), Tuscany (10,5%), Veneto (8,6%), Lombardia (6,6%), and Latium (4,9%). Puglia (7,7%), Sardinia (6,6%), Calabria (6,1%) and Sicily (5,9%) are on the other hand the most popular destinations in the south.

Referring to the accommodation capacity, Italy (2011) can boast 33.911 hotels, with 2.252.636 bed places, with no appreciable change with respect to the previous year. Non-hotel accommodations, on the other hand, amount to 119.818 units (+3% than in 2010), with 2.489.102 (+1,8% than in 2010) bed a places. Non-hotel accommodations therefore seem to be increasing more, and also have larger capacity than hotels.

The areas with the largest capacity are the North-East (147,7 bed places per 1.000 inhabitants) and the Centre (92,2 bed places per 1.000 inhabitants). In the South of Italy, only Sardinia (83,0 per 1.000 inhabitants), Calabria (97,0 per 1.000 inhabitants) and Abruzzo (83,0 per 1.000 inhabitants) have number of bed places higher than the national average (78,1 per 1.000 inhabitants).

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.

Cruise tourism

The value chain of cruise tourism generates a significant financial and employment impact. Italy is the European country benefiting the most from cruise tourism. Out of 15 billion of direct expenditure in the EU, 4,45 is spent in Italy.

As regards the economic effects of cruise industry (source European Cruise Council, 2011):

- Almost 32% of total employment impact of the industry concerns Italy. Italian crew members and staff for year 2011 are estimated to 13.600 persons.
- From the total 100.089 generated jobs, 27% concerns trade and hospitality industry and 26% shipbuilding and metals industry.
- Respectively, the generated compensation was estimated to 3.043 million euro for 2011.

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 represented21% of the world total.

Sales of cruises in Europe recorded their fourth year of double-digit growth in 2011, despite a serious economic crisis within the Eurozone, the disruption caused by the events of the 'Arab Spring' and the Costa Concordia disaster.

Italy tops the list when it comes to homeports, given that more than 1/3 of cruise passengers in Europe begin their voyages in one of its ports. An increase in interporting cruises (where passengers can start their cruise at a choice of several ports within a single itinerary), has been also registered, contributing to enhancing Italy position as cruise home-port. Although interporting complicates on-board operations, there are significant benefits as it brings cruises closer to more passengers.

In this context, at regional level the most important cruise ports in Italy with a leading role in the European industry are: Civitavecchia, Venice, Savona and Genoa. These Italian ports are considered among the major home-ports in Europe, while Naples, Livorno Bari, Palermo and Messina are key ports-of-call. New homeports are being developed in other areas, notably Trieste and Ravenna.

Venice – besides its central role in Europe as a home-port – is the most important beneficiary of the increased deployments of brands like Costa Crociere, MSC and Royal Caribbean International, with passenger numbers flows at 2 million in 2010, while the terminal operator registered revenues and operating profits up by 9–10%[10]. Those revenues are ten times higher than they were ten years ago.

The debate over cruise tourism sustainability has received much attention in the last year, as a consequence of the Costa Concordia accident, which on 13 January 2013 partly sank after striking a rock off the eastern shore of the Isola del Giglio, in Tuscany. Since then, several initiatives aimed at improving sustainability in the sector have been carried out (e.g. Venice Blue Flag II, and "eco-sustainability memorandum of under standing" between cruise lines, the Venice Council, the passenger terminal and the port authority).

However, several concerns still remain as to the impact on the territory and resources depletion. This is exacerbated by the lack of national strategic framework. Ports increasingly resembling terminal containers (built with huge investments funded by competing port authorities), extremely long quays to allow the docking of several big ships at the same time, large squares built as parking areas for the coaches that go on shore excursions, new motorway junctions built to let tourists reach art cities in the shortest time possible, are among the main negative effects on the environment which are leading to a rethink of the cruise sector as a tourism model environmentally, financially, and socially sustainable for Italian coasts. This model shift is also happening in a time when there seems to be a reduction in the actual economic and job impact that the sector has on ports of destinations (the impact varies to a great extent depending if a port is a "home port" or a "port of call").

[10] Source: ECC (2013).

4.4 Regulatory environment

Short-sea shipping (incl. Ro-Ro) and Passenger ferry services

The most relevant measures regarding maritime transports are:

- Port State Control regulations requiring ships to meet international safety, security and environmental standards and involving inspections in ports of call. The rules are approved through the Paris MoU on Port State Control.
- IMO regulations on navigation and ship safety and environment, brought together in the SOLAS and MARPOL maritime legislative frameworks.
- ILO's Maritime Labour Convention (MLC), 2006 providing comprehensive rights and protection at work for seafarers.
- United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea - the "Rotterdam Rules" (2008).
- EC Directive 2000/59 on port reception facilities, with the aim of substantially reducing discharges of ship-generated waste and cargo residues into the sea.
- New EU legislation that came into effect on 1 January 2010 pertains to the EU Sulphur Directive 2005/33/EC, which defines limits on the sulphur content of marine fuels.
- Regulation (EC) No 725/2004 on enhancing ship and port facility security and Directive 2005/65/EC which complements the security measures introduced by Regulation (EC) No 725/2004.
- Decision No 884/2004/EC of the European Parliament and of the Council of 29 April 2004 amending Decision No 1692/96/EC on Community guidelines for the development of the trans-European transport network.
- Regulation (EU) No 1177/2010 of the European Parliament and of the Council of 24 November 2010 concerning the rights of passengers when travelling by sea and inland waterway and amending Regulation (EC) No 2006/2004.
- Directive 2010/65/EU of the European Parliament and of the Council on reporting formalities for ships arriving in and/or departing from ports of the Member States and repealing Directive 2002/6/EC.
- Decree 4 November 2010, n. 242, for the realisation of a one-stop customs service (sportello unico doganale), which compels 18 public administrations to integrate their bureaucratic processes in one single window for enterprises.
- Law 84/94, defining the set of port rules and related activities. Italian parliament commissions are long debating on the reform of this law, where the public nature of ports is established and the administration entrusted to public Port Authorities.

All issues concerning ports and maritime transport should be dealt with by a single administration, while at present responsibilities are “scattered” across several competent bodies. Serious bottlenecks for the growth of maritime transport in Italy are to be found in the delay to solve administrative-customs inefficiencies and in the current governance system of ports (law 84/94) that should be reformed. Both issues are included in the National Plan for Logistics 2011/2020; a one-stop customs service (Sportello Unico Doganale) should be operational in 2014, allowing an on-line procedure and elaboration of all customs and administrative documents (including sanitary procedures) currently under the administration of different offices. Law 84/94 should be changed in order to entrust Port Authorities with a higher financial autonomy (especially to invest in infrastructures) and a larger geographic jurisdiction. Another debate concerns the liberalisation of technical-nautical services, which Italian ship owners do not want. On the other hand, some reforms or simplification of rules concerning related tariffs and taxes seems to be necessary.

Marine aquaculture

The most relevant measures regarding aquaculture are:

- The Water Framework Directive (2000/60/EC) applies to inland waters and coastal water up to 1 nautical mile. At the Directive's core is a set of environmental objectives, which include achieving good ecological and chemical status of surface water within 15 years of the Directive entering into force. There is some concern in the aquaculture industry about the potential for the WFD to constrain the development of aquaculture.
- The Marine Strategy Framework Directive (2008/56/EC) is in essence the continuation of the Water Framework Directive beyond the 1 nautical mile limit.
- The Habitats Directive (92/43/EEC) complementing the Birds Directive (79/409/EEC). At the heart of both these Directives is the creation of a network of sites called Natura 2000. Natura 2000 sites are protected areas where aquaculture activities are limited or prohibited.
- The Council Regulation (EC) No 708/2007 concerning use of alien and locally absent species in aquaculture aims at controlling the spread of aquaculture species in Europe.
- The Council Directive 2006/88/EC of 24 October 2006 on animal health requirements for aquaculture animals and products thereof, and on the prevention and control of certain diseases in aquatic animals.
- The "hygiene package is a body of EU law laying down hygiene rules for foodstuffs produced in the EU and non-EU countries exporting to the EU, and includes the following acts:
- Regulation (EC) No. 852/2004 on the hygiene of foodstuffs
- Regulation (EC) No. 853/2004 laying down specific hygiene rules for food of animal origin in order to guarantee a high level of food safety and public health
- Regulation (EC) No. 854/2004 putting in place a Community framework of official controls on products of animal origin intended for human consumption
- At national level it is important to highlight the D.Lgs. 228/2001, which realizes the autonomy of the aquaculture entrepreneur from the fishing activities.
- D.Lgs. n. 154 of 26 May 2004, for the modernization of fisheries and aquaculture.
- D.M. n. 79 of February 2013, for the issue of authorization of marine aquaculture.

Besides national and EU legislation, it is important to state that the concession regimes, the application of several rules and the controls are under the jurisdiction of Regions, and this implies that the legislation can vary considerably from region to region. For instance, some important rules in the Emilia-Romagna region are the Regional Law n. 9/2002, which defines the regional authority for national waters (as a consequence of the decentralisation process defined by the D.Lgs. 112/1998) and Regional Law n. 29/1981 for the development of aquaculture. Although regional involvement in aquaculture issues can be considered positive due to a closer relation with sector operators and a better knowledge of local problems, an excessive disparity of rules is seen as a negative aspect for a coordinated development of aquaculture in Italy.

National associations highlight that it could be important to prepare a "white book" dealing with the problems of Italian aquaculture, in order to establish an ad-hoc legislation, rather than adapting rules from fisheries and/or agriculture.
Italian bureaucracy has one of the most negative impacts on aquaculture in the whole EU. This is due to the high number of rules and to the coexistence of several administrative offices that have to provide different types of authorisations and concessions. These include grants for the use of public waters, sanitary authorisations/inspections (CITES, UVAC), authorisation for aquaculture (D.M. n. 79 del 14/02/2013). In order to reduce these constraints, it would be necessary to join all current administrative functions under a sole authority, the Ministry of Agricultural, Food and Forestry Policies, in coordination with regional authorities; furthermore, it would be important to create a "one-stop service" (Sportello Unico Territoriale) at regional level to handle all bureaucratic procedures. Finally, several simplification rules recently introduced in the Italian legislation should be applied to aquaculture. These include: DPR 227/2011 "Autocertificazione autorizzazione scarico"; DPR 59/2013 "Autorizzazione Unica Ambientale".

Protection of habitats

There are different typologies of protected areas that individually contribute to the protection of habitats.

At EU level, Natura 2000 is the core part of the EU nature and biodiversity Policy. It encompasses: (i) Special Areas of Conservation (SACs) designated by Member States under the Habitats Directive, and (ii) Special Protection Areas (SPAs) which are defined under the 1979 Birds Directive. The aim of the network is to guarantee the long-term survival of Europe's most valuable and threatened species and habitats:

http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1992L0043:20070101:EN:PDF

http://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

At national and regional level , Law 394/91 defines the classification of protected natural areas, establishing the official list of protected areas in line with the criteria established, at the time, by the National Committee for protected area.

http://www.parks.it/federparchi/leggi/394.html

Currently, the system of protected natural areas is classified as follows, including Natura 2000 network:

- National Parks;
- Natural parks regional and interregional;
- Wilderness;
- Wetlands of international interest (under the Ramsar convention);
- Other protected areas;
- Special Protection Areas (SPAs);
- Special Areas of Conservation (SACs);
- Areas of finding land and marine (Law 979/82).

This framework regulates the protection of coastal habitats and the exploitation level of these habitats by human activity.

Law 394/91 and Law 979/82, subsequently integrated by Law 344/97 and Law 426/98 gave a definition of “Marine Protected Areas”, i.e. “natural reserves in aquatic environments, including coasts overlooking them, that presents notable natural, geomorphologic, physical, and biochemical features, and that play an important role for scientific, ecological, cultural, educational, and economic reasons.

This acts set the basic principle to safeguard promote natural heritage.

With art.19, Law 394/91 identifies the activities which cannot be carried out in marine protected areas, as the activities that risk endangering the environment, as well as the features that led to the institution of the protected area:

- Catching and harming animal and vegetal species, as well as the collection of archaeological artifacts;
- Modifying the geophysical environment, as well as the chemical and hydro-biological features of water;
- Advertising products or services;
- Introducing weapons, and explosives;
- Motorboating;
- Discharging solid and liquid waste.

The decrees instituting marine protected areas can, however, envisage exceptions to the rules set out in Law 391/91, taking into consideration socio-economic activities traditionally carried out in the areas.

Law 394/91 also promotes the conclusion of “local area plans” specific to each protected area, in order to develop sustainable economic activities, especially in the field of agricolture, farming, forestry, tourism. Depending on the activities to be developed, area plans are to be agreed with the Ministries for Agriculture, Industry, Labour, and Cultural and natural heritage, as well as with the Regions, and any other public pr private subjects involved.

At present, most Italian marine protected areas are zoned according to the biosphere reserve strategy, thus having one or more highly protected IUCN Category I core zones, surrounded by buffer zones where limited

human activities are allowed. These, in turn, are surrounded by boundary transition zones with less protection. Where economic activities are allowed, there is no overall plan – each park can decide for itself, though there are guidelines governing nature-related tourism. Controlled sustainable tourism, run by the Park' service department – Private hotels. Other allowed activities are: scuba-diving, fishing tourism, trekking, environmental education.

Other important National laws are:

- Decision of 28 November 2002: Permanent conference State-Regions: modifications of the 4th update to the official list of protected areas.;
- Decree 3 September 2002: Ministry of Environment. Guidelines for Natura 2000 sites management
- Decision 25 July 2002, n. 1500: Permanent Conference State-Regions: 4th update to the official list of protected areas;
- Law 179/02: Provisions on environment protection;
- Decree 3 April 2000: List of EU-relevant sites and special protection areas;
- Law 426/98: new interventions in the field of environment protection;.
- Decree 357/97: Regulation implementing directive 92/43 EEC for natural and semi-natural habitat protection;
- Law 124/94: Ratification and execution of the Convention on Biodiversity;
- Law 157/92 Provisions for the protection of wild fauna;
- Decree of 10 May 1991: institution of the National registry of protected areas;
- Law 431/85: urgent provisions for the protection of protected areas.

Coastal tourism and Cruise tourism

Tourism – and therefore cruise tourism in general - is a matter of regional legislation in Italy. The pluralism of sources has been partly overcome by introducing the Tourism Code, which entered into force on 21 June 2011 with the Legislative Decree no. 79 of 23 May 2011. Tourism code is the result of a multi-year effort made by the Italian Parliament in order to condense into a single act all provisions concerning accommodation establishments.

Link to Tourism Code:

http://www.citsnet.it/cits2013/images/documenti/CodiceTurismonew.pdf

As regards coastal tourism, the management of coastal areas is assigned to Regional administrations, each of which adopts their own coastal management plan.

Since 2011 Italy has hosted an annual event dedicated to cruise tourism: the Italian Cruise Day (ICD) that involves both public and private actors and support them to cooperate for further development of the cruise industry in:

- The participation of municipalities to concessionary companies dealing with the operation of cruise terminals (for example in Genoa the Municipality participates in the Stazioni Marittime SpA).
- The participation of local authorities and ports in common national and European projects for the renewal of cities (for example the case of Naples where the City Council together with the port Authority participated to the URBACTII program).
- The resolution of possible conflicts emerging between the cruise sector and the local system such as congestion, pollutions etc (for example the case of Venice and the agreement "Venice Blue Flag II" according to which cruise lines are committed to use less polluting fuels when entering the Lagoon).

5. Growth drivers and barriers to growth for the 6 most promising marine and maritime economic activities

The tables below provide an overview of growth drivers and barriers to growth summarising both benchmark and SWOT analysis, reported in detail in the Country fiche Annex.

Table 9 - Growth drivers and barriers to growth for Short-sea shipping (incl. Ro-Ro)

SHORT-SEA SHIPPING (incl. Ro-Ro)	Growth drivers	Barriers to growth
Maritime research	The research sector counts on INSEAN, a national research institute, and CETENA a company of the FINCANTIERI Group. The new Ritmare flagship project is addressed to the development of maritime technologies with the following scopes: security, sustainability, comfort, efficiency, materials, processes, etc...	National funds are decreasing due to the economic crisis.
Development and innovation	Several international projects have been carried out; e.g: MIELE - design and to development of ICT platforms; COSTA – emissions abetment by LNG. AdriaticMoS - development of Motorways of the Sea system.	National funds are decreasing due to the economic crisis.
Access to finance	Access to funds of the Industry 2015 plan (Law of 2006).	Delays in public funding. Lack of certainties on future access to finance due to the economic situations. Private investments are hindered by bureaucracy, lack of transparency, slow and inefficient infrastructure improvements. Need to forecast the future demand of the Motor ways of the Sea services.
Smart infrastructure	Several international projects have been carried out as Pilot actions; e.g: MIELE: this project (involving Italy, Spain, Portugal, Germany, Cyprus; end date: December 2013) coordinated by an implementing body of the Italian Ministry of Transport, includes the following steps: mapping the needs of relevant stakeholders; adapting, upgrading and integrating existing ICT systems in order to be interoperable with the MIELE Middleware; achieving and demonstrating systems interoperability through the MIELE Middleware; designing the framework for the exploitation of the MIELE Middleware and the possible full deployment of its services after the completion of this pilot action. AdriaticMoS: this project (involving Adriatic countries) aims: to define quality and security requirements for the identified MoS services; to perform an analysis of the transport needs in the region; to forecast the future demand of the MoS and identify bottlenecks and missing links, infrastructure and services needs; to identify and evaluate alternative scenarios of the Master Plan elaboration; to provide investment and time planning and identify funding sources.	Need to define quality and security requirements for Motorways of the Sea services Need to adapt, upgrade and integrate the existing ICT systems (maritime single window, port single windows, port communities, private operators' ICT systems) which represent obstacles to interoperability. Few sector operators are able to provide an integrated transport services. The Italian hub-and-spoke based network of ports means less cargo concentration in mainland destination ports and as such a more dispersed or fragmented inland transport system Development of intermodal infrastructures is hindered by viability problems of large cities and morphological characteristics of the territory (e.g. Liguria, Venice, Trieste, and Naples). Rail connections are not efficient. Bureaucratic (especially customs) procedures are still too long.
Maritime clusters	Collaboration with local universities and research centres. Creation of the North Adriatic Port Association including the ports of Rijeka, Koper, Trieste and Venice. Existence of several tables of discussion such as "Federazione del Mare" (joining industrial associations of shipping, logistics, shipbuilding, port authorities, etc...) and "Mare Technology Platform (PTNM)" (joining public administrations, industrial associations and research bodies). Historical co-presence and collaboration between economic agents in main ports and coastal regions.	Few maritime operators for most of the routes, meaning oligopoly situations. Problems linked to morphological characteristics of the territory limiting the development of intermodal terminals.

SHORT-SEA SHIPPING (incl. Ro-Ro)	Growth drivers	Barriers to growth
	The following High-Technology Regional Districts are named by PTNM as the priority tools to develop its initiatives: • Sicilian technological district (Maritime Commercial and Leisure Transport Technologies) • Technological district of Friuli Venezia Giulia (Shipbuilding and Boatbuilding Technologies) • Sea technological district of Marche (Maritime Technologies) • Ligurian district of marine technologies (Marine Technologies) • Technological district of Campania (Composite and Polymeric Materials Technologies) • Ligurian district of Integrated Intelligent Systems Technologies	
Education, training and skills	Long tradition in the sector. Established partnership with Universities, Training Centers, Enterprises, Industrialists Associations and Research Institutes. Specialised curricula in universities.	----
Maritime spatial planning	Some important example such as traffic corridors in the Adriatic Sea. Some regions have begun developing ICZM guidelines or similar plans for coastal zones.	Decentralization in some areas (e.g. fisheries, aquaculture, coastal protection) can represent a problem of coordination. Due to decentralization, each region has different approaches, more or less developed, to ICZM.
Integrated local development	Historical co-presence and collaboration between economic agents in main ports and coastal regions. The Mare Technology Platform (PTNM) has been consulted to propose specific objectives and set of actions for both the RITMARE PROGRAMME (Italian Research for the Sea) and the INDUSTRIA 2015 Programme.	----
Public engagement	Strong engagement to finance research and projects, and to organise platforms (PTNM is coordinated by the DG Maritime and Inland Transport)	Bureaucratic (especially customs) procedures are still too long and inefficient. New laws for the governance of ports is considered necessary New forms of public-private-partnerships are necessary.

Table 10 - Growth drivers and barriers to growth for Passenger ferry services

PASSENGER FERRY SERVICES	Growth drivers	Barriers to growth
Maritime research	The research sector counts on INSEAN, a national research institute, and CETENA a company of the FINCANTIERI Group. The new Ritmare flagship project is addressed to the development of maritime technologies with the following scopes: security, sustainability, comfort, efficiency, materials, processes, etc...	National funds are decreasing due to the economic crisis.
Development and innovation	Several international projects have been carried out; e.g: MIELE - design and to development of ICT platforms; COSTA – emissions abetment by LNG. AdriaticMoS - development of Motorways of the Sea system . Most ferries have a unique design, which is produced according to the special characteristics of each route, highly diverse passenger and freight requirements.	National funds are decreasing due to the economic crisis.
Access to finance	Access to funds of the Industry 2015 plan (Law of 2006).	Delays in public funding. Private investments are hindered by bureaucracy, lack of transparency, slow and inefficient infrastructure improvements. Need to forecast the future demand of the Motor ways of the Sea services.

PASSENGER FERRY SERVICES	Growth drivers	Barriers to growth
Smart infrastructure	Passenger terminals are generally situated close to city centres facilitating connections with rail stations and touristic development of port cities.	
Maritime clusters	Collaboration with local universities and research centres. Historical co-presence and collaboration between economic agents in main ports and coastal regions. Maritime transport is important for coastal tourism especially for mayor and minor islands.	Large maritime clusters can create tension with other marine activities, especially tourism activities.
Education, training and skills	Long tradition in the sector. Established partnership with Universities, Training Centers, Enterprises, Industrialists Associations and Research Institutes. Specialised curricula in universities.	----
Maritime spatial planning	Some important example such as traffic corridors in the Adriatic Sea. Some regions have begun developing ICZM guidelines or similar plans for coastal zones.	Decentralization in some areas (e.g. fisheries, aquaculture, coastal protection) can represent a problem of coordination. Due to decentralization, each region has different approaches, more or less developed, to ICZM.
Integrated local development	Historical co-presence and collaboration between economic agents in main ports and coastal regions. The Mare Technology Platform (PTNM) has been consulted to propose specific objectives and set of actions for both the RITMARE PROGRAMME (Italian Research for the Sea) and the INDUSTRIA 2015 Programme.	Some specific strategise for the development of minor island do exist, but not an organic plan
Public engagement	Agreement between private enterprises and the State to ensure basic routes with islands. Recent privatisation of Tirrenia.	Lack of a plan for passenger transport. Economic crisis make more difficult to ensure connections.

Table 11 - Growth drivers and barriers to growth for Marine aquaculture

MARINE AQUACULTURE	Growth drivers	Barriers to growth
Maritime research	Several centres of research are actively involved in this field. Research financed by triennial plans of fisheries and aquaculture. The new Ritmare flagship project is explicitly addressed to the research of innovative aspects for sustainable aquaculture	A specialised research centre for mariculture is needed. Enterprises are too small and, often, family run, to have an internal R&D department. Universities have frequently carried out disorganised researches, without a real connection with operator needs
Development and innovation	Existing collaboration between enterprises and research centres.	Technical problems to develop tuna farming. Enterprises are too small and, often, family run, to have an internal R&D department. A specific Aquaculture Technology and Innovation Platform is missing
Access to finance	EU resources (EFF and later funds). Research financed by triennial plans of fisheries and aquaculture.	Difficulty to access finance in economic crisis periods. Enterprises are too small and, often, family run, in order to have easy access to finance
Smart infrastructure	----	Supply is too fragmented; it would be necessary more organization through POs. Some problems for obtaining young wild clams to use in aquaculture.
Maritime clusters	Extensive aquaculture in the "valli" can be associated to agriculture and tourism. Aquaculture in "valli" and clam farming are located in restricted areas. Local universities have (unstructured) collaboration with farm enterprises.	A specific Aquaculture Technology and Innovation Platform is missing.
Education, training and skills	Long tradition in extensive aquaculture. Specialised curricula in universities.	More training is needed for advanced aquacultures techniques. Enterprises are too small and, often, family run in order to have continuous training
Maritime spatial planning	Some regions (Emilia Romagna) are beginning to develop spatial planning. Some regions have begun developing ICZM	Due to decentralization, each region has different approaches, more or less developed, to spatial planning and ICZM.

MARINE AQUACULTURE	Growth drivers	Barriers to growth
	guidelines or similar plans for coastal zones.	A National Strategy for Integrated Coastal Management is under study but it does not seem to be a priority (long time since the process begun without results)
Integrated local development	Private initiative has always been the engine for aquaculture development in Italy. The AMA (Associazione Mediterranea Acquacoltori) promotes local initiatives	Supply is too fragmented; it would be necessary more organization through POs.
Public engagement	National and EU funds are fundamental for the development of aquaculture.	National funds are decreasing due to the economic crisis. There are regional differences in the legislation and application of rules, with several constraints related to licences, controls, sanitary rules, etc... Too much bureaucracy for obtaining licences.

Table 12 - Growth drivers and barriers to growth for Coastal tourism

COASTAL TOURISM	Growth drivers	Barriers to growth
Maritime re search	Several maritime researches linked to Coastal tourism in different national universities and institutions Important effort to support a better dissemination and analysis of tourism data was made with the creation of the National Tourism Observatory (ONT)	Presidents of public National and local bodies dealing with tourism are appointed by the government. This implies that they are not independent from the political power when carrying out their activity. Private investment in research are still low
Development and innovation	E-tourism initiatives coming from public bodies like the Ministry of Cultural Heritage and Tourism	Small enterprises and small coastal destination often work uncoordinated, and due to budget reasons tend not to associate innovation to a potential enlargement and enhancement of their tourist offer
Access to finance	ENIT has broadened its financial base in recent years and has strengthened its co-operation with the regions, local governments and the private sector.	Low access to credit in Southern regions, together with the lower level of infrastructures development in the south represent a weakness for new business activities
Smart infrastructure	High number of airport with good international connections. Good IT infrastructure Effective port and airport system; Good general infrastructures (Information Technology)	Websites are still poorly utilised, improvements ENIT's budget has fluctuated almost annually, making it difficult to plan strategically and maintain a continuous presence in priority markets Absence of network agreements between single accommodation structures that allow the optimisation of purchasing processes, of delivering services and of distribution Distribution of commercial port non along the coast is not perfectly balanced. Weak connections between airports and coastal areas
Maritime clusters	Federazione del Mare-Italian Maritime Cluster, founded in 1994, includes the major actor of maritime industry	Coastal tourism actors are not yet involved in this organisation
Education, training and skills	Presence of a good number of post-graduate courses in the field. High percentages of tertiary education level (university, doctoral and specialization courses) 13,8% of the population. Higher choice of degrees in Economics and Management of Tourism	Competition is hindered by the lack of up-to-date basic training programmes.
Maritime spatial planning	Tourism planning is a matter of regional legislation in Italy	Currently ICZM strategy in Italy is under development
Integrated local development	Local Tourism Systems are defined in the Italian legislation (Law 135/01) with the aim to carry out projects that can promote tourism. Decentralised approach to tourism development	"Opposition" of local societies because of Environmental pressures and congestions of destinations Disparities between the north and south. Local Tourism Systems have been constituted without sufficiently taking into account the needs of private operators or at least their sector associations
Public engagement	A plan national "Italia 2020", as well as regional developments plans have been approved.	Policy rules and regulations are still not sufficiently supportive of the development of the sector

Table 13 - Growth drivers and barriers to growth for Cruise tourism

CRUISE TOURISM	Growth drivers	Barriers to growth
Maritime research	The research sector can count on many Universities, institutions, public bodies and private companies conducting research on both sectors of cruise tourism value chain: (i) production and maintenance of vessels and infrastructure facilities, (ii) tourists services. (SAFEDOR, SIS-PRECODE , MC WAP, LIFE+)	The public sector engagement is less relevant than the private one.
Development and innovation	Several innovative projects or products are developed in the hospitality segment, including food & beverage companies and equipment, in IT, communication and entertainment systems.	The low degree of accessibility to the hinterland of italian cruise destination threats the full exploitations of certain ports capacity and restricts the economic impacts for coastal areas. The environmental impacts of ports and their facilities are a concern of local populations.
Access to finance	The increase trends in the number of cruise passengers are stimulating the necessity for new public infrastructures in order to serve the industry. Legislative regime for facilitating PPP. Legislative regime to support shipbuilding activity.	Limited public resources have generated a trend toward complex Public-Private Partnerships for the development of multiple infrastructures.
Smart infrastructure	Applications of smart infrastructure to energy systems, traffic systems and integrated management solutions for port (GIADA project, use of photovoltaic panels, web reservation).	High cost. Conflict of interests.
Maritime clusters	Federazione del Mare-Italian Maritime Cluster, founded in 1994. The Cluster aims at representing the maritime sector of the country. Organizations linked to cruise tourism (shipbuilding, research, port administrations) are involved	Lack of coordination and cooperation between ports in coastal regions Lack of commitment between ports and cruise lines in most cases.
Education, training and skills	Long tradition in the sector. Established partnership with Universities, Training Centres, Enterprises, Industrialists Associations and Research Institutes. Existence of specialized training courses at regional level.	Limited dedicated cruise programs at higher level of education.
Maritime spatial planning	Currently ICZM strategy in Italy is under development.	Spatial planning policies related to cruise activity are not currently applied. Equivalent but territorially fragmented tools at regional level are in place to address coastal issues.
Integrated local development	Participation of local authorities and ports to common national and European projects for the renewal of the cities (for example the case of Naples where the Municipality together with the port Authority participated to the URBACTII program). Resolution of possible conflicts emerging between cruise sector and the local system such as congestion, pollutions etc (for example the case of Venice and the agreement "Venice Blue Flag II" according to which cruise lines are committed to use less polluting fuels when entering the Lagoon).	"Opposition" of local societies because of Environmental pressures and congestions of destinations. Lack of Local Touristic Systems for cruise sector.
Public engagement	Involvement of public bodies such as Chamber of Commerce and Municipalities to the construction and management of port infrastructures. Participation of municipalities to concessionary companies dealing with the operation of cruise terminals (for example in Genoa the Municipality participates in the Stazioni Marittime SpA).	Public engagement seems focused on transport and education policies. Local societies' awareness for the unsustainable performance of the sector.

Table 14 - Growth drivers and barriers to growth for Protection of habitats

PROTECTION OF HABITATS	Growth drivers	Barriers to growth
Maritime research	Management bodies of parks and other types of coastal protected areas autonomously elaborate their own development and management plans including research activities that are in this way strictly linked to local territorial needs and interests	Lack of funding for the definition of protected coastal surfaces that have a very limited extension compares to the Italian coastal length.
Development and innovation	The National strategy for Biodiversity, elaborated in 2010 contains actions addressed to the development and innovation of protection of habitats mechanisms (monitoring activities, actions to improve and restore ecological functions of habitats, programs and initiatives aimed at preventing the introduction and invasion of alien species…) A well-established website (Federparchi) facilitates access to information on all the progress made by Italy in the protection of all types of marine areas (national parks, regional parks, Natura 2000 network, Ramsar sites…)	Limited to local capacity to establish links between park authorities and private sectors.
Access to finance	Environmental expenditure of the Italian Regions has been growing in the last few years, both as regards direct interventions and grants.	Opportunities for private subjects that carry out economic activities in protected areas are still very limited. For instance, Rural Development Programmes (managed by Italian Regions) have actions aimed at protecting habitats (Natura 2000 area) but are financially limited, and only for the agriculture sector. The access to EU funds depends on the know-how at local level
Smart infrastructure	Some coastal areas are characterised by the presence of cutting-edge services and infrastructures.	Monitoring and surveillance needs defining and optimizing with existing technologies
Maritime clusters	Existence of coastal protected areas clusters that cooperate with each other (e.g. the “Po Delta” is “shared” between the Emilia Romagna and the Marche regions)	Limited to local capacity to establish links
Education, training and skills	Presence of a good number of post-graduate courses in the field. High percentages of tertiary education level (university, doctoral and specialization courses) 13,8% of the population. Environmental education and training programme managed by ISPRA (also in “e-learning” via Moodle)	----
Maritime spatial planning	Spatial planning is developed due to importance of economic activities (aquaculture, tourism, agriculture) in protected areas. Italy has a regoinal approach for coastal zone management and there is no single institution invested with the governance of the coastal zone.	The regional and local approaches often are sector oriented.
Integrated local development	Protection of habitats are likely to bring benefits, increasing the natural capital and goods and services that will benefit local people in particular in a tourist country like Italy.Participatory management of coastal protected areas.	Difficult relationship between the Ente Parco and the resident population in the protected area.
Public engagement	The sector is entirely public . The new National strategy for Biodiversity (2010) set how Government, the Regions and Local Bodies should jointly develop and enact policies on the preservation and restoration of species, habitats and landscape for the whole national territory.	Implementing the National Biodiversity Network as an Italian biodiversity network made up of Observatories established at a national and regional level is still in progress. Italy is not meeting its marine conservation objectives and legal commitments (e.g. 10% protection of its coastal and marine waters, CBD).

6. Analysis of maritime strategies at regional and national level, as well as those under preparation and their links with Smart Specialisation Strategies

Table 15 - Policies/interventions towards most promising marine and maritime activities and the Blue Growth objectives

Level	Strategies	Objectives	Most relevant and promising maritime economic activities	Links to BG Objectives	
National	Programma Nazionale Triennale della Pesca e dell'Acquacoltura 2013-2015	Objective A: Preservation of fish stock Objective B:Foster the competitiveness of aquaculture enterprises Objective C: Diversification of fisheries and aquaculture entrprises Objective D: Foster technological innovation and research Objective D: Foster OP development	**Marine aquaculture**	Contribution to an overall improvement in human diet and more quality merchandise Diversification of coastal communities activities Preservation of fish stock-sustainable aquaculture Promote aquaculture based on-binding strategic guidelines, multiannual national strategic plans and the exchange of best practice	Aquaculture
National	Programma Nazionale della Ricerca 2011-2013/Ritmare, la Ricerca Italiana per il Mare	Objective A Development of technologies for sustainable fisheries and aquaculture Objective B: Maritime Technologies for the development and construction of a Demonstration Vessel Objective C:Planning of the Maritime Space and Marine Environment Objective D: Observation System for the Marine Mediterranean Environmen	**Short-sea shipping**		
			Passenger ferry services		
			Marine aquaculture	Contribution to an overall improvement in human diet and more quality merchandise Diversification of coastal communities activities Preservation of fish stock-sustainable aquaculture Promote aquaculture based on-binding strategic guidelines, multiannual national strategic plans and the exchange of best practice	Aquaculture
			Habitat protection		
National	Industria 2015	Financing projects of industrial innovation in different fields; in the marine sector: shipbuilding; logistics aspects of ports and shipping	**Short-sea shipping**		
			Passenger ferry services		
National/ Regional	Gestione Integrata delle Zone Costiere – GIZC	Developing guidelines concerning ICZM for all coastal activities under national and regional administration	**Marine aquaculture**	Contribution to an overall improvement in human diet and more quality merchandise Diversification of coastal communities activities Preservation of fish stock-sustainable aquaculture Promote aquaculture based on-binding strategic guidelines, multiannual national strategic plans and the exchange of best practice	Aquaculture
			Coastal tuorism		
			Yachting and marinas		
			Habitat protection		
National	Il Piano Nazionale della Logistica 2011/2020	Developing port strategies	**Short-sea shipping**		
			Passenger ferry services		
National	National Tourism Development Plan "Italia 2020"	Increase the attractiveness of italian seaside tourism at international level. Specific objectives: Objective A) Improvement of governance system; Objective B) Relaunch Ithe National tourism Agency (ENIT); Objective C) Improvement and modernisation of tourism resources; Objective D) Tourist accommodation establishments and infrastauctures; Objective E) Provide higher tourism education and training initiatives; Objective F) Attract foreign investment.	**Coastal tourism & Yachting / Marinas**	Healthy environment Increase the growth potential of activities Increase the attractiveness of coastal areas	Maritime, coastal and cruise tourism
			Cruise tourism		
			Habitat protection		
National	National Strategy for Biodiversity	Implementing actions for conservation, restoration and enhancement of habitats. The strategy has three objectives: Objective A) Biodiversity maintenance and ecosystems services development throught actions aimed to life support (eg soil formation), provisioning (eg food, water resources, medicines), regulating (eg climate regulation), cultural (eg religious and cultural, aesthetic and recreational, educational); Objective B) Biodiversity and climatic change. Actions aimed to reduce the impact of climate change on biodiversity, defining appropriate measures to face it and to mitigate changes and increasing the resilience of natural ecosystems and habitats; Objective C) Biodiversity and economic policies through the integration of biodiversity conservation objectives into economic and sector policies, the creation of opportunities for new employments and social development, the strengthening of the understanding of the benefits of ecosystem services arising from it and the awareness of the costs of their loss.	**Coastal tourism & Yachting / Marinas**	Enhance efficiency of harvesting the European energy resources Minimize land-use requirements of the power sector Reduce the European greenhouse gas emissions	Blue Energy
			Cruise tourism	Healthy environment Increase the growth potential of activities Increase the attractiveness of coastal areas	Maritime, coastal and cruise tourism
			Habitat protection		

Table 16 - Policies/interventions towards most promising marine and maritime activities and the Smart Specialisation Strategies[11]

Level	Strategies	Objectives	Most relevant and promising maritime economic activities	Links to Smart Specialisation Strategies
National	Programma Nazionale Triennale della Pesca e dell'Acquacoltura 2013-2015	Objective A: Preservation of fish stock Objective B:Foster the competitiveness of aquaculture enterprises Objective C: Diversification of fisheries and aquaculture entrprises Objective D: Foster technological innovation and research Objective D: Foster OP development	**Marine aquaculture**	Innovation friendly business environments for SMEs Research infrastructures, centres of competence and science parks Universities-enterprise cooperation Green growth
National	Programma Nazionale della Ricerca 2011-2013/Ritmare, la Ricerca Italiana per il Mare	Objective A Development of technologies for sustainable fisheries and aquaculture Objective B: Maritime Technologies for the development and construction of a Demonstration Vessel Objective C:Planning of the Maritime Space and Marine Environment	**Short-sea shipping** **Passenger ferry services** **Marine aquaculture** **Habitat protection**	Clusters Research infrastructures, centres of competence and science parks Universities-enterprise cooperation Key enabling technologies Green growth
National	Industria 2015	Financing projects of industrial innovation in different fields; in the marine sector: shipbuilding; logistics aspects of ports and shipping	**Short-sea shipping** **Passenger ferry services**	Clusters Innovation friendly business environments for SMEs Research infrastructures, centres of competence and science parks Universities-enterprise cooperation Digital agenda Key enabling technologies Innovative public procurement Green growth
National/ Regional	Gestione Integrata delle Zone Costiere – GIZC	Developing guidelines concerning ICZM for all coastal activities under national and regional administration	**Marine aquaculture** **Coastal tuorism** **Yachting and marinas** **Habitat protection**	Clusters Green growth
National	Il Piano Nazionale della Logistica 2011/2020	Developing port strategies	**Short-sea shipping** **Passenger ferry services**	Clusters Innovation friendly business environments for SMEs Digital agenda Key enabling technologies Innovative public procurement Green growth
National	National Tourism Development Plan "Italia 2020"	Increase the attractiveness of italian seaside tourism at international level. Specific objectives: Objective A) Improvement of governance system; Objective B) Relaunch Ithe National tourism Agency (ENIT); Objective C) Improvement and modernisation of tourism resources; Objective D) Tourist accommodation establishments and infrastauctures; Objective E) Provide higher tourism education and training initiatives; Objective F) Attract foreign investment.	**Coastal tourism & Yachting / Marinas** **Cruise tourism** **Habitat protection**	Clusters Universities-enterprise cooperation Research infrastructures, centres of competence and science parks Cultural and creative industries Internationalisation Green growth
National	National Strategy for Biodiversity	Implementing actions for conservation, restoration and enhancement of habitats. The strategy has three objectives: Objective A) Biodiversity maintenance and ecosystems services development throught actions aimed to life support (eg soil formation), provisioning (eg food, water resources, medicines), regulating (eg climate regulation), cultural (eg religious and cultural, aesthetic and recreational, educational); Objective B) Biodiversity and climatic change. Actions aimed to reduce the impact of climate change on biodiversity, defining appropriate measures to face it and to mitigate changes and increasing the resilience of natural ecosystems and habitats; Objective C) Biodiversity and economic policies through the integration of biodiversity conservation objectives into economic and sector policies, the creation of opportunities for new employments and social development, the strengthening of the understanding of the benefits of ecosystem services arising from it and the awareness of the costs of their loss.	**Coastal tourism & Yachting / Marinas** **Cruise tourism** **Habitat protection**	Clusters Universities-enterprise cooperation Research infrastructures, centres of competence and science parks Green growth

[11] Smart Specialisation Strategies (S3) used for this logical analysis have been defined on the basis of the S3 horizontal approaches (or RIS horizontal priorities), as defined in the Guide to Research and Innovation Strategies for Smart Specialisation, available at http://s3platform.jrc.ec.europa.eu/en/c/document_library/get_file?uuid=e50397e3-f2b1-4086-8608-7b86e69e8553. See the Country fiche guide for more details at http://www.cogeaspa.it/blue-growth-study/country-fiches/?lang=en

Short-sea shipping (incl. Ro-Ro), Deep-sea shipping and Passenger ferry services

Short-sea shipping (incl. Ro-Ro) (as well as deep-sea shipping) and Passenger ferry services are backed by several strategies. Although there is not a specific plan for maritime transports (especially passenger transport), key aspects for the growth of these activities can be found in the "National plan of logistics 2011/2020", where the attention is focused on the role of ports. The main objectives are: (i) increase the competitiveness of northern ports in the Adriatic and Tyrrhenian Sea with respect to North Europe countries, and (ii) increase the competitiveness of transhipment ports with respect to ports located in Northern Africa. A third objective is the strengthening of Adriatic connections, taking advantage of the future development of eastern Pan-European corridors using the port of Ploče, Bar, Durres and Igoumenitsa as Adriatic terminals.

In order to reach these objectives, intermodal infrastructural improvements should be developed (especially railways, intermodal terminals, etc.) to have less expensive inland transports, as well as more rapid and easy bureaucratic procedures, and IT platforms. One key measure will be the introduction of a one-stop customs service (sportello unico doganale), which should be operative in 2014, allowing a online process and elaboration of all customs and administrative documents currently under the administration of different offices. A reform of port authorities is also included between priorities. An online platform should be integrated with the EGNOS and Galileo satellite navigation systems.

Important steps in this direction can be done through international projects, for example the underway MIELE (Multimodal Interoperability E-services for Logistics and Environmental sustainability) project (involving Italy, Spain, Portugal, Germany, Cyprus; end date: December 2013) coordinated by an implementing body of the Italian Ministry of Transport.

On the other hand, the Industry 2015 plan (affected by delays in payments) was thought to finance private projects of industrial innovation in different fields, including shipbuilding and logistics aspects of ports and shipping. SITMAR is a project realised by a consortium of advanced technologies enterprises, with the collaboration of universities, for the realisation of a system (hardware and software) allowing advanced solutions for multimodality, navigation safety, management of transported goods, etc. SLIMPORT is another project addresses to similar objectives.

Maritime Technologies are also explicitly included in the Flagship RITMARE project. Here a close cooperation between the worlds of research and industry is seen, starting from the work of the "National Maritime Technological Platform". The analysis developed has led to identify the following areas: security; environmental sustainability; comfort; efficiency; materials, processes and innovative components.

Considering all the amount of considerable effort realised in the research and technological field, probably the most serious bottlenecks for the growth of Italian maritime transport are to be found in the public engagement, especially in the delay to solve administrative-customs inefficiencies and to reform the current governance system of ports. Regional competition for resources, in fact, leads to irrational competitions between several small ports, without the possibility to realise a structured and hierarchical plan of priorities.

On the other hand, despite the importance of the sector and the recent privatization process which could lead to important structural and functional changes, a clear strategy for maritime passenger transport is missing.

Marine aquaculture

As regards marine aquaculture, Italy presents a coherent strategy that is developed every three years with the "National triennial plan of fisheries and aquaculture". The most recent plan covers the 2013-2015 period and, similarly to previous plans, tries to balance ecologic and economic objectives. As far as aquaculture is concerned, the attention is more focused on economic performance, competition, innovation, simplification of bureaucratic procedures, development of POs, and research.

Research in aquaculture is also fostered through other national strategies, such as the National research plan 2011-2013 and, more specifically, the included RITMARE flagship project a national marine research project for the period 2012-2016, focusing on several themes including maritime technologies, sustainable fishing, space planning, environment, etc…

However, apart from general guidelines, aquaculture remains a sector under the jurisdiction of regions, and every region may have different rules or different application of rules. Differences are found in the field of concessions, sanitary rules and controls. In the case of Emilia-Romagna Region, for example, the regional authority has redistributed functions and powers to province authorities for inshore farms, while it maintains jurisdiction over mariculture concessions. The regional authorities also manage EFF funds through specific announcements. Although regional involvement in aquaculture issues can be considered positive due to a closer relation with sector operators and a better knowledge of local problems, an excessive disparity of rules is seen as a negative aspect for a coordinated development of aquaculture in Italy.

Finally, integrated development of aquaculture with other activities, should be assured by ICZM plans or similar plans developed at regional level. However, even in this case, since this issue is decentralised, several forms of integrated planning can be found in each region (e.g. Emilia Romagna is the Region where ICZM approaches are more developed).

Coastal and cruise tourism

The 5-year strategic plan for tourism development, "Italia 2020", (reviewed every two years) stemmed from the need to reinforce Italy's competitiveness in the International markets. Coastal areas are among the main assets to revitalise the sector through measures jointly implemented by both the Central government and the regions.

http://www.governo.it/backoffice/allegati/70278-8390.pdf

Seaside tourism has become less appealing to International tourists. The main reason why should be found the existence of alternative destinations, more modern and less expensive (Spain, Turkey, Croatia).

In order to take the most from the available resources, the Italian strategy for revitalisation of tourism envisages two different objectives:

- The first objective will take into account three segments: the region of origin, the age group, and assets as regards short- and medium/long-range tourism;
- The second objective focuses on on short-range tourism.

Since seaside and cultural tourism is a traditional activity in coastal areas, medium- and long-range actions are the most interesting (first line of actions).

Measures envisaged under these objectives are:

- Identifying 30–40 priority regions on which to focus the action
- Focusing on attracting tourists from the BRIC countries to increase tourists' average expenditure;
- Developing 1-2 new touristic hub in Southern Italy;
- Promote cultural sites thanks public-private partnerships;
- Launching a programme for environmental awareness.

As regards transport and accommodation infrastructures, it can be seen that all measures envisaged in the strategy address coastal tourism. Specific measures are aimed at improving accommodation to increase their competitiveness with respect to International competitors.

Some measures aim to develop knowledge and skills of tourism operators, through the introduction of specific tutoring and communication initiatives. Even in this case, all these measures are likely to have an

impact on coastal tourism, e.g.: improved attractiveness of jobs in the tourism industry, life-long learning, job training, and post-graduate university courses on tourism, etc.

Finally, in the document it is also envisaged to attract foreign investors, also through the use of EU funds in the new financial frame work 2014-2020.

In the strategy, cruise tourism is not expressly mentioned. Nonetheless some actions and measures are likely to have an impact on it as well, e.g.:

- Governance: enhancement of central support and coordination;
- Revitalisation of the National Tourism Agency (ENIT)
- Enhancement of tourism offer
- Transport and infrastructures: evolution in line with the new needs.

At present, strategies to attract cruise ships and cruise tourists are devised at port level.

Protection of habitats

In Italy strategic actions for conservation, restoration and enhancement of habitats, are pursued by the national and regional authority or parks institutions by a full range of instruments (Natura 2000 Network, Life+ projects, parks development plans…)

The National strategy for Biodiversity, 2010 Environmental Ministry, is at present the main strategy for the protection of biodiversity:

http://www.minambiente.it/export/sites/default/archivio/allegati/biodiversita/estratto_strategia_eng.pdf

The Strategy started in 2011 and it is planned to up to 2020. The strategy has three objectives:

- Biodiversity and ecosystems services;
- Biodiversity and climatic change;
- Biodiversity and economic policies.

The strategic objectives are aimed at ensuring the durability of ecosystem services that are necessary to life, addressing the environmental and economic changes that are taking place, and optimizing synergy between sectoral policies and environmental protection.

Due to the transversal theme of biodiversity which is closely connected to most sectoral policies, the achievement of strategic objectives is addressed in a wide range of work areas. The first work area is “species, habitats and landscape”. Threats to biodiversity in terms of species and habitats are related to the failure to implement, in a pragmatic and rigorous way, the existing laws on the use of natural resources and assessment procedures, as well as to the lack of adequate rules on the sustainable use of the environment aimed at preventing the depletion of species and the deterioration of habitats and landscapes. The Government, the Regions and Local Bodies should jointly develop and enact policies on the preservation and restoration of species, habitats and landscape for the whole national territory.

These policies should recognize the intrinsic value and importance, also in economic terms, of the complex mosaic of ecosystems. These policies should also guarantee the objectives of biodiversity and ecosystem conservation through planning that integrates conservation, restoration and sustainable use of the elements of the territory, by reducing fragmentation and implementing programs and measures that guarantee and restore adequate ecological connectivity.

14 specific objectives must be achieved by 2020:

- improving data and filling knowledge gaps on the substance, characteristics and conservation status of habitats and species and their ecosystem services as well as on direct and indirect threat factors;

- improving data and knowledge on the value of ecosystems and their services by identifying the potential beneficiaries and stakeholders who play an effective role in the management of these systems;
- promoting the sustainable use of natural resources and introducing the application of the ecosystem approach and of the precautionary principle in their management;
- integrating biodiversity into legislation and local planning tools to ensure the continuous flow of ecosystem services and the ability to mitigate and adapt to climate change;
- enacting policies aimed at ensuring the satisfactory conservation status of habitats and native species also through the implementation of pilot projects for their in situ and ex situ protection and recovery;
- implementing a policy of careful assessment of the risks associated with the use of genetically modified organisms (GMOs);
- implementing policies aimed at solving the problems caused by IAS;
- implementing policies aimed at improving the sustainability of hunting in compliance and in line with national and EU standards and guidelines;
- implementing policies on the conservation of migratory species;
- implementing policies aimed at mitigating the impact of infrastructures on species and habitats;
- implementing policies aimed at reducing the impact of hazardous and toxic substances on species and habitats;
- implementing policies aimed at significantly reducing poaching activities;
- implementing policies aimed at removing and/or mitigating the underlying causes of anthropogenic climate change while implementing an adaptation strategy aimed at reducing the impact of climate change on the species and habitats used, with special reference to migratory species and mountain environments;
- developing permanent monitoring activities for migratory species in relation to climate change.

Sources and references

This Country fiche has been compiled according to a common methodology adopted in the framework of this Study and more specifically in Task 2.

A "Country fiche Guide" and a detailed methodology ("*Methodology for identifying and estimating Maritime Economic Activities using NACE and other data*") are available at http://www.cogeaspa.it/blue-growth-study/country-fiches/?lang=en

Sources

API - Associazione Piscicoltori Italiani, http://www.api-online.it/

ARPAV - Agenzia Regionale per la Prevenzione e Protezione Ambientale del Veneto, http://www.arpa.veneto.it/

ASSOBIOTEC - Associazione nazionale per lo sviluppo delle biotecnologie, http://assobiotec.federchimica.it/default.aspx

Babalola A., Bennis K., Caltagirone M., Manjarrez L., Tanizawa A., (2011), Tourism Cluster in Italy Microeconomics of Competitiveness Final Report, http://www.isc.hbs.edu/pdf/Student_Projects/Italy_Tourism_2011.pdf

Banca d'Italia, (2013), Il turismo internazionale in Italia: dati e risultati, numero 12, http://www.bancaditalia.it/pubblicazioni/seminari_convegni/conv-12

Cassa di depositi e prestiti, (2012), Porti e logistica: Il sistema portuale e logistico italiano nel contesto competitivo euro-mediterraneo: potenzialità e presupposti per il rilancio, http://www.cassaddpp.it/static/upload/por/porti_e_logistica.pdf"

Cataudella, Spagnolo, (2011), Lo stato della pesca e dell'acquacoltura nei mari italiani, Ministero delle Politiche agricole, alimentari e forestali, http://www.politicheagricole.it/flex/cm/pages/ServeAttachment.php/L/IT/D/4%252Fc%252F0%252FD.8febeba449faeb02417d/P/BLOB%3AID%3D5164

CNR – Consiglio Nazionale delle Ricerche, http://www.cnr.it/sitocnr/home.html

CSA Marinebiotech, http://www.marinebiotech.eu/

EEA - European Environmental agency, http://www.eea.europa.eu/

European Cruise Council, (2013), 2011/2012 REPORT, at http://www.europeancruisecouncil.com/content/ECC%20Report%202012-13.pdf

EUROSTAT, http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/

EEA – European Environment Agency, http://www.eea.europa.eu/data-and-maps/data/clc-2006-vector-data-version-2

EWEA - European wind Energy association, at www.ewea.org

FAO - Food and Agriculture Organization of the United Nations,
http://www.fao.org/fishery/statistics/collections/en

Federazione del mare, Censis, (2011), IV RAPPORTO SULL'ECONOMIA DEL MARE, Cluster marittimo e sviluppo in Italia e nelle regioni, ,
http://www.federazionedelmare.it/Home/IV%20Rapporto%20sull'economia%20del%20mare.%20Fdm-Censis%202011.Sintesi.pdf

Fincantieri, http://www.fincantieri.it/

Global water intelligence (GWI), 2011, Global Water Market 2011, Volume 2: Europe and Africa

IREPA, several reseacrhes and study, available at http://www.irepa.org/it/pubblicazioni.html

ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale, Atlante delle coste,
http://www.isprambiente.gov.it/it/servizi-per-lambiente/stato-delle-coste/atlante-delle-coste

ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale, (2011) Costa e stato dei litorali,
http://www.isprambiente.gov.it/files/pubblicazioni/statoambiente/tematiche2011/05_%20Mare_e_ambiente_costiero_2011.pdf

ISTAT, Istituto Nazionale di Statistica, at http://www.istat.it/

JRC - Joint Research Center, (2013) 2013 Annual EconomicReport on the EU Fishing Fleet,
http://stecf.jrc.ec.europa.eu/documents/43805/581354/2013-09_STECF+13-15+-+AER+EU+Fleet+2013_JRC84745.pdf

JRC - Joint Research Center, (2013) 2013 Economic Performance Report on the EU Aquaculture Sector,
http://stecf.jrc.ec.europa.eu/documents/43805/622206/2013-12_STECF+13-29+-+Aquaculture+economics_JRC86671.pdf

JRC - Joint Research Center, (2013), Economic Performance of the EU Fish Processing Industry,
http://stecf.jrc.ec.europa.eu/documents/43805/631667/2013-12_STECF+13-31+EU+Fish+processing+report_JRC87692.pdf

JRC – Joint Research Centre, http://eusoils.jrc.ec.europa.eu/library/themes/salinization/data.html

Marine biotech, at http://www.marinebiotech.eu/

Marine Board – European Science Foundation (2008), Strategic analyses for new activities,
http://www.redictsmarinas.ieo.es/redICTS/archivo.html;jsessionid=3BE0249D51FA9A08E4291E74D373FF31?id=335

Marine Board- European Science Foundation (2010), Marine Biotechnology: A New Vision and Strategy for Europe, http://www.esf.org/fileadmin/Public_documents/Publications/marine_biotechnology_01.pdf

Marine Board- European Science Foundation (2010), Marine Renewable Energy,
http://www.esf.org/fileadmin/Public_documents/Publications/MB_vision_document2.pdf

Ministero dell'Ambiente e della tutela del territorio e del mare, (2011), Parchi Nazionali: dal capitale naturale alla contabilità ambientale,
http://www.minambiente.it/sites/default/files/archivio/comunicati/Attuazione_Interno_VI_bozza_okx7x_Layout_1.pdf

Ministero dell'Ambiente e della tutela del territorio e del mare, (2011), Report Nazionale sui progressi realizzati in materia di gestione integrata delle zone costiere, http://www.minambiente.it/sites/default/files/archivio/allegati/biodiversita/dpn_report_nazionale_Gizc_2006_2010.pdf

Ministero dello sviluppo economico, (2013), IL MARE, SUPPLEMENTO AL BOLLETTINO UFFICIALE DEGLI IDROCARBURI E DELLE GEORISORSE, Anno LVII N.2 - 28 Febbraio 2013, http://unmig.sviluppoeconomico.gov.it/unmig/buig/supplemento57-2/supplemento57-2.pdf

Ministero dello Sviluppo economico, Bollettino ufficiale degli idrocarburi, various numbers, at http://unmig.sviluppoeconomico.gov.it/unmig/buig/mbuig.asp

Ministero dello sviluppo economico, (2012), DGRME Annual Report 2013, http://unmig.sviluppoeconomico.gov.it/unmig/stat/ra2013eng.pdf

Ministero delle Infrastrutture e dei trasporti, (2012) Conto Nazionale delle Infrastrutture e dei Trasporti, http://www.mit.gov.it/mit/site.php?p=cm&o=vd&id=2681

Ministry of Infrastructure and Transport, http://www.mit.gov.it/mit/site.php?p=cm&o=vm&lm=2&id_cat=9

OECD - Organisation for Economic Co-operation and Development, at http://www.oecd.org/

OECD, (2011), Studies on Tourism: Italy: Review of Issues and Policies, OECD Publishing. http://dx.doi.org/10.1787/9789264114258-en

Osservatorio Nautico Nazionale, (2013), Rapporto sul turismo nautico, numero 4 anno 2013.

Osservatorio Nazionale del Turismo, (2013), Il traffico crocieristico in Italia nel 2012, a cura di Risposte Turismo s.r.l., http://www.ontit.it/opencms/export/sites/default/ont/it/documenti/files/ONT_2013-03-11_02962.pdf

PRC- Policy Research Corporation, (2009), The economics of climate change adaptation in EU coastal areas, http://ec.europa.eu/maritimeaffairs/documentation/studies/climate_change_en.htm

Presidenza del Consiglio, (2013), TURISMO ITALIA 2020 LEADERSHIP, LAVORO, SUD, Strategic plan for the development of tourism, http://www.governo.it/backoffice/allegati/70278-8390.pdf

Risposte Turismo s.r.l., (2012), Italian cruise watch, http://www.italiancruiseday.it/ItalianCruiseWatch2011website.pdf

SRM - Studi sull'economia del Mezzogiorno e del Mediterraneo, (2012), Porti e Mediterraneo, semestral newsletter, http://www.sr-m.it/news/su-srm-med-la-newsletter-porti-e-mediterraneo.html

SRM - Studi sull'economia del Mezzogiorno e del Mediterraneo, (2012), TRASPORTO MARITTIMO E SVILUPPO ECONOMICO: Scenari internazionali, analisi del traffico e prospettive di crescita, Giannini Editore, http://www.portale-infrastrutture.it/writable/documenti/Libro%20Trasporto%20Marittimo%20-%202012.pdf

UCINA - Unione Nazionale Cantieri Industrie Nautiche ed Affini (2012), La Nautica in Cifre: Analisi del mercato per l'anno 2012, http://www.lanauticaincifre.it/pubblicazioni/

Unioncamere, (2011), Imprese Turismo, http://www.ontit.it/opencms/export/sites/default/ont/it/documenti/files/ONT_2011-02-01_02589.pdf

Unioncamere, (2011, 2012, 2013), several studies and reports, available at: http://www.ontit.it/opencms/opencms/ont/it/fonti/Unioncamere-Isnart

Unioncamere, Osservatorio nazionale del Turismo, (2010), Competitività del settore turistico italiano, http://www.ontit.it/opencms/export/sites/default/ont/it/documenti/files/ONT_2010-06-22_02393.pdf

Uniontrasporti, (2011), I° Rapporto sullo stato delle infrastrutture in Italia: criticità di oggi, priorità di domani, project financed by Unioncamere, http://www.uniontrasporti.it/writable/news/pdf/Uniontrasporti_I%20Rapporto%20sulle%20infrastrutture_Testo.pdf

UNTWO - United Nation World Tourism Organisation, at http://www2.unwto.org/

V. Vannucchi, , L. Cappietti, A.F.O. Falcão, (2012), Estimation of the offshore wave energy potential of the Mediterranean Sea and propagation toward a nearshore area, http://www.icoe2012dublin.com/ICOE_2012/downloads/papers/day2/POSTER%20SESSION%202/Valentina%20Vannucchi,%20Universita%20Di%20Firenze.pdf

World travel and tourism council, (2013), Travel and Tourism, Economic Impact, ITALY, http://www.ontit.it/opencms/export/sites/default/ont/it/documenti/files/ONT_2013-07-12_02986.pdf