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

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COUNTRY FICHE - ANNEX

MALTA

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1. Selection of the most important regions

No NUTS-2 available as for Malta.

2. Indicative size of all marine and maritime activities

Function/activity		GVA (EUR, billion)	Employment (*1000)	Score	Source & Reference year
0. Other sectors					
0.1	Shipbuilding and ship repair	0,080	1,319	1,0595	NSO (2010)
0.2	Water projects	----	----	0	----
1. Maritime transport					
1.1	Deep-sea shipping	0,013	0,047	0,089	NSO (2010)
1.2	Short-sea shipping (incl. Ro-Ro)	0,040	0,492	0,446	NSO (2010)
1.3	Passenger ferry services	0,150	3,523	2,512	NSO (2010)
1.4	Inland waterway transport	0,000	0,000	0,000	n.a.
2. Food, nutrition, health and eco-system services					
2.1	Fishing for human consumption	0,008	0,771	0,426	NSO (2013) Poseidon (2012)
2.2	Fishing for animal feeding	0,000	0,000	0,000	n.a.
2.3	Marine aquaculture	0,012	0,173	0,147	STECF (2010)
2.4	Blue biotechnology	0,000	0,000	0,000	n.a.
2.5	Agriculture on saline soils	0,000	0,000	0,000	n.a.
3. Energy and raw materials					
3.1	Offshore oil and gas	0,000	0,000	0,000	n.a.
3.2	Offshore wind	0,000	0,000	0,000	n.a.
3.3	Ocean renewable energy	0,000	0,000	0,000	n.a.
3.4	Carbon capture and storage	0,000	0,000	0,000	n.a.
3.5	Aggregates mining (sand, gravel, etc.)	0,000	0,000	0,000	n.a.
3.6	Marine minerals mining	0,000	0,000	0,000	n.a.
3.7	Securing fresh water supply (desalination)	0,053	0,900	0,715	WSC (2010)
4. Leisure, working and living					
4.1	Coastal tourism	0,273	14,025	8,378	NSO (2010)
4.2	Yachting and marinas	n.a.	0.5	0,000	----
4.3	Cruise tourism	See 4.1	See 4.1	0,000	----
5. Coastal protection					
5.1	Protection against flooding and erosion	0,001	0,070	0,038	COFOG (2010)
5.2	Preventing salt water intrusion	----	0,016	0,000	MEPA (2010)
5.3	Protection of habitats	0,016	0,115	0,138	EUROSTAT (2010)
6. Maritime monitoring and surveillance					
6.1	Traceability and security of goods supply chains	0,008	1,764	0,922	NSO (2010)
6.2	Prevent and protect against illegal movement of people and goods	0,014	0,399	0,271	NSO (2010)
6.3	Environmental monitoring	0,001	0,095	0,050	MEPA (2010)

3. Relative growth of all marine and maritime activities

Detailed scoring of the fastest growing marine functions in Malta (2008 - 2010)

Function/maritime economic activity		GVA (CAGR, %)	Employment (CAGR, %)	Score	Source & Reference year
0. Other sectors					
0.1	Shipbuilding and ship repair	0,00	0,00	0,00	NSO (2010)
0.2	Water projects	----	----	----	----
1. Maritime transport					
1.1	Deep-sea shipping	-3,88	1,58	-1,15	NSO (2010)
1.2	Short-sea shipping (incl. Ro-Ro)	6,69	2,09	4,39	NSO (2010)
1.3	Passenger ferry services	-3,22	2,33	-0,45	NSO (2010)
1.4	Inland waterway transport	----	----	----	n.a.
2. Food, nutrition, health and eco-system services					
2.1	Fishing for human consumption	-5,33	5,10	-0,12	NSO (2013) Poseidon (2012)
2.2	Fishing for animal feeding	----	----	----	n.a.
2.3	Marine aquaculture	360,86	-7,23	176,82	NSO (2013) Poseidon (2012)
2.4	Blue biotechnology	----	----	----	n.a.
2.5	Agriculture on saline soils	----	----	----	n.a.
3. Energy and raw materials					
3.1	Offshore oil and gas	----	----	----	n.a.
3.2	Offshore wind	----	----	----	n.a.
3.3	Ocean renewable energy	----	----	----	n.a.
3.4	Carbon capture and storage	----	----	----	n.a.
3.5	Aggregates mining (sand, gravel, etc.)	----	----	----	n.a.
3.6	Marine minerals mining	----	----	----	n.a.
3.7	Securing fresh water supply (desalination)	0,00	0,00	----	WSC (2010)
4. Leisure, working and living					
4.1	Coastal tourism	1,34	-1,93	-0,29	NSO (2010)
4.2	Yachting and marinas	----	----	----	----
4.3	Cruise tourism	----	----	----	----
5. Coastal protection					
5.1	Protection against flooding and erosion	216,86	32,29	124,57	COFOG (2010)
5.2	Preventing salt water intrusion	----	----	----	MEPA (2010)
5.3	Protection of habitats	0,00	0,00	0,00	EUROSTAT (2010)
6. Maritime monitoring and surveillance					
6.1	Traceability and security of goods supply chains	-4,68	-2,36	-3,52	NSO (2010)
6.2	Protect against illegal movement of people and goods	-5,04	-0,77	-2,90	NSO (2010)
6.3	Environmental monitoring	0,00	0,00	0,00	MEPA (2010)

4. Maritime economic activities with most future potential

Function	Activity	Innovativeness	Competitiveness	Employment	Policy relevance	Spill-over effects	Sustainability	Overall score
0. Other sectors	0.1 Shipbuilding and ship repair	0	-	0	0	+	-	-
	0.2 Water projects	+	0	+	+	0	+	++++
1. Maritime transport	1.1 Deep-sea shipping	0	+	-	0	0	-	-
	1.2 Short-sea shipping (incl. RoRo)	0	+	0	+	+	-	++
	1.3 Passenger ferry services	+	+	0	+	+	-	+++
	1.4 Inland waterway transport	-	-	-	-	-	-	------
2. Food, nutrition, health and eco-system services	2.1 Fishing for human consumption	0	+	0	+	+	+	++++
	2.2 Fishing for animal feeding	-	-	-	-	-	-	------
	2.3 Marine aquaculture	+	0	+	+	+	+	+++++
	2.4 Blue Biotechnology	+	0	+	+	+	+	+++++
	2.5 Agriculture on saline soils	-	-	-	-	-	-	------
3. Energy and raw materials	3.1 Offshore oil and gas	-	-	-	-	-	-	------
	3.2 Offshore wind	+	+	0	+	0	+	++++
	3.3 Ocean renewable energy (wave, tidal, OTEC, thermal, biofuels, etc.)	+	+	0	+	0	+	++++
	3.4 Carbon capture and storage	+	-	0	+	0	+	++
	3.5 Aggregates mining (sand, gravel, etc.)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	3.6 Marine minerals mining	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	3.7 Securing fresh water supply (desalination)	0	0	0	+	+	+	+++
4. Leisure, working and living	4.1 Coastal tourism	0	+	+	+	+	0	++++
	4.2 Yachting and marinas	0	-	0	+	0	0	0
	4.3 Cruise tourism	0	+	0	0	+	0	++
5. Coastal protection	5.1 Protection against flooding and erosion	0	0	0	0	0	+	+
	5.2 Preventing salt water intrusion	0	0	0	0	0	+	+
	5.3 Protection of habitats	+	0	0	+	+	+	++++
6. Maritime monitoring and surveillance	6.1 Traceability and security of goods supply chains	+	0	+	0	0	0	++
	6.2 Prevent and protect against illegal movement of people and goods	+	+	0	+	+	0	++++
	6.3 Environmental monitoring	+	0	0	+	0	+	+++

5. Growth drivers and barriers to growth

5.1 Results of the benchmark analysis

MARINE AQUACULTURE[1]	Growth drivers	Barriers to Growth
Maritime research	Good R&D facilities on Malta, with well-established and innovative research into new species and systems	----
Development and innovation	Favourable climate 9 months a year, providing excellent water quality and temperatures	High labour opportunity costs and limited flexibility
Access to finance	----	Limited financing opportunities
Smart infrastructure	----	----
Maritime clusters	----	All feed is currently imported; Most large volume markets are in other EU countries;
Education, needs in training and skills	----	Limited specialised training in aquaculture
Maritime spatial planning	----	Strong competition for both sea space (grow-out) and coastal land (e.g., hatcheries and processing)
Integrated local development	Good technical knowledge by operators and regulators	----
Public engagement	Established regulatory system	----

OFFSHORE WIND[2]	Growth drivers	Barriers to Growth
Maritime research	Suitable marine and physical conditions	Limited local R&D capacity
Development and innovation	Feed in tariff for solar power already exists;	Limited wind power and offshore engineering development and innovation
Access to finance	----	----
Smart infrastructure	Willingness to reduce fossil fuel consumption	----
Maritime clusters	----	----
Education, needs in training and skills	----	Limited training and skills in offshore engineering
Maritime spatial planning	----	
Integrated local development	----	----
Public engagement	Strong government support	----

[1] The benchmark instance is “Marine aquaculture in Greece”.
[2] The benchmark instance is “Offshore wind in Denmark”.

COASTAL TOURISM[3]	Growth drivers	Barriers to Growth
Maritime research	Natural attractors, land and seascapes; Benign southern climate;	----
Development and innovation	Strong cultural heritage;	Limited number of sandy beaches
Access to finance	Effective, progressive tourism agency that encourages diversification and investment;	----
Smart infrastructure	Good air and road infrastructure;	Malta island is crowded, with limited wilderness and coastal space for expansion; Roads congested, especially in the 3 cities area;
Maritime clusters	----	----
Education, needs in training and skills	Well educated and experienced operators; Well educated, English speaking operators	Limited labour pool, esp. in peak months
Maritime spatial planning	----	----
Integrated local development	Short distance from most EU counties.	----
Public engagement	----	----

MARITIME MONITORING AND SURVEILLANCE[4]	Growth drivers	Barriers to Growth
Maritime research	----	Difficult translation of scientific results in an operational use
Development and innovation	----	----
Access to finance	----	Budgetary restrictions from incoming government
Smart infrastructure	Existing IT capability for marine surveillance platform development; Malta's IT sector able to deliver 'smart' marine surveillance solutions	Whilst Malta's IT capacity is considerable, it lacks the sheer size compared to the benchmark case
Maritime clusters	Development of a designated cluster for maritime surveillance IT & facility development	Lack of specific clusters for maritime surveillance
Education, needs in training and skills	Well trained and experienced armed forces; Malta a recognised centre for training & skills development	----
Maritime spatial planning	----	----
Integrated local development	----	----
Public engagement	----	----

[3] The benchmark instance is "Coastal Tourism in Sardinia (Italy)".
[4] The benchmark instance is "Maritime monitoring and surveillance in Spain – Andalusia"

5.2 SWOT analyses

Marine aquaculture

Strengths	Weaknesses
• Well established and innovative research into new species and systems • Use of defined aquaculture zones to reduce conflict with other sea users • Current operators not over-burdened by debt	• Aquaculture – especially of new species – may be considered risky and therefore restricts the access to finance. • No local education or specialised training in aquaculture • Strong completion for both sea space (grow-out) and coastal land (e.g., hatcheries and processing)
Opportunities	**Threats**
• Non-food products e.g., blue biotechnology that are high value, highly intensive (e.g., reducing spatial needs) • Closed cycle tuna farming • Service provision to North Africa aquaculture • Intensive recirculation systems • Clustering of land-based infrastructure • Offshore systems • Greater integration with tourism and fisheries	• Increasing conflicts with other sea users • Difficult to achieve economies of scale enjoyed by competitors (e.g., Greece and Italy)

Offshore wind

Strengths	Weaknesses
• Malta's IT sector • Malta's maritime engineering capacity concentrated in a small area	• Limited in-country research capacity • Limited wind power and offshore engineering development and innovation • Limited training and skills in offshore engineering • Busy marine space
Opportunities	**Threats**
• Reduction of Malta's fossil fuel consumption and dependence. • Malta's IT sector able to deliver 'smart' energy solutions • In time, Malta could become and offshore power service provide to North African neighbours.	• Conflicts with fishing (esp. lampuki FAD fishing), bunkering and tourism

Coastal tourism

Strengths	Weaknesses
• Southern climate • Land and seascapes • Church and other heritage sites • Strong banking sector, supportive of Maltese tourism • Well educated, English speaking operators • Coastal tourism central part of local development plans • Progressive tourism authority	• Malta island is crowded, with limited wilderness • Roads congested, especially in the three cities area • Spatial restrictions to expansion of mass tourism • Insufficient shopping experiences • Insufficient information feedback from tourism operators
Opportunities	**Threats**
• Development of high end, niche tourism opportunities • Maintenance of coastal tourism zones • Greater integration with traditional industries such as fishing • Malta's IT sector able to deliver 'smart' industrial solutions	• Competition from EU and emerging North Africa states with more beaches and wilderness • Poor urban planning, leading to greater congestion and poorer utility services • Lack of investment

Maritime Surveillance

Strengths	Weaknesses
• Malta's strategic location in the Mediterranean and on the southern border of the EU • Well trained and experienced armed forces • Existing IT capability for marine surveillance platform development • Malta a recognised centre for training & skills development • Limited number of organisations and businesses involved in maritime surveillance management.	• Difficult translation of scientific results in an operational use • Whilst Malta's IT capacity is considerable, it lacks the sheer size compared to the benchmark case • Lack of specific clusters for maritime surveillance.
Opportunities	**Threats**
• Malta's IT sector able to deliver 'smart' marine surveillance solutions • Partnerships with other EU countries (e.g., Italy) • Development of a designated cluster for maritime surveillance IT & facility development	• Budgetary restrictions from incoming government

6. Maritime strategies

Title of the official document	Level (regional, national, cross-national, EU level)	Responsible body	Maritime Strategy concerned	Kind of Strategy document & publishing date
An aquaculture strategy for Malta	National	MRRA (now DFA)	Aquaculture	Strategy document (2012)
Tourism Policy for the Maltese Islands (2012 – 2016)	National	Ministry for Tourism, Culture & the Environment	Coastal tourism	Policy document (2011)
Tourism Policy for the Maltese Islands (2007 – 2011)	National	Ministry for Tourism, Culture & the Environment	Coastal tourism	Policy document (2006)
EUROSUR European Border Surveillance System	Regional	AFM / FRONTEX	Maritime surveillance	EU programme (2008)
Strategy for Renewable Electricity Exploitation in Malta	National	Malta Resources Authority	Energy	Strategy (2005)
National Energy Efficiency Plan (2008 – 2016)	National (required by Directive 2006/32/EC)	Malta Resources Authority	Energy	Action Plan (2007)
National Reform Programme	National (under Europe 2020 Strategy)	Ministry of Finance, the Economy and Investment	Cross-cutting	Programme (2011)
National Environment Policy (2011 – 2020)	National	Ministry for Tourism, Culture & the Environment	Cross-cutting	Policy (2011)
Strategic Plan for Environment and Development (to 2020)	National	Malta Environment and Planning Authority	Cross-cutting	Strategy (2012, in progress)
Climate Change Strategy	National	Ministry for Resources and Rural Affairs	Cross-cutting	Strategy (2012)
Creative Economy Strategy	National	Creative Economy Working Group	Cross-cutting	Strategy (2011)
Mediterranean Strategy for Sustainable Development	Regional	Mediterranean Action Plan	Cross-cutting	Strategy (2005)
Europe, the world's No 1tourist destination – a new political framework for tourism in Europe	EU	European Commission	Tourism	Policy communication (2010)
Energy 2020: A strategy for competitive, sustainable and secure energy	EU	EU	Wind power	Strategy (2010)