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Conservation objectives and measures for Malta's marine

Natura 2000 sites

JANUARY 2023

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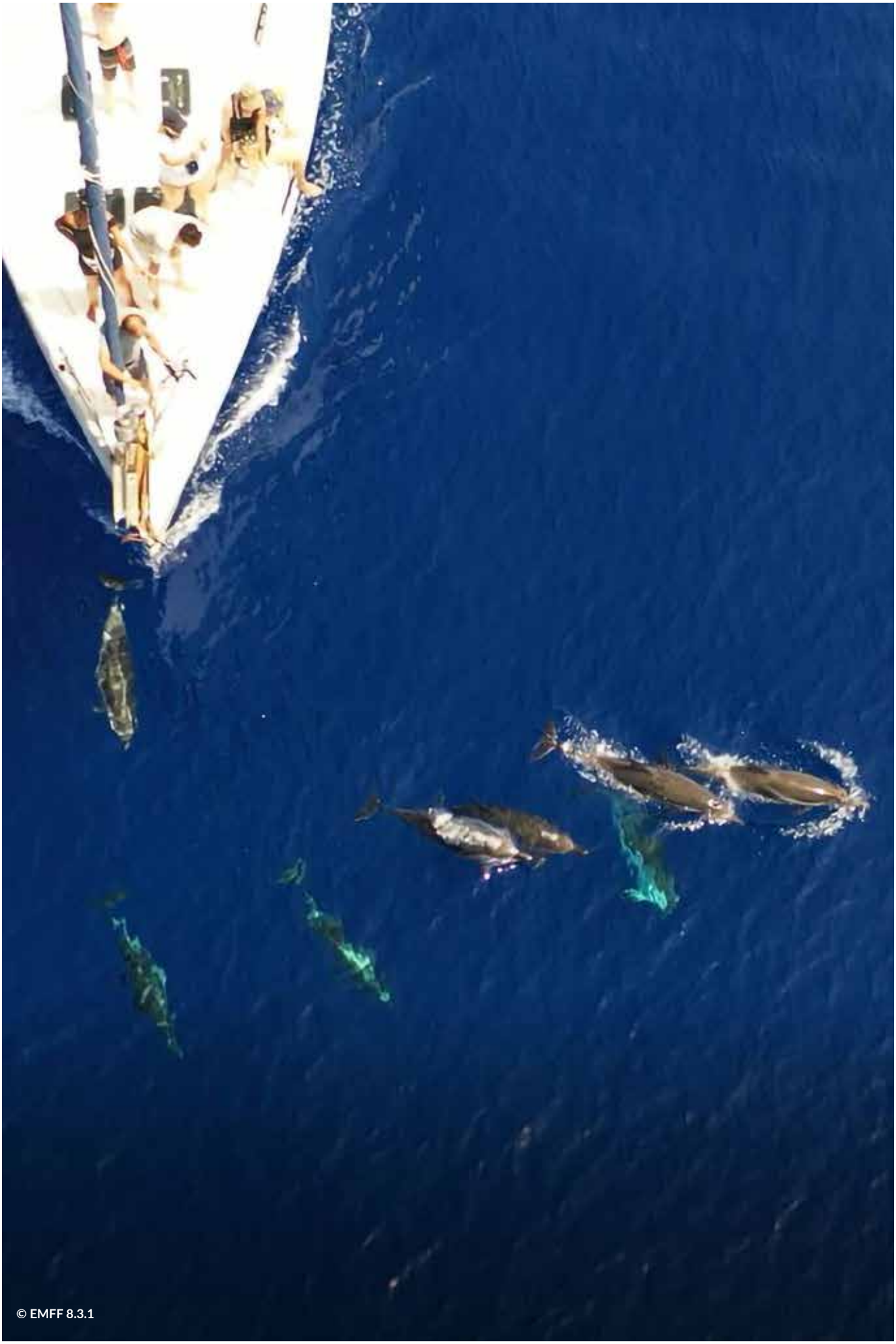

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Part I: Overview

1. POLICY BACKGROUND

1.1 THE HABITATS AND BIRDS DIRECTIVES

The **Habitats Directive** (92/43/EEC) and **Birds Directive** (2009/147/EC) seek to protect the most vulnerable habitat and species types across their natural range within the European Union (EU), with the following overall objectives:

- the Habitats Directive seeks to maintain and restore natural habitats and species of wild fauna and flora of Community interest at a Favourable Conservation Status;
- the Birds Directive aims to protect all wild birds and their most important habitats across the EU.

The designation of protected areas is required for the conservation of species and habitat types listed in Annex I and II of the Habitats Directive and Annex I of the Birds Directive, as well as for migratory birds. This coherent network of protected areas across the European Union is known as the **European Natura 2000 Network**. **Special Conservation Areas** (SACs) designated under the Habitats Directive and **Special Protection Areas** (SPAs) designated under the Birds Directive form part of the Natura 2000 network.

1.2 MARINE PROTECTED AREAS

Malta designated up to 4,138km^2 of marine waters for the conservation of important marine habitats and species listed in Annex I and II of the Habitats Directive and Annex I of the Birds Directive. This area is equivalent to more than 35% of Malta's National territory and the Fisheries Management Zone, a 25 nautical mile boundary designated under the Territorial Waters and Contiguous Zone Act (Cap 226).

In total, eighteen (18) Marine Protected Areas have been established in accordance with the **Flora, Fauna and Natural Habitats Protection Regulations (S.L. 549.44)**, contributing to the achievement of a favourable conservation status (FCS) of marine habitats and species, and to the protection of seabirds as listed hereunder:

MARINE HABITATS

Out of the nine (9) marine habitat types listed as "natural habitat types of community interest of which conservation requires the designation of Special Areas of Conservation (SACs)", in Annex I of the Habitats Directive, Malta identified four (4) natural habitat types occurring in Maltese waters:

- Sandbanks which are slightly covered by sea water all the time (1110);
- *Posidonia* beds (1120);
- Reefs (1170); and
- Submerged or partially submerged sea caves (8330).

Five (5) SACs in inshore/coastal waters (Figure 1) and five (5) SACs in offshore waters (Figure 2) are designated for the protection of these four marine habitat types. Three of these sites (MT0000113; MT0000115 and MT0000116) overlap with SACs for marine mammals and marine reptiles.

The inshore or coastal SACs incorporate all four habitat types listed in Annex I for the Habitats Directive; while offshore SACs are mainly designated for the

purpose of protecting reefs (1170) and sea caves (8330). Designation of protected areas for reefs and sea caves were a product of the results of the LIFE BaĦAR for N2K project (LIFE12 NAT/MT/000845).[1]

Marine Species

The loggerhead turtle *Caretta caretta* and the bottlenose dolphin *Tursiops truncatus* are listed in Annex II of the Habitats Directive that states "animal and plants species of community interest of which conservation requires the designation of Special Areas of Conservation (SACs)". Malta designated three offshore areas for the protection of the loggerhead turtle (MT0000113; MT0000115 and MT0000116) and three offshore areas (MT0000113; MT0000115 and MT0000116) for the protection of the bottlenose dolphin (Figure 1 & Figure 2). Designation of protected areas for the loggerhead turtle and bottlenose dolphin were based on the results of the Project LIFE+ MIGRATE (LIFE11NAT/MT/1070)[2]. Such protected areas would also contribute to the protection of other dolphin species found in Maltese waters, including the common dolphin (*Delphinus delphis*) and the striped dolphin (*Stenella coeruleoalba*).

1 https://lifebahar.org.mt/
2 https://lifeprojectmigrate.com/

In addition, some of the inshore/coastal SACs also contribute to the protection of the Maltese Top-shell (*Steromphala nivosa*) which is listed in Annex II of the Habitats Directive (MT0000101; MT0000105).

Seabirds

On the basis of the outcome of the LIFE+ Malta Seabird Project (LIFE10 NAT/MT/090 -2011-2016) Malta designated eight Special Protection Areas (SPAs) for the protection of breeding seabirds in Malta (Figure 3):

- Yelkouan shearwater (*Puffinus yelkouan*),
- Scopoli's shearwater (*Calonectris diomedea*) and
- European Storm-petrel (*Hydrobates pelagicus*).

Overlap between SACs and SPAs can be noted in Figure 1 - Figure 3.

1.3 MANAGEMENT REQUIREMENTS

The designation of protected areas (SACs and SPAs) needs to be followed up through the implementation of management processes targeting the achievement of conservation objectives for the listed habitats and species.

In accordance with Article 6 of the Habitats Directive, "*for Special Areas of Conservation, Member States shall establish the* ***necessary conservation measures***

Figure 1: Map of coastal Special Areas of Conservation

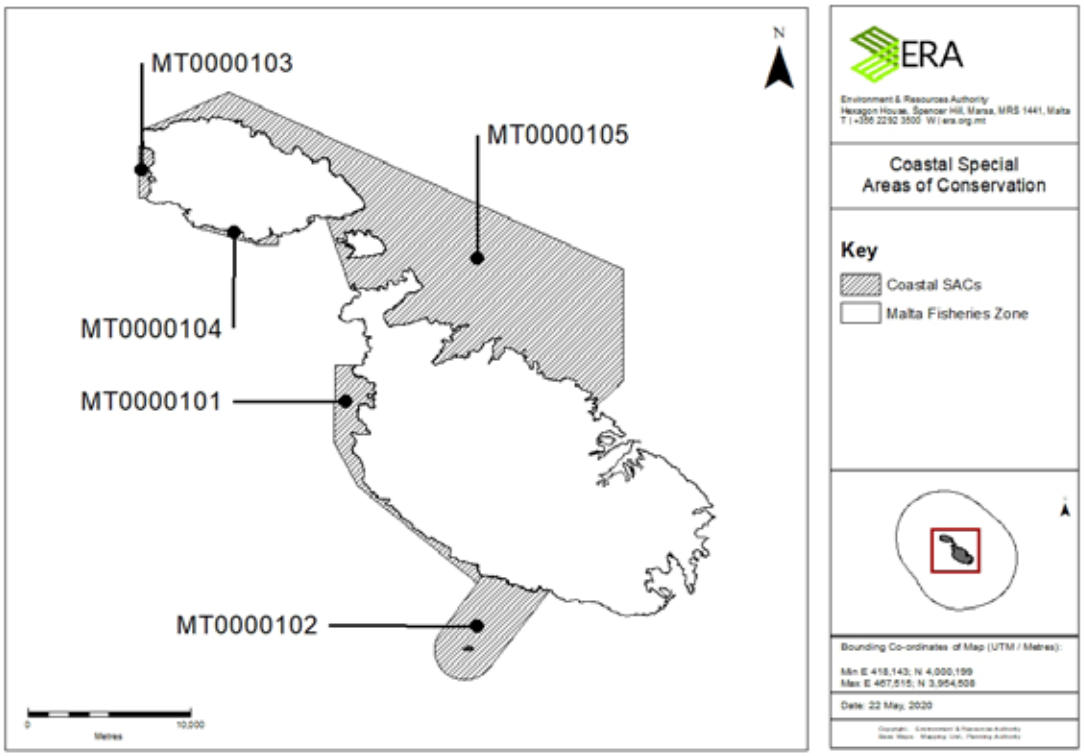


Figure 2: Map of offshore Special Areas of Conservation

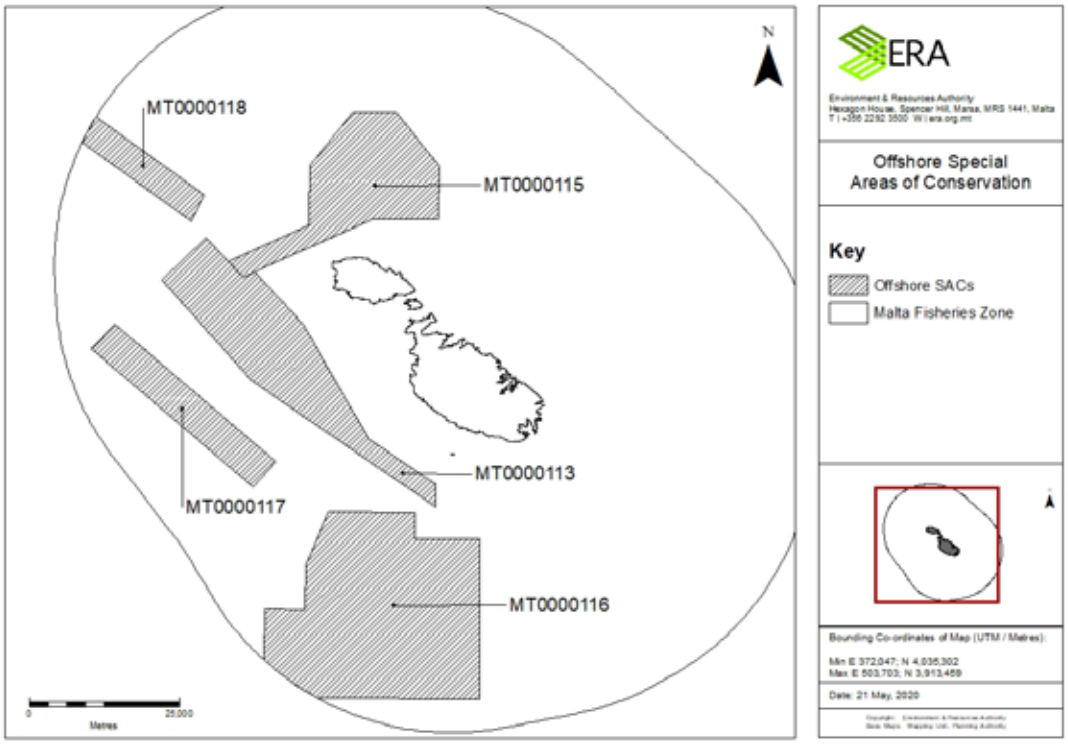
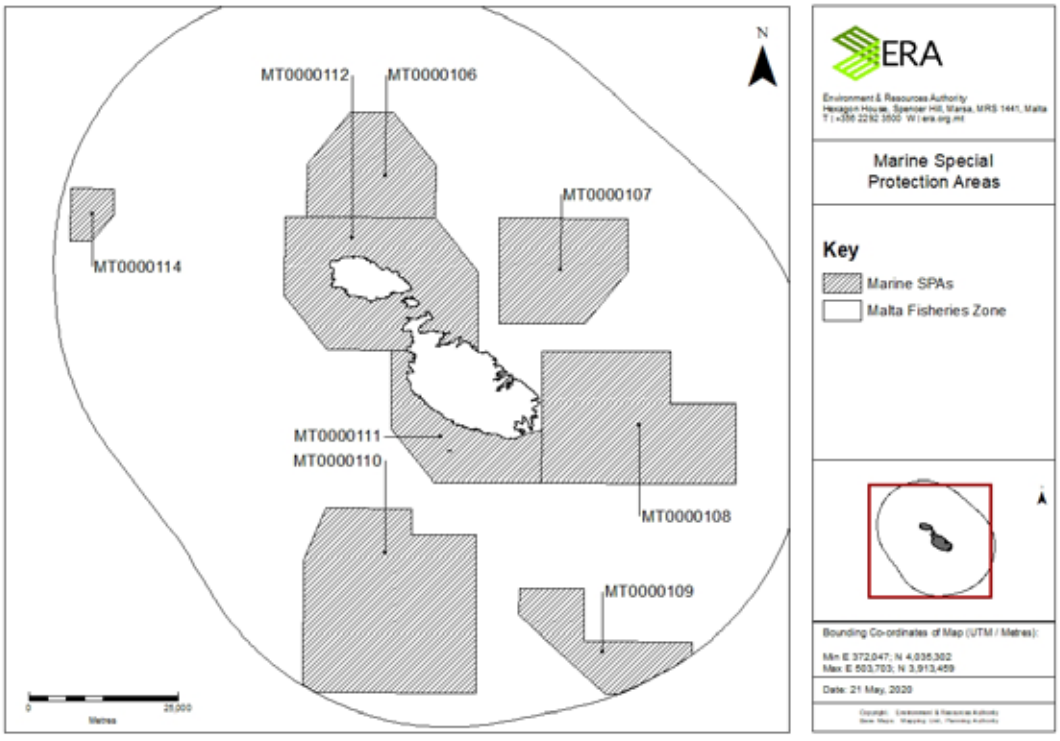


Figure 3: Map of Marine Special Protection Areas



involving if need be, appropriate management plans specifically designed for the sites or integrated into other development plans and appropriate statutory, administrative or contractual measures ***which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the site***." Management and assessment requirements as per Article 6 of the Habitats Directive, also apply to Special Protection Areas as designated under the Birds Directive (by virtue of Article 7 of the Habitats Directive).

This means that all Marine Protected Areas (MPAs) should be subject to management regimes targeting the achievement of FCS of marine habitats and species and to the protection of seabirds in accordance with the overall objective of the Habitats Directive and Birds Directive respectively.

Loggerhead turtle - *Caretta caretta*
OCEANA / Carlos Minguell © LIFE BaHAR for N2K

2. SCOPE

2.1 CONSERVATION OBJECTIVES AND CONSERVATION MEASURES:

CONSERVATION OBJECTIVES

Management of Marine Protected Areas should be geared at improving or maximising the contribution of the sites to the maintenance or achievement of FCS of the habitats and species listed in the Habitats Directive and the protection of seabirds in accordance with the Birds Directive. For this purpose, '**conservation objectives**' (COs) need to be set to guide management processes and enable measurement of progress towards achievement of the overall objectives of the two Directives.

A conservation objective is defined as "**the specification of the overall target for the species and/or habitat types for which a site is designated in order for it to contribute to maintaining or reaching favourable conservation status**". While favourable conservation status is defined at **the level of the natural range of the habitat or species**, management related contributions of the site towards the achievement of such an objective needs to be based on **site-specific objectives** that consider the ecological functions of the protected areas.

Broad conservation objectives would thus target achievement of FCS at national, biogeographical, or European level, while site-specific objectives would specify the conditions targeted to be achieved by the habitat type or species within the specific sites, so as to maximise the level of contribution of the respective sites in achieving FCS. Site-specific conservation objectives need to:
be set for all species and habitat types of Community Interest listed in the Habitats Directive and also for species of birds listed in Annex I of the Birds Directive present in Natura 2000 sites;
be based on the ecological requirements of the natural habitat types and species;
address threats of degradation or destruction to which the habitat and species present within the site are exposed to.

Site-specific conservation objectives (SSCOs) should be established in the context of the conservation status of the habitat type and species present at the time of designation of the protected area, as specified in the Standard Data Forms (SDF) of such areas[3].

CONSERVATION MEASURES

Conservation measures (CMs) are the actions through which the conservation objectives for a Natura 2000 site would be achieved. Such measures should generally be established at a local or site level. However, conservation measures can also be applicable at a broader scale and can include measures to be implemented outside the Natura 2000 network. In fact, compliance with Article 6.1 of the Habitats Directive could require measures that are not site-specific and measures that apply to either areas outside the boundary of the protected site or that apply across multiple sites.

3 https://era.org.mt/topic/natura-2000-datasheets-maps/

2.2 INFORMATION NEEDS

Each site forming part of the Natura 2000 network should be recognised for the contribution of the site to the entire network, so as the Member States can achieve a favourable conservation status for the habitats and species present within the site. This principle should be the basis for establishing site level conservation objectives.

The management process should therefore include an assessment at site level of the degree to which the habitat or species concerned requires maintenance of, or, where necessary, restoration to a particular conservation status in order to make sure that the site contributes to achieving conservation targets at a higher level (regional, national, biogeographical region or EU).

In this regard, the conservation status of the listed habitats and species, the status of the protected areas and the associated pressures and threats were consulted prior to developing conservation objectives and measures for the Marine Protected Areas. This information was adapted from Malta's reports to the EU Commission pursuant to Article 17 of the Habitats Directive[4] and Article 12 of the Birds Directive[5], as well as the Standard Data Forms of each protected area[6].

2.3 SCOPE AND OBJECTIVES OF THIS DOCUMENT

This document puts forward conservation objectives and conservation measures for Marine Protected Areas in accordance with Article 6.1 of the Habitats Directive.

The objectives and measures presented in this document reflect the outcome of the stakeholder and public consultation processes. The public consultation process was launched on July 10th, 2021 and closed on September 5th,2021. The document also presents discussions with the EU Commission that were held in October 2021.

The revised management process is outlined in Part II and Part III of this document as follows:

- Part II details SSCOs, operational objectives (OOs) and the conservation measures for each habitat and species for which Marine Protected Areas are designated, in line with EU Commission guidance;[7]
- Part III lists general objectives and measures that are applicable to all Marine Protected Areas.

General objectives and measures primarily target the achievement of FCS at a broader National scale, whilst also providing the necessary links with regional objectives.

SSCOs, on the other hand, stipulate targets that need to be met within the Marine Protected Area in order for the site to contribute to achieving FCS. These SSCOs are complemented by operational objectives which seek to address knowledge gaps or address specific pressures on the habitats and species.

2.4 SYNERGIES ACROSS POLICY IMPLEMENTATION

The elaboration of conservation objectives and conservation measures was primarily undertaken in relation to the conservation status of the listed habitats and species. Nevertheless, achievement of common goals across related policies was an important consideration throughout the whole process. In this regard, the elaboration of conservation objectives and measures for Marine Protected Areas also sought a streamlined approach towards implementation of related EU and regional policy, including *inter alia*:

- the **National Biodiversity Strategy and Action Plan (NBSAP)** targeting the achievement of global and EU targets on biodiversity;
- the implementation of the EU **Marine Strategy Framework Directive** (MSFD - 2008/56/EC), in particular the Programme of Measures pursuant to this Directive;

4 http://cdr.eionet.europa.eu/mt/eu/art17/envxngv_g/
5 https://cdr.eionet.europa.eu/mt/eu/art12/envxztaea/
6 https://era.org.mt/topic/natura-2000-datasheets-maps/

7 Refer to the following links: http://ec.europa.eu/environment/nature/natura2000/management/docs/commission_note/commission_note2_EN.pdf and http://ec.europa.eu/environment/nature/natura2000/management/docs/commission_note/comNote%20conservation%20measures_EN.pdf.

Common Dolphin - *Dephinus delphis*
© EMFF 8.3.1

- Malta's **River Basin Management Plan** for coastal waters pursuant to the EU Water Framework Directive (WFD – 2000/60/EC); and Refer to the following links:
- the **Barcelona Convention** for the protection of the marine environment and the Coastal Region of the Mediterranean and associated protocols and action plans.

2.5 IMPLEMENTATION PROCESS

The conservation objectives and measures will be adopted through the relevant legal tools. This process will involve the development and publication of site regulations or notices in order to ensure that relevant stakeholders and the public in general are aware of the conservation measures and the need for compliance with the related regulations.

The implementation of conservation measures will be sought following the adoption of the relevant legal documents. As specified by the EU Commission guidelines, the conservation measures outlined in this document are accompanied by an indication of the responsible entity/entities. The implementation of the conservation measures will be undertaken by stakeholders as listed for each proposed measure. Notwithstanding, implementation will involve other relevant parties as necessary including *inter alia*:

- Department of Fisheries and Aquaculture
- Authority for Transport in Malta
- Malta Tourism Authority
- Ambjent Malta

Timeframes for implementation are stipulated for both conservation measures and operational objectives related to necessary studies or research targeting closure of knowledge gaps. Such timeframes are in consideration of the potential use of EU funds for implementation purposes as well as of the procurement procedures that will be employed in accordance with local public procurement regulations.

Neptune grass - *Posidonia oceanica*
OCEANA / Carlos Minguell © LIFE BaHAR for N2K

Part II:
Site-Specific Conservation Objectives, Operational Objectives and Conservation Measures

PREMABLE 3

This section outlines the SSCOs for each habitat and species for which Marine Protected Areas have been designated. On the basis of guidance provided by the EU Commission[8], SSCOs specify conditions targeted to be achieved by the habitat type or species within the specific sites, so as to maximise the level of contribution of the respective sites in achieving FCS of such habitats and species as the overall objective of the Habitats Directive (HD).

SSCOs need to be based on the **ecological requirements** of the habitat types and species and address threats of degradation to which such habitats and species are exposed to. Ecological requirements are defined in terms of attributes that reflect the habitats' and species' conservation status. Within this context, the attributes are selected based on the relevance of the parameters that define FCS as reproduced hereunder for habitats and species:

The conservation status of a natural habitat will be taken as 'favourable' when:

- its **natural range** and **areas** it covers within that range are stable or increasing;
- the specific **structure and functions** which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and
- the **conservation status of its typical species** is favourable as defined in (i) (Article 1e).

The conservation status of a species will be taken as 'favourable' when:

- **population dynamics** data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- the **natural range** of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- there is, and will probably continue to be, a **sufficiently large habitat** to maintain its populations on a long-term basis.

The SSCOs should identify targets to be reached in terms of these key attributes corresponding to the ecological requirements and the FCS of the habitats and species within the protected sites. However, the extent to which such targets can be developed also depend on the level of knowledge available for the attributes in question. Whenever knowledge is insufficient to identify the thresholds/ targets, operational objectives are set for addressing knowledge gaps within a specified period of time.

Table 1 below provides the list of attributes used to elaborate the SSCOs based on the current level of knowledge. Not all parameters defining FCS are thus being covered through targets at this stage, pending improved knowledge through achievement of the operational objectives.

8 http://ec.europa.eu/environment/nature/natura2000/management/docs/commission_note/commission_note2_EN.pdf and http://ec.europa.eu/environment/nature/natura2000/management/docs/commission_note/comNote%20conservation%20measures_EN.pdf.

Table 1: List of Attributes per Habitat and Species

Name	Code	HD Parameters defining FCS	Attributes used for SSCOs on the basis of available knowledge
Annex I Habitat Types			
Sandbanks	1110	Range & Extent	Area covered by the habitat type
Posidonia beds	1120	Range & Extent	Lower limit of meadow
			Area covered by the habitat type
		Structure & Functions	Shoot density
			Epiphytic load
			Maintenance of water quality
Reefs (Coastal)	1170	Structure & Functions	Condition of macroalgae (CARLIT)
		Typical Species	Species composition
Reefs (Offshore)	1170	Range & Extent	Area covered by the habitat type
		Typical Species	Species composition
Submerged or partially submerged sea caves	8330	Operational Objectives only	
Annex II Species			
Tursiops truncatus	1349	Range	Presence within the site
		Population	Individuals/Abundance
		Habitat for the species	Feeding behaviour
Caretta caretta	1224	Range	Distribution within the site
		Population	Individuals/Abundance
Calonectris diomedea *Puffinus yelkouan* *Hydrobates pelagicus*	A850 A464 A014	Range	Breeding Range
		Population	Breeding Pairs
			Individuals
Steromphala nivosa	2578	Range	Presence within the site
		Habitat for the species	Area covered by the habitat

Within the current knowledge scenario, it is important to note that the targets set through the SSCOs may be subject to changes and regular updating based on improved knowledge through time. Nevertheless, these SSCOs are considered robust enough to enable assessment of potential impacts as part of the Appropriate Assessment (AAs) procedure pursuant of Article 6 of the EU HD. In this regard, AAs which are undertaken based on these SSCOs will be considered valid regardless of any future updates of the SSCOs.

The information, with respect to the conservation status and pressures as relevant to each MPA from the Standard Data Forms (SDF), is reproduced in each section for each habitat and species. This information justifies the elaboration of the COs in terms of maintenance or improvements required for each protected site. The pressures and threats taken into consideration for the elaboration of conservation measures are those ranked by the SDF as of medium/high significance for the specific MPA and that are relevant to the habitats and species in question. Pressures and threats on habitats and species, as reported by Malta pursuant to Article 17 and Article 12 of the Habitats and Birds Directives respectively[9], and that are deemed relevant to the MPAs, were also taken into consideration, as well as other potential pressures/threats. This approach ensures the elaboration of COs and CMs targeting habitats/features that are most at risk of not achieving FCS.

The SDF data is followed by the SSCOs, OOs and the related conservation measures.

9 such reports list pressures/threats at a national scale rather than at MP level

3.1 SANDBANKS WHICH ARE SLIGHTLY COVERED BY SEA WATER ALL THE TIME - 1110 (SA)

Sandbanks in Maltese waters are characterised by the presence of the seagrass *Cymodocea nodosa* on sandy substrata. Three coastal MPAs have been designated for the conservation of this habitat type. The Standard Data Forms for these MPAs indicate that sandbanks are of excellent and good conservation status in terms of structure and functions and restoration possibilities in MT0000101 and MT0000105 but are of average or reduced conservation in MT0000104 (Table 2).

Cymodocea nodosa is highly sensitive to disturbances and water pollution, but can also be affected by natural factors including wind and wave exposure. At this stage, limited knowledge is available on the natural variation in the extent of such habitat type as well as the associated biodiversity. Furthermore, the full extent of this habitat type within the coastal MPAs still needs to be ascertained. Within this context, the site-specific conservation objectives (SSCOs - Table 3) for this habitat type should be considered preliminary. Such objectives are solely elaborated in relation to the baseline data with respect to the extent of the habitat as reported through the Standard Data Forms and will be subject to updates on the basis of improved knowledge.

Operational objectives (Table 4) are being put forward to address gaps that are currently hindering the development of robust SSCOs. Such operational objectives are also being put forward with the knowledge that nutrient enrichment and reduced water quality constitute the main anthropogenic pressure on such habitat type.

Table 2: Information from the Standard Data Form in relation to Sandbanks

MPA	Cover [ha]	Data Quality	Site assessment				Pressures relevant to protected site
			Representativity[10]	Relative Surface[11]	Conservation[12]	Global[13]	
MT0000101	42.48	Good	B	A	B	B	Professional and passive fishing; Leisure fishing
MT0000104	0.09	Good	C	B	C	C	Professional and passive fishing; Leisure fishing
MT0000105	33.52	Moderate	B	A	A	B	Professional active fishing; Outdoor sports and leisure activities, recreational activities; Professional passive fishing; Marine macro-pollution (i.e. plastic bags, styrofoam); Leisure fishing

10 **REPRESENTATIVITY:** Degree of representativity of the natural habitat type on the site: A: excellent representativity; B: good representativity; C: significant representativity

11 **RELATIVE SURFACE:** Area of the site covered by the natural habitat type in relation to the total area covered by that natural habitat type within the national territory. A: 100 >= p >15%; B: 15 >= p > 2%; C: 2 >= p > 0

12 **CONSERVATION:** Degree of conservation of the structure and functions of the natural habitat type concerned and restoration possibilities. A: excellent conservation; B: good conservation; C: average or reduced conservation

13 **GLOBAL:** Global assessment of the value of the site for conservation of the natural habitat type concerned. A : excellent value; B : good value; C : significant value

Table 3: Preliminary Site-Specific Conservation Objectives for Sandbanks

MPA	SSCO code	Conservation Objective	Attribute	Targets	Unit of Measurement
MT0000101	**SSCO_SA_101**	Maintain the extent of sandbanks as characterised by *Cymodocea nodosa* in MT0000101, by achieving the targets by 2030.	Cover	Area of sandbanks is maintained at >40 ha within the site, subject to natural variability.	ha
MT0000104	**SSCO_SA_104**	Maintain the extent of sandbanks as characterised by *Cymodocea nodosa* in MT0000104, by achieving the targets by 2030.	Cover	Area of sandbanks is maintained at approximately 0.1 ha within the site, subject to natural variability.	ha
MT0000105	**SSCO_SA_105**	Maintain the extent of sandbanks as characterised by *Cymodocea nodosa* in MT0000105, by achieving the targets by 2030.	Cover	Area of sandbanks is maintained at >30 ha within the site, subject to natural variability.	ha

Table 4: Operational Objectives for Sandbanks within MT0000101, MT0000104 and MT0000105

MPA	Operational Objective code	Conservation Objective
MT0000101 MT0000104 MT0000105	**OO_ SA_1**	Undertake studies in 2024-2026 to comprehensively map the extent of sandbanks within the coastal protected areas and enable elaboration of site-specific conservation objectives.
	OO_ SA_2	Undertake studies between 2024-2026 on the biodiversity associated with sandbanks and continue to develop adequate indicators by 2026 for the assessment of conservation status of sandbanks on the basis of 'structure and functions' parameters.
	OO_SA_3	Ensure that the levels of nutrients within the sites in question do not lead to eutrophication.

***Conservation Measures*:**

Measure name	**REGULATION OF NUTRIENT INPUT**
Measure code	**CM_SA_1**
Category (Art. 17)	CF07 - Reduce/eliminate marine pollution from industrial, commercial, residential and recreational areas and activities
Actions for measure implementation	• Based on knowledge on point discharges with emissions to Marine Protected Areas supporting sandbanks with *Cymodocea nodosa*, review the effectiveness of the permitting system to ensure good water quality within such areas by 2025. • Update permitting system based on the outcome of the effectiveness assessment.
Applicable sites	MT0000101, MT0000104, MT0000105
Lead/supporting parties	Environment and Resources Authority
Timeframe	2025
Performance indicator	Nutrient concentrations and turbidity in the water column overlying sandbanks within MPAs.

Little Neptune grass - *Cymodocea nodosa*
OCEANA / Carlos Minguell © LIFE BaHAR for N2K

3.2 POSIDONIA OCEANICA BEDS - HABITAT 1120 (PO)

Five coastal Marine Protected Areas are designated for the conservation of *Posidonia oceanica* beds. In accordance with the assessment undertaken as part of the Standard Data Forms of these sites, this priority marine habitat is in excellent or good conservation status, in terms of its structure and functions and restoration possibilities, in all the protected areas except for MT0000104, in which such status is of average or reduced conservation (Table 5). Such reduced conservation status can be potentially attributed to a combination of pressures at the site in question including potential disturbance to the seabed.

Within this context, SSCOs (Table 6) seek maintenance of the conservation status of this habitat type, except for *Posidonia* beds within MT0000104, for which improvement in status in terms of structure and functions is sought. Operational objectives are put forward in Table 7, followed by the conservation measures.

Apart from the information included in Standard Data Forms, additional information from recent data collection processes[14] in relation to *P. oceanica* in MT0000101 - MT0000105 was used to elaborate the conservation objectives and measures. However, recent data collection processes were primarily targeting the determination of the extent of *Posidonia* meadows at a national scale and the condition of the habitat type within representative monitoring sites. Noting the geographical scope of the survey, the *Posidonia* 'cover' data must be interpreted with caution on a localised scale. Within this context, targets on 'cover' of *P. oceanica*, on the basis of such data, are being set through the SSCOs, with the understanding that such targets need to be verified through more detailed localised surveys within the Marine Protected Areas. The SSCOs may thus be subject to updates based on additional monitoring data.

14 https://era.org.mt/wp-content/uploads/2020/06/MSFD-Art.-17-Update-Malta_FINAL.pdf & https://era.org.mt/description-of-activities/#Activity-1

Neptune grass - *Posidonia oceanica*
OCEANA / Carlos Minguell © LIFE BaHAR for N2K

Table 5: Information from the Standard Data Form in relation to the Posidonia oceanica beds

MPA	Cover [ha]	Data Quality	Site assessment				Pressures relevant to protected site
			Representativity[15]	Relative Surface[16]	Conservation[17]	Global[18]	
MT0000101	171.74	Good	B	A	B	B	Professional and passive fishing; Leisure fishing
MT0000102	150.91	Good	B	B	A	B	Professional and passive fishing; Leisure fishing
MT0000103	11.10	Good	C	C	B	C	Outdoor sports and leisure activities, recreational activities; Professional and passive fishing, Leisure fishing
MT0000104	1.89	Good	C	C	C	C	Professional and passive fishing; Leisure fishing
MT0000105	5011.68	Moderate	A	A	B	B	Professional active fishing; Outdoor sports and leisure activities recreational activities; Professional passive fishing; Marine macro-pollution (i.e. plastic bags, styrofoam); Leisure fishing

15 **REPRESENTATIVITY:** Degree of representativity of the natural habitat type on the site: A: excellent representativity; B: good representativity; C: significant representativity

16 **RELATIVE SURFACE:** Area of the site covered by the natural habitat type in relation to the total area covered by that natural habitat type within the national territory. A: 100 >= p >15%; B: 15 >= p > 2%; C: 2 >= p > 0

17 **CONSERVATION:** Degree of conservation of the structure and functions of the natural habitat type concerned and restoration possibilities. A: excellent conservation; B: good conservation; C: average or reduced conservation

18 **GLOBAL:** Global assessment of the value of the site for conservation of the natural habitat type concerned. A : excellent value; B : good value; C : significant value

Noble pen-shell - *Pinna nobilis*
OCEANA / Carlos Minguell © LIFE BaHAR for N2K

Table 6: Site-Specific Conservation Objectives for Posidonia Beds

MPA	SSCO code	Conservation Objective	Attribute	Targets	Unit of Measurement
MT0000101	**SSCO_PO_101a**	Maintain the range and area of *Posidonia* beds in MT0000101, by achieving the targets by 2030.	Lower limit of meadow	The maximum depth of the lower limit at which *P. oceanica* occurs within the MPA is maintained within the range of 30-40m.	Depth in metres
			Cover	The percentage area covered by *P. oceanica* is maintained at 17%[19] of the total extent of the MPA.	%
	SSCO_PO_101b	Maintain the structure and functions of *P. oceanica* beds in MT0000101, by achieving the targets by 2030 in representative monitoring stations.	Epiphytic Load	The average epiphytic biomass/ leaf biomass ratio measured at a depth of 15m does not exceed 20%.	Epiphytic biomass/ leaf biomass %
			Average shoot density	An average shoot density as measured at a depth of 15m of not less than 250 counts.	Shoots per m^2
			Water quality	The level of chlorophyll-a does not exceed an average of 0.53 μgL^{-1} within the site.	μgL^{-1}
MT0000102	**SSCO_PO_102a**	Maintain the range and area of *Posidonia* beds in MT0000102, by achieving the targets by 2030.	Lower limit of meadow	The maximum depth of the lower limit at which *P. oceanica* occurs within the MPA is maintained within the range of 30-40m.	Depth in metres
			Cover	The percentage area covered by *P. oceanica* is maintained at 8%[20] of the total extent of the MPA.	%
	SSCO_PO_102b	Maintain the structure and functions of *P. oceanica* beds in MT0000102, by achieving the targets by 2030 in representative monitoring stations.	Epiphytic Load	The average epiphytic biomass/ leaf biomass ratio as measured at a depth of 15m does not exceed 20%.	Epiphytic biomass/ leaf biomass %
			Average shoot density	An average shoot density as measured at a depth of 15m of not less than 250 counts.	Shoots per m^2
			Water quality	The level of chlorophyll-a does not exceed an average of 0.53 μgL^{-1} within the site.	$\mu g\ L^{-1}$

19 Percentage to be confirmed through localised surveys.
20 Percentage to be confirmed through localised surveys.

MPA	SSCO code	Conservation Objective	Attribute	Targets	Unit of Measurement
MT0000103	**SSCO_PO_103a**	Maintain the range and area of *P. oceanica* beds in MT0000103, by achieving the targets by 2030.	Lower limit of meadow	The maximum depth of the lower limit at which *P. oceanica* occurs within the MPA is maintained within the range of 20-30m.	Depth in metres
			Cover	The percentage area covered by *P. oceanica* is maintained at approximately 5% of the total extent of the MPA.	%
	SSCO_PO_103b	Maintain the structure and functions of *P. oceanica* beds in MT0000103, by achieving the targets by 2030 in representative monitoring stations.	Epiphytic Load	The average epiphytic biomass/ leaf biomass ratio as measured at a depth of 15m does not exceed 20.	Epiphytic biomass/ leaf biomass %
			Average shoot density	An average shoot density as measured at a depth of 15m of not less than 250 counts.	Shoots per m^2
			Water quality	The level of chlorophyll-a does not exceed an average of 0.53 μgL^{-1} within the site.	μgL^{-1}
MT0000104	**SSCO_PO_104a**	Maintain the range and area of *P. oceanica* beds in MT0000104, by achieving the targets by 2030.	Lower limit of meadow	The maximum depth of the lower limit at which *P. oceanica* occurs within the MPA is maintained within the range of 15-20m.	Depth in metres
			Cover	The percentage area covered by *P. oceanica* is maintained at 0.5% of the total extent of the MPA.	%
	SSCO_PO_104b	Improve the structure and functions of *P. oceanica* beds in MT0000104, by achieving the targets by 2030 in representative monitoring stations.	Epiphytic Load	The average epiphytic biomass/ leaf biomass ratio as measured at a depth of 15m does not exceed 20%.	Epiphytic biomass/ leaf biomass %
			Average shoot density	Increase the shoot density as measured at a depth of 15m to an average of 250 counts.	Shoots per m^2
			Water quality	The level of chlorophyll-a does not exceed an average of 0.53 μgL^{-1} within the site.	$\mu g\ L^{-1}$

MPA	SSCO code	Conservation Objective	Attribute	Targets	Unit of Measurement
MT0000105	**SSCO_PO_105a**	Maintain the range and area of *Posidonia* beds in MT0000105, by achieving the targets by 2030.	Lower limit of meadow	The maximum depth of the lower limit at which *P. oceanica* occurs within the MPA is maintained within the range of 30-40m.	Depth in metres
			Cover	The percentage area covered by *P. oceanica* is maintained at 30% of the total extent of the MPA.	%
	SSCO_PO_105b	Maintain the structure and functions of *P. oceanica* beds in MT0000105, by achieving the targets by 2030 in representative monitoring stations.	Epiphytic Load	The average epiphytic biomass/ leaf biomass ratio as measured at a depth of 15m does not exceed 20%.	Epiphytic biomass/ leaf biomass %
			Average shoot density	An average shoot density as measured at a depth of 15m of not less than 250 counts.	Shoots per m^2
			Water quality	The level of chlorophyll-a does not exceed an average of 0.53 μgL^{-1} within the site.	μgL^{-1}

Table 7: Operational Objectives for Posidonia Beds within MT0000101 - MT0000105

MPA	Operational Objective code	Conservation Objective
MT0000101 MT0000102 MT0000103 MT0000104 MT0000105	**OO_ PO_1**	Undertake studies to improve knowledge, by 2024, on the impacts and extent of anchoring/mooring activity on *Posidonia oceanica* and best available management options identified on the basis of technical feasibility and a socio-economic assessment.
	OO_PO_2	Investigate and map, by 2025, potential refuge areas for the noble pen shell *Pinna nobilis* and assess feasibility of reinforcement and/or reintroduction of *P. nobilis* in coastal areas.
MT0000103 MT0000104 MT0000105	**OO_ PO_3**	Undertake studies in 2024-2025 to assess the restoration potential of *Posidonia* beds in selected MPAs and feasibility of restoration techniques. Such studies will enable the implementation of conservation measures CM_Po_1.

Conservation Measures:

Measure name	**IMPLEMENTATION OF RESTORATION MEASURES FOR POSIDONIA BEDS ON A PILOT BASIS AND MONITORING OF EFFECTIVENESS**
Measure code	**CM_PO_1**
Category (Art. 17)	CF02 - Habitat restoration of areas impacted by residential, commercial, industrial and recreational infrastructure, operations and activities
Actions for measure implementation	• Based on studies undertaken through Operational Objective OO_Po_3, implement feasible restoration techniques within selected areas as identified in collaboration with relevant stakeholders. Implementation to take place in 2026. • Issue regulation of activity as necessary/relevant within the areas subject to restoration by 2027. • Monitor effectiveness of restoration techniques throughout the period 2027-2030. • Development of restoration plan on the basis of the outcome of the pilot implementation process by 2030.
Applicable sites	MT0000103, MT0000104, MT0000105
Lead/supporting parties	Environment and Resources Authority
Timeframe	2026-2030
Performance indicator	Area of *Posidonia* beds subject to restoration techniques

Measure name	**PROMOTION OF BEHAVIOURAL CHANGES TO ADDRESS POTENTIAL IMPACTS FROM RECREATIONAL ACTIVITY ON POSIDONIA BEDS**
Measure code	**CM_PO_2**
Category (Art. 17)	CF03 - Reduce impact of outdoor sports, leisure and recreational activities
Actions for measure implementation	• Development of a Code of Good Practice specifically targeting relevant recreational activity in coastal waters with potential impact on *Posidonia* beds by 2023. • Development, by 2024, of a digital service to enable recreational users of coastal waters to view location of *Posidonia* beds in relation to the Code of Good Practice. The information may also be promulgated through the issuance of related Notices to Mariners. • Awareness raising campaign in 2024 on the importance of *Posidonia* beds and associated species, and on anthropogenic impacts on such habitat types, including *inter alia*: • Installation of beach signs to inform public about regulations and importance of *Posidonia* beds and associated species. • Dissemination of the relevant Codes of Good Practice and information of relevant services.
Applicable sites	MT0000101, MT0000102, MT0000103, MT0000104, MT0000105
Lead/supporting parties	Environment and Resources Authority; Authority for Transport in Malta
Timeframe	2023-2024
Performance indicator	Level of awareness amongst public sectors on importance of *Posidonia* beds

Measure name	**PROVISION OF ALTERNATIVE METHODS FOR ANCHORING ACTIVITY AND PROMOTION OF USE**
Measure code	**CM_PO_3**
Category (Art. 17)	CF03 - Reduce impact of outdoor sports, leisure and recreational activities
Actions for measure implementation	• Based on the outcome of Operational Objective OO_Po_1, feasible management options targeting reduction of impacts from anchoring activity will be implemented on a pilot basis in 2025. • Awareness raising campaign on the importance of *Posidonia* beds and associated species, including dissemination of information on available infrastructure targeting reduction of impacts from anchoring activity in 2025. • Update Code of Good Practice as per CM_Po_2 to promote use of alternative methods in 2025. • Monitor use and effectiveness of management options in 2026.
Applicable sites	MT0000101, MT0000102, MT0000103, MT0000104, MT0000105
Lead supporting parties	Environment and Resources Authority; Authority for Transport in Malta
Timeframe	**2025-2026**
Performance indicator	Area used for alternative methods of anchoring

Measure name	**ADOPT AN EARLY WARNING AND RAPID RESPONSE SYSTEM FOR NON-INDIGENOUS SPECIES**
Measure code	**CM_PO_4**
Category (Art. 17)	CI01 - Early detection and rapid eradication of invasive alien species of Union concern
Actions for measure implementation	• A surveillance system for non-indigenous species in *Posidonia* meadows to be put in place by 2025, linking monitoring processes and citizen science, the latter through involvement of the diving community. • Development and provision of the relevant information to enable engagement of the relevant public sectors in this process by 2025. • Develop, in collaboration with experts in the field, relevant response measures for NIS with high impact potential on *Posidonia* meadows by 2026.
Applicable sites	MT0000101 - MT0000105
Lead/supporting parties	Environment and Resources Authority
Timeframe	**2025-2026**
Performance indicator	Level of impact/distribution of NIS on *Posidonia* meadows

3.3 REEFS – 1170 (RC & RO)

Five inshore and five offshore Marine Protected Areas are designated for the conservation of 'Reefs'. Reefs encompass a variety of benthic communities which vary with depth. A broad classification which is being adopted for the management process is:

- 'coastal' reefs – reefs occurring within inshore coastal areas, and
- 'offshore' reefs – reefs occurring at depths of 300 – 1000m.

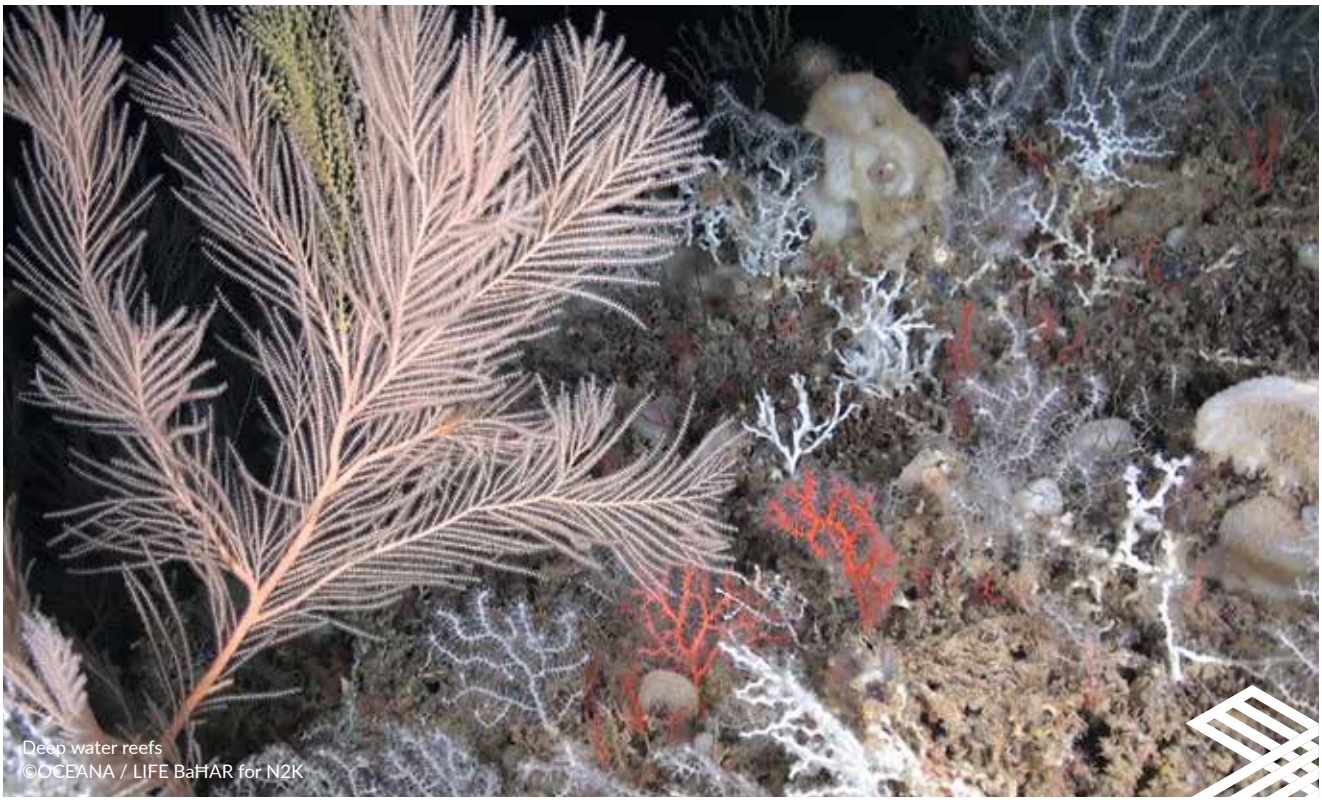
Coastal reefs are covered by MPAs MT0000101, MT0000102, MT0000103, MT0000104 and MT0000105, while offshore reefs are covered by MT00001113, MT0000115, MT0000116, MT00001117 and MT0000118. In accordance with the assessment undertaken as part of the Standard Data Forms for these sites, both coastal and offshore reefs are in good conservation status in terms of their structure and functions and restoration possibilities (Table 8).

Within this context, the site-specific conservation objectives for these sites (Table 9) seek the maintenance of such status in terms of the most relevant attributes that define the conservation status of this habitat type.

It should be noted that the conservation objectives and measures are primarily based on information from data collection processes[21] used for the designation of the five offshore areas[22] and the extension of three coastal marine protected areas[23] for the conservation of reef habitats. However, further long-term trend data and knowledge on the typical species for the habitat and impacts on this habitat is required in order to support/develop quantitative targets for the conservation objectives. In particular, knowledge in relation to the extent of reefs within inshore areas needs to be improved in order to ensure coverage of all relevant benthic communities associated with reefs.

The data quality for the sites MT0000102 and MT0000105 is deemed to be 'Moderate', whereas that for the other coastal sites is 'Good'. Operational objectives will seek to improve the data quality for such sites in terms of the extent of the habitat type (Table 10).

21 LIFE BaHAR for N2K project (LIFE12 NAT/MT/000845)
22 MT00001113, MT0000115, MT0000116, MT00001117 and MT0000118
23 MT0000101, MT0000104 and MT0000105



Deep water reefs
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Table 8: Information from the Standard Data Form in relation to Reefs

MPA	Cover [ha]	Data Quality	Site assessment				Pressures relevant to protected site
			Representativity[24]	Relative Surface[25]	Conservation[26]	Global[27]	
MT0000101	213.04	Good	A	C	B	B	Professional and passive fishing; Leisure fishing
MT0000102	223.98	Moderate	A	C	B	B	Professional and passive fishing; Leisure fishing
MT0000103	26.13	Good	B	C	B	B	Outdoor sports and leisure activities, recreational activities; Professional and passive fishing, Leisure fishing
MT0000104	75.48	Good	A	C	B	B	Professional and passive fishing Leisure fishing
MT0000105	84.44	Moderate	B	C	B	B	Professional active fishing; Outdoor sports and leisure activities, recreational activities; Professional passive fishing; Marine macro-pollution (i.e. plastic bags, styrofoam); Leisure fishing
MT0000113	3465.47	Good	A	A	B	A	Leisure fishing; Professional passive fishing
MT0000115	712.69	Good	A	B	B	B	Professional Active Fishing
MT0000116	1583.00	Good	A	B	B	A	Professional Active Fishing
MT0000117	2688.39	Good	A	A	B	B	N/A[28]
MT0000118	1735.75	Good	A	A	B	B	N/A[29]

24 **REPRESENTATIVITY:** Degree of representativity of the natural habitat type on the site: A: excellent representativity; B: good representativity; C: significant representativity

25 **RELATIVE SURFACE:** Area of the site covered by the natural habitat type in relation to the total area covered by that natural habitat type within the national territory. A: 100 >= p >15%; B: 15 >= p > 2%; C: 2 >= p > 0

26 **CONSERVATION:** Degree of conservation of the structure and functions of the natural habitat type concerned and restoration possibilities. A: excellent conservation; B: good conservation; C: average or reduced conservation

27 **GLOBAL:** Global assessment of the value of the site for conservation of the natural habitat type concerned. A: excellent value; B: good value; C : significant value

28 All pressures are of low importance

29 All pressures are of low importance

Table 9: Site-Specific Conservation Objectives for Reefs (Rc = coastal reefs; Ro = offshore reefs)

MPA	SSCO Code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000101	**SSCO_Rc_101a**	Maintain the structure and functions of coastal reefs found in MT0000101 by achieving the targets by 2030.	Condition of macroalgae	The macroalgal communities associated with littoral rock are dominated by sensitive species (including *Cystoseira* spp.) resulting in 'high' or 'good' status as per CARLIT index along >75% of the coastline of the protected area.	CARLIT (Cartography of littoral rocky-shore communities) for communities up to 1m depth
			Species composition	The presence and coverage of typical species[30] (structuring algal communities and/or coralligenous communities) associated with infralittoral reefs, as listed hereunder, are stable throughout a period of 6 years: • *Cystoseira spinosa* • *Dictyopteris polypodioides* • *Sargassum vulgare* • *Flabellia petiolata* • *Halopteris* spp. • *Zonaria tournefortii* • *Astroides calycularis*	Density/cover of typical species on the basis of representative sampling
MT0000102	**SSCO_Rc_102a**	Maintain the structure and functions of coastal reefs found in MT0000102 by achieving the targets by 2030.	Condition of macroalgae	The macroalgal communities associated with littoral rock show an improving trend towards 'high' or 'good' status as per CARLIT index.	CARLIT (Cartography of littoral rocky-shore communities) for communities up to 1m depth
			Species composition	The presence and coverage of typical.	Density/cover of typical species on the basis of representative sampling

30 List of typical species reflects the communities present within the protected site in question on the basis of existing data and will be updated as knowledge improves.

MPA	SSCO Code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000103				species[31] (structuring algal communities and/or coralligenous communities) associated with infralittoral reefs as listed hereunder are stable throughout a period of 6 years: • *Cystoseira spinosa* • *Dictyopteris polypodioides* • *Sargassum vulgare* • *Flabellia petiolata* • *Halopteris* spp. • *Peyssonnelia* spp. • *Astroides calycularis*	representative sampling
	SSCO_Rc_103a	Maintain the structure and functions of coastal reefs found in MT0000103 by achieving the targets by 2030.	Condition of macroalgae	The macroalgal communities associated with littoral rock are dominated by sensitive species (including Cystoseira spp.) resulting in 'high' or 'good' status as per CARLIT index along >75% of the coastline of the protected area.	CARLIT (Cartography of littoral rocky-shore communities) for communities up to 1m depth
			Species composition	The presence and coverage of typical species[32] (structuring algal communities and/or coralligenous communities) associated with infralittoral reefs as listed hereunder are stable throughout a period of 6 years: • *Cystoseira* spp. • *Flabellia petiolata* • *Peyssonnelia squamaria*	Density/cover of typical species on the basis of representative sampling

31 List of typical species reflects the communities present within the protected site in question on the basis of existing data and will be updated as knowledge improves.

32 List of typical species reflects the communities present within the protected site in question on the basis of existing data and will be updated as knowledge improves.

MPA	SSCO Code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000104	**SSCO_Rc_104a**	Maintain the structure and functions of coastal reefs found in MT0000104 by achieving the targets by 2030.	Condition of macroalgae	The macroalgal communities associated with littoral rock are dominated by sensitive species (including Cystoseira spp.) resulting in 'high' or 'good' status as per CARLIT index along >75% of the coastline of the protected area.	CARLIT (Cartography of littoral rocky-shore communities) for communities up to 1m depth
			Species composition	The presence and coverage of typical species[33] (structuring algal communities and/or coralligenous communities) associated with infralittoral reefs, as listed hereunder, are stable throughout a period of 6 years: • *Cystoseira spinosa* • *Dictyopteris polypodioides* • *Sargassum vulgare* • *Flabellia petiolata* • *Halopteris* spp. • *Zonaria tournefortii* • *Astroides calycularis*	Density/cover of typical species on the basis of representative sampling
MT0000105	**SSCO_Rc_105a**	Maintain the structure and functions of coastal reefs found in MT0000104 by achieving the targets by 2030.	Condition of macroalgae	The macroalgal communities associated with littoral rock are dominated by sensitive species (including Cystoseira spp.) resulting in 'high' or 'good' status as per CARLIT index along >75% of the coastline of the protected area.	CARLIT (Cartography of littoral rocky-shore communities) for communities up to 1m depth

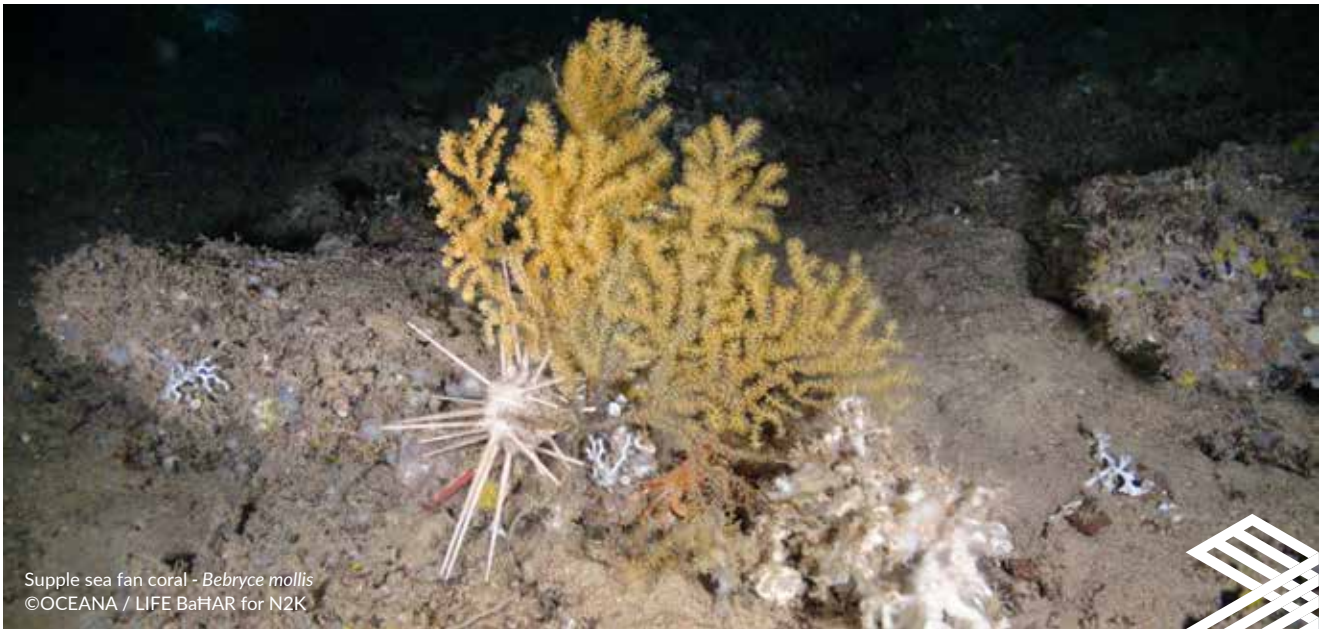
33 List of typical species reflects the communities present within the protected site in question on the basis of existing data and will be updated as knowledge improves.

MPA	SSCO Code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000113			Species composition	The presence and coverage of typical species[34] (structuring algal communities and/or coralligenous communities) associated with infralittoral reefs as listed hereunder are stable throughout a period of 6 years: • *Cystoseira* spp. • *Dictyopteris polypodioides* • *Flabellia petiolata* • *Sargassum vulgare* • *Halopteris* spp. • *Zonaria tournefortii* • *Mesophyllum* spp. • *Astroides calycularis*	Density/cover of typical species on the basis of representative sampling
	SSCO_Ro_113a	Maintain the range and area of reefs in MT0000113.	Area covered by the habitat type	• Area of reef habitats is maintained at 3400 - 3500 ha.	Extent (ha)
	SSCO_Ro_113b	Maintain the range and area of reefs in MT0000115.	Species composition	The presence of typical species associated with offshore reefs within this site are stable throughout a period of 6 years: • *Madrepora oculata* • *Callogorgia verticillata* • *Leiopathes glaberrim* • *Anthipathes dichotoma* • *Parantipathes larix* • *Lophelia pertusa* • *Corallium rubrum*	Presence of typical species on the basis of representative sampling
MT0000115	SSCO_Ro_115a	Maintain the range and area of reefs in MT0000115.	Area covered by the habitat type	Area of reef habitats is maintained at 700 - 750 ha.	Extent (ha)

34 List of typical species reflects the communities present within the protected site in question on the basis of existing data and will be updated as knowledge improves.

MPA	SSCO Code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000116	**SSCO_Ro_115b**	Maintain the structure and functions of offshore reefs in MT0000115 by achieving the following targets by 2030.	Species composition	The presence of typical species associated with offshore reefs within this site are stable throughout a period of 6 years: • *Bebryce mollis* • *Chironephthya mediterranea* • *Paramuricea macrospina* • *Swiftia pallida* • *Callogorgia verticillata* • *Stenocyathus vermiformis* • *Hexadella dedritifera* • *Reteporella* spp.	Presence of typical species on the basis of representative sampling
	SSCO_Ro_116a	Maintain the range and area of reefs in MT0000116.	Area covered by the habitat type	Area of reef habitats is maintained at 1500 - 1600 ha.	Extent (ha)
	SSCO_Ro_116b	Maintain the structure and functions of offshore reefs in MT0000116 by achieving the following targets by 2030.	Species composition	The presence of typical species associated with offshore reefs within this site are stable throughout a period of 6 years: • *Madrepora oculata* • *Lophelia pertusa* • *Leiopathes glaberrima* • *Anthipathes dichotoma* • *Parantipathes larix* • *Hexadella dedritifera* • *Isidella elongata* • *Corallium rubrum*	Presence of typical species on the basis of representative sampling
MT0000117	**SSCO_Ro_117a**	Maintain the range and area of reefs in MT0000115.	Area covered by the habitat type	Area of reef habitats is maintained at 2600 - 2700 ha.	Extent (ha)

MPA	SSCO Code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000118	**SSCO_Ro_117b**	Maintain the structure and functions of offshore reefs in MT0000117 by achieving the following targets by 2030.	Species composition	The presence of typical species associated with offshore reefs within this site are stable throughout a period of 6 years: • *Madrepora oculata* • *Callogorgia verticillata* • *Hexadella dedritifera* • *Lophelia pertusa* • *Corallium rubrum* • *Isidella elongata*	Presence of typical species on the basis of representative sampling
	SSCO_Ro_118a	Maintain the range and area of reefs in MT0000118.	Area covered by the habitat type	Area of reef habitats is maintained at 1700 - 1800 ha.	Extent (ha)
	SSCO_Ro_118b	Maintain the structure and functions of offshore reefs in MT0000116 by achieving the following targets by 2030.	Species composition	The presence of typical species associated with offshore reefs within this site are stable throughout a period of 6 years: • *Madrepora oculata* • *Callogorgia verticillata* • *Leiopathes glaberrima* • *Lophelia pertusa* • *Corallium rubrum*	Presence of typical species on the basis of representative sampling



Supple sea fan coral - *Bebryce mollis*
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Table 10: Operational Objectives for Reefs

MPA	Operational Objective code	Conservation Objective
MT0000101 MT0000102 MT0000103 MT0000104 MT0000105	**OO_ Rc_1**	Undertake studies between 2024-2026 to comprehensively map the extent of reefs within the coastal protected areas and enable elaboration of site-specific conservation objectives in terms of this attribute.
	OO_ Rc_2	Continue to develop adequate indicators by 2027 for the assessment of conservation status of coastal reefs based on 'structure and functions' parameters.
	OO_Rc_3	Undertake studies to improve knowledge, by 2024, on the impacts and extent of anchoring/mooring activity on coastal reefs and best available management options.
	OO_Rc_4	Reduce pressures on coastal reefs from *inter alia:* • Abandoned, Lost or Discarded Fishing Gear (ALDFG), • Diving activity.
MT0000113 MT0000115 MT0000116 MT0000117 MT0000118	**OO_ Ro_1**	Improve knowledge, by 2027, on deep-sea biodiversity in terms of community and ecosystem ecology and on pressures/impacts thereon thus enabling the development of adequate status indicators.
	OO_Ro_2	Identify, by 2025, most sensitive area supporting offshore reefs to the deployment of Fishing Aggregating Devices and reduce pressures on offshore reefs from Abandoned, Lost or Discarded Fishing Gear (ALDFG).

Conservation Measures:

Measure name	**PREVENTION OF ABANDONED, LOST AND DISCARDED FISHING GEAR AND REMOVAL OF LITTER FROM AREAS SUPPORTING REEFS (COASTAL AND OFFSHORE)**
Measure code	**CM_R_1**
Category (Art. 17)	CF08: Reduce/eliminate marine contamination with litter
Actions for measure implementation	• Enhance and facilitate reporting scheme(s) for ALDFG by 2024. • Explore, in 2025, alternative designs for Fish Aggregating Devices in collaboration with fishers including an assessment of economic viability and exploring related incentives. • Continue and step-up efforts for removal of ALDFG from reef areas (ongoing).
Applicable sites	MT0000101, MT0000102, MT0000103, MT0000104, MT0000105, MT0000113, MT000115, MT0000116, MT000117, MT0000118
Lead/supporting parties	Environment and Resources Authority, Department of Fisheries and Aquaculture
Timeframe	2024 – 2025
Performance Indicator	Amount of ALDFG in areas supporting reefs

Measure name	**SUSTAINABLE DIVING PRACTICES**
Measure code	**CM_R_2**
Category (Art. 17)	CF03 - Reduce impact of outdoor sports, leisure and recreational activities
Actions for measure implementation	• Starting from 2026, develop, publish and promote an annual list of priority dive sites to reduce pressure on areas supporting very sensitive reefs. • Develop and promote in 2026, a set of sustainable diving practices involving dive centres.
Applicable sites	MT0000101, MT0000102, MT0000103, MT0000104, MT0000105
Lead/supporting parties	Environment and Resources Authority
Timeframe	2026
Performance Indicator	Number of dive centres involved in promotion of sustainable practices.

Measure name	**REVIEW AND UPDATE AS NECESSARY, EXISTING REGULATION OF ANTHROPOGENIC DISTURBANCE ON REEFS AROUND THE ISLET OF FILFLA**
Measure code	**CM_R_3**
Category (Art. 17)	N/A
Actions for measure implementation	• By 2025, review the effectiveness of existing regulations on the conservation status of reefs and associated species around the islet of Filfla in MT0000102. • Update or enhance existing regulations as relevant, by 2027, in consideration of the status of the benthic ecosystems.
Applicable sites	MT0000102
Lead/supporting parties	Environment and Resources Authority
Timeframe	2025-2027
Performance Indicator	Conservation status of the reefs in MT0000102

Measure name	**AWARENESS RAISING ON THE IMPORTANCE OF REEFS**
Measure code	**CM_R_4**
Category (Art. 17)	N/A
Actions for measure implementation	• Implement awareness raising programme to disseminate information with respect to the importance of reefs with the public and public sectors including *inter alia*: • Installation of beach signs to inform public about regulations and importance of reefs and associated species; • Launching of guided snorkel trails including reef communities.
Applicable sites	MT0000101, MT0000102, MT0000103, MT0000104 & MT0000105
Lead/supporting parties	Environment and Resources Authority
Timeframe	2023-2025
Performance Indicator	Level of awareness amongst public sectors on importance of reefs

3.4 SUBMERGED OR PARTIALLY SUBMERGED SEA CAVES - 8330 (CC AND CO)

Three inshore and three offshore Marine Protected Areas are designated for the conservation of submerged or partially submerged sea cave habitats. Although caves are present within all coastal Marine Protected Areas, information on such habitats within MT0000102 and MT0000103 is currently limited.

The Standard Data Forms for the six protected areas indicate that caves are in excellent or good conservation status in terms of their structure and functions and restoration possibilities (Table 11).

While the presence and location of sea caves within these MPAs are generally known, information on the ecology of such caves and associated communities is limited. In this regard, SSCOs cannot be elaborated at this stage and instead operational objectives are being put forward to address current knowledge gaps and to obtain baseline data on the ecological characteristics for a representative subset of caves (Table 12). This would enable the elaboration of SSCOs by 2025.

The operational objectives put forward by this document distinguish between coastal and offshore caves. Noting however the limited accessibility to offshore caves as well as the limited knowledge on potential impacts, conservation measures are not being put forward at this stage, pending knowledge improvement on potential impacts/threats as per operational objectives.

Submerged sea cave
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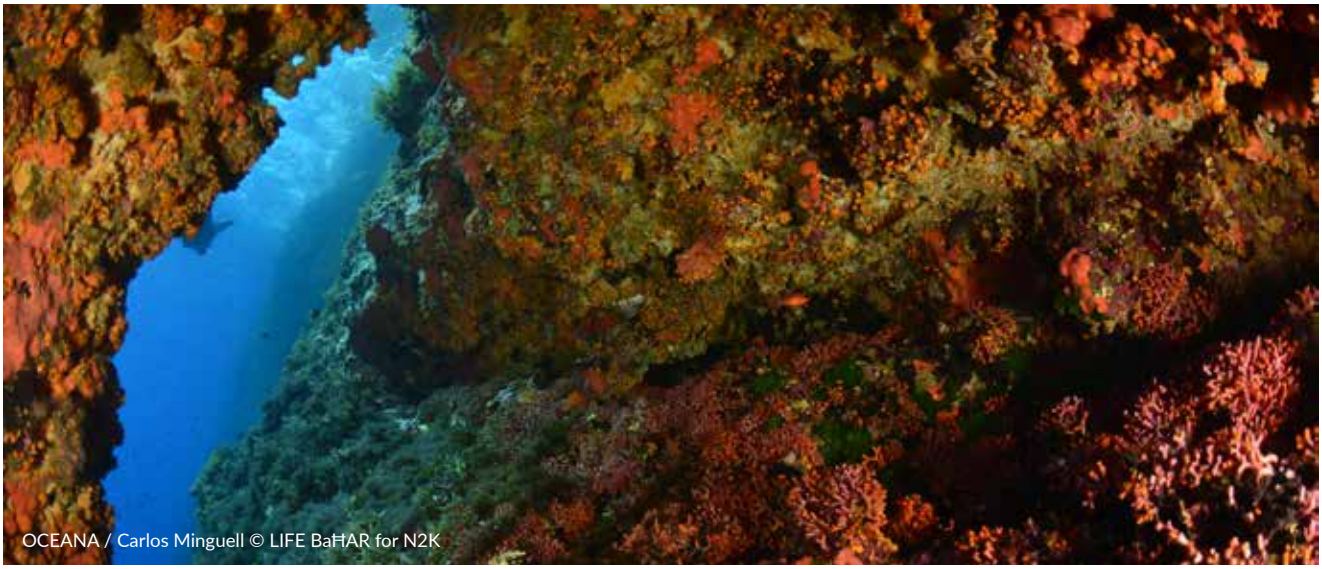
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Table 11: Information from the Standard Data Form in relation to Caves

MPA	Number	Data Quality	Site assessment: Representativity[35]	Site assessment: Relative Surface[36]	Site assessment: Conservation[37]	Site assessment: Global[38]	Pressures relevant to protected site
MT0000101	28	Good			B	B	Professional and passive fishing; Leisure fishing
MT0000104	28	Good			B	B	Professional and passive fishing Leisure fishing
MT0000105	64	Good			B	B	Professional active fishing; Outdoor sports and leisure activities, recreational activities; Professional passive fishing; Marine macro-pollution (i.e. plastic bags, styrofoam); Leisure fishing
MT0000113	5	Good			B	B	Leisure fishing; Professional passive fishing
MT0000115	7	Good			B	A	Professional Active Fishing
MT0000118	5	Good			B	B	N/A[39]

35 **REPRESENTATIVITY:** Degree of representativity of the natural habitat type on the site: A: excellent representativity; B: good representativity; C: significant representativity

36 **RELATIVE SURFACE:** Area of the site covered by the natural habitat type in relation to the total area covered by that natural habitat type within the national territory. A: 100 >= p >15%; B: 15 >= p > 2%; C: 2 >= p > 0

37 **CONSERVATION**: Degree of conservation of the structure and functions of the natural habitat type concerned and restoration possibilities. A: excellent conservation; B: good conservation; C: average or reduced conservation

38 **GLOBAL:** Global assessment of the value of the site for conservation of the natural habitat type concerned. A : excellent value; B : good value; C : significant value

39 All pressures are of low importance

Table 12: Operational Objectives for Caves

MPA	Operational Objective code	Conservation Objective
MT0000101 MT0000102 MT0000103 MT0000104 MT0000105	OO_ Cc_1	Undertake studies, by 2023, to ground truth data on the location of submerged and partially submerged caves within coastal MPAs.
	OO_ Cc_2	Undertake studies, by 2024, to ecologically characterise a representative subset of submerged and partially submerged coastal caves.
	OO_Cc_3	Reduce disturbance to cave ecological communities through diving activity.
MT0000113 MT0000115 MT0000116	OO_ Co_1	Undertake studies, by 2024, to morphologically and ecologically characterise, to the best extent possible[40], a representative subset of offshore caves.
	OO_ Co_2	The potential impact/threat of different (economic) activities is assessed for this habitat type by 2025.

Conservation Measures:

Measure name	**ACCESS RESTRICTIONS FOR HIGHLY DIVERSE AND SENSITIVE CAVES**
Measure code	**CM_Cc_1**
Category (Art. 17)	CF03 – Reduce impact of outdoor sports, leisure and recreational activities
Actions for measure implementation	• Based on the outcome of Operational Objective OO_Cc_2, caves which are highly sensitive to disturbance by commercial and recreational use are identified by 2025. • Access restrictions are set in regulations for diving and other commercial and recreational uses in highly diverse and sensitive caves by 2027.
Applicable sites	MT0000101, MT0000102, MT0000103, MT0000104 & MT0000105
Lead/supporting parties	Environment and Resources Authority
Timeframe	2025-2027
Performance Indicator	Issue of regulations

Measure name	**CODE OF CONDUCT FOR COMMERCIAL ACTIVITIES USING CAVES**
Measure code	**CM_Cc_2**
Category (Art. 17)	CF03 - Reduce impact of outdoor sports, leisure and recreational activities
Actions for measure implementation	By 2024, develop a Code of Conduct for commercial activities in caves to enhance good practice for minimising disturbance. Distribute and promote the Code of Conduct through existing maritime channels by 2025.
Applicable sites	MT0000101, MT0000102, MT0000103, MT0000104 & MT0000105
Lead/supporting parties	Environment and Resources Authority; Authority for Transport in Malta
Timeframe	2024 - 2025
Performance Indicator	Code of Conduct

40 This may likely be limited to the cave entrance, in view of limitations to enter said caves and risk of loss of equipment

Measure name	**ENGAGEMENT OF DIVING CENTRES IN SURVEILLANCE AND MONITORING OF CAVES**
Measure code	**CM_Cc_3**
Category (Art. 17)	N/A
Actions for measure implementation	• In 2025, hold training sessions with dive centres in relation to surveillance and monitoring of caves. • Develop a scheme by 2025 for the engagement of dive centres in surveillance and monitoring of caves.
Applicable sites	MT0000101, MT0000102, MT0000103, MT0000104 & MT0000105
Lead/supporting parties	Environment and Resources Authority
Timeframe	2024-2025
Performance Indicator	Number of diving centres participating in surveillance/monitoring of caves

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Striped Dolphin - *Stenella coruleoalba*
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3.5 BOTTLENOSE DOLPHIN *TURSIOPS TRUNCATUS* (AND OTHER DELPHINIDS) – 1349 (TT AND CE)

Three offshore Marine Protected Areas are designated for the conservation of the bottlenose dolphin *Tursiops truncatus* listed in Annex II of the Habitats Directive.

Noting, however, the presence of other species of delphinids in Maltese waters, and also within these MPAs, including the common dolphin (*Dephinus delphis*) and the striped dolphin (*Stenella coruleoalba*), operational objectives and measures put forward in this section target the conservation of the species group as a whole, giving due consideration to the need of maximising the contribution of the site to the conservation of *T. truncatus* in accordance with the assessment undertaken as part of the Standard Data Form for all three Marine Protected Areas (Table 13). In this regard, it should be noted that all three sites are indicating a good conservation status of the features of the habitat, which are important for the species concerned.

Additional information to that available in the Standard Data Forms, as attained from recent data collection processes[41] in relation to delphinids in MT0000113, MT0000115 and MT0000116, was used to elaborate the conservation objectives and measures. However, further long-term trend data and further knowledge on the ecological functions of the sites for *T. truncatus* is required in order to confirm the quantitative targets elaborated as part of the site-specific conservation objectives (Table 14).

Operational objectives are put forward to address current knowledge gaps and pressures or threats on each of the delphinid species under consideration, as reported by Malta as part of the Habitats Directive Article 17 reporting (Table 15).

41 https://era.org.mt/description-of-activities/#Activity-1

Table 13: Information from the Standard Data Form in relation to the Bottlenose Dolphin (Tursiops truncatus)

MPA	Size: individuals				Site assessment				Pressures relevant to protected site
	Min	Max	Category	Data Quality	Population[42]	Conservation[43]	Isolation[44]	Global[45]	
MT0000113	0	79	Present	Good	C	B	B	C	Leisure fishing; Professional passive fishing
MT0000115	0	79	Present	Good	C	B	B	C	Professional Active Fishing
MT0000116	0	79	Present	Good	C	B	B	C	Professional Active Fishing

Table 14: Site-Specific Conservation Objectives for the Bottlenose Dolphin (Tursiops truncatus)

MPA[46]	SSCO code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000113	**SSCO_TT_113a**	Maintain the distribution of *Tursiops truncatus* within MT0000113.	Presence	The presence of *T. truncatus* is verified through all visual surveys undertaken at the site in question.	Presence/ Absence
	SSCO_TT_113b	Maintain the population dynamics of *Tursiops truncatus* in MT0000113, by achieving the following targets by 2030.	Individuals	The average number of individuals of *Tursiops truncatus* sighted at the MPA through systematic visual surveys over a period of six years is stable and ranging between 20 and 35 individuals.	Number of individuals sighted

42 **POPULATION:** Size and density of the population of the species present on the site in relation to the populations present within national territory. A: 100% >= p > 15%; B: 15% >= p > 2%; C: 2% >= p > 0%

43 **CONSERVATION:** Degree of conservation of the features of the habitat which are important for the species concerned and possibilities for restoration A: excellent conservation; B: good conservation; C: average or reduced conservation

44 **ISOLATION:** Degree of isolation of the population present on the site in relation to the natural range of the species. A: population (almost) isolated; B: population not-isolated, but on margins of area of distribution; C: population not-isolated within extended distribution range

45 **GLOBAL**: Global assessment of the value of the site for conservation of the species concerned A : excellent value B : good value; C : significant value

46 No site-specific conservation objectives are being proposed for MT0000115 pending further knowledge on the functions of this site in relation to T. truncatus

MT0000116	**SSCO_TT_116a**	Maintain the distribution of *Tursiops truncatus* within MT000016.	Presence	The presence of *T. truncatus* is verified through all visual surveys undertaken at the site in question.	Presence
	SSCO_TT_116b	Maintain the population dynamics of *Tursiops truncatus* in MT0000116, by achieving the following targets by 2030.	Abundance	The population estimated through sightings of *Tursiops truncatus* over a period of six years is stable and ranging between 60 and 80.	Estimated Population Abundance (upscaled to the level of the MPA)
	SSCO_TT_116c	Maintain the habitat for *Tursiops truncatus* as provided by MT0000116.	Feeding behaviour	Feeding behaviour is observed for at least one sighting as part of systematic visual surveys.	Presence of feeding behaviour (observations)

Bottlenose Dolphin - *Tursiops truncatus*
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Bottlenose dolphin - *Tursiops truncatus*
© EMFF 8.3.1

Table 15: Operational Objectives for Cetaceans within MT0000113, MT0000115 and MT000016

MPA	Operational Objective code	Conservation Objective
MT0000113 MT0000115 MT0000116	**OO_ Ce_1**	Undertake studies between 2024-2026 to improve knowledge on the ecological functions of the sites for *Tursiops truncatus*, *Delphinus delphis* and *Stenella coeruleoalba* and on interactions with anthropogenic activity.
	OO_ Ce_2	Reduce disturbance on marine mammals from relevant anthropogenic activities, including noise-generating activities, within the protected sites.
MT0000115	**OO_ Ce_3**	Undertake studies on the population dynamics and distribution of *Tursiops truncatus* within MT0000115 to enable the elaboration of Site site-specific conservation objectives for this site by 2025.

Conservation Measures:

Measure name	**REGULATION OF ACTIVITIES THAT MAY CAUSE DISTURBANCE TO CETACEANS**
Measure code	**CM_Ce_1**
Category (Art. 17)	CF03 - Reduce impact of outdoor sports, leisure and recreational activities
Actions for measure implementation	• Development, by 2024, of a Code of Conduct outlining best practices and behaviour in proximity to cetaceans targeting primarily boating activity and commercial vessels. • Issue of regulations, by 2025, in cooperation with relevant stakeholders to regulate selected activities referred to in the Code of Conduct. • Development, by 2026, of a digital service providing the relevant information to facilitate compliance by recreational boaters/ commercial vessels within protected areas. The information may also be promulgated through the issuance of related Notices to Mariners.
Applicable sites	MT0000113, MT0000115; MT0000116
Lead/supporting parties	Environment and Resources Authority; Authority for Transport in Malta
Timeframe	2024-2026
Performance Indicator	Issue of Regulations

Measure name	**MITIGATION OF INCIDENTAL BY-CATCH**
Measure code	**CM_Ce_2**
Category (Art. 17)	CG05 - Reduce bycatch and incidental killing of non-target species
Actions for measure implementation	In 2024, hold workshops with fishers to provide a better understanding of interactions of marine mammals with fisheries. Promote the use of mitigation measures as per GFCM recommendation GFCM/36/2012/2 on the mitigation of incidental catches of cetaceans in the GFCM are of application[47]. Improve data collection and recording on cetacean by-catch by facilitating reporting procedures.
Applicable sites	MT0000113; MT0000115; MT0000116
Lead/supporting parties	Environment and Resources Authority; Department of Fisheries and Aquaculture
Timeframe	2024-2025
Performance Indicator	Number of workshops held

Measure name	**AWARENESS RAISING ON CETACEANS**
Measure code	**CM_Ce_3**
Category (Art. 17)	N/A
Actions for measure implementation	• Starting from 2023, organise at least one awareness event a year on cetaceans and anthropogenic impacts thereon. • By 2023, engage in citizen science where the general public is involved in data recording.
Applicable sites	MT0000113; MT0000115; MT0000116
Lead/supporting parties	Environment and Resources Authority
Timeframe	2023
Performance Indicator	Number of people engaged in data collection processes

47 https://www.fao.org/3/ax384e/ax384e.pdf

Striped dolphin - *Stenella coeruleoalba*
OCEANA / Carlos Minguell © LIFE BaHAR for N2K

Loggerhead turtle - *Caretta caretta*
OCEANA / Carlos Minguell © LIFE BaHAR for N2K

3.6 LOGGERHEAD TURTLE CARETTA CARETTA (AND OTHER MARINE TURTLES) – 1224 (CC AND TU)

The loggerhead turtle *Caretta caretta* is considered the only marine turtle which is a true member of the Maltese fauna, since records of other turtle species are occasional in Maltese waters. It is included in the Standard Data Forms of four Marine Protected Areas: MT0000105, MT0000113, MT0000115 and MT0000116 (Table 16). The coastal MPA MT0000105, however has not been designated for this species and its presence within such site is being noted and taken into consideration for the development of conservation objectives and measures.

With the exception of MT0000105, in which the inclusion of the loggerhead turtle is only based on presence, the offshore sites are indicating excellent and good conservation status of the features of the habitat which are important for *Caretta caretta*, hence the focus of the site-specific conservation objectives on 'maintenance' of the current status (Table 17).

Additional information to that available in the Standard Data Forms, as attained from recent data collection processes[48] in relation to turtles in MT0000113, MT0000115 and MT0000116, was used to elaborate the conservation objectives and measures. However, further long-term trend data and further knowledge on the ecological functions of the sites for *C. caretta* are required in order to confirm the quantitative targets elaborated as part of the site-specific conservation objectives (Table 17).

Operational objectives addressing knowledge gaps and main pressures are listed in Table 18.

48 https://era.org.mt/wp-content/uploads/2020/06/MSFD-Art.-17-Update-Malta_FINAL.pdf & https://era.org.mt/description-of-activities/#Activity-1


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Table 16: Information from the Standard Data Form in relation to the Loggerhead Turtle (Caretta caretta)

MPA	Size: individuals Min	Max	Category	Data Quality	Site assessment Population[49]	Conservation[50]	Isolation[51]	Global[52]	Pressures relevant to protected site
MT0000113	0	180	Common	Good	A	A	C	A	Leisure fishing; Professional passive fishing
MT0000115	0	180	Common	Good	B	A	C	A	Professional Active Fishing
MT0000116	0	180	Common	Good	B	B	C	B	Professional Active Fishing
MT0000105			Present	Data Deficient					Professional passive & active fishing; Leisure fishing; Outdoor sports & leisure activities, recreational activities; marine macropollution

49 **POPULATION:** Size and density of the population of the species present on the site in relation to the populations present within national territory. A: 100% >= p > 15%; B: 15% >= p > 2%; C: 2% >= p > 0%

50 **CONSERVATION:** Degree of conservation of the features of the habitat which are important for the species concerned and possibilities for restoration A: excellent conservation; B: good conservation; C: average or reduced conservation

51 **ISOLATION:** Degree of isolation of the population present on the site in relation to the natural range of the species. A: population (almost) isolated; B: population not-isolated, but on margins of area of distribution; C: population not-isolated within extended distribution range

52 **GLOBAL:** Global assessment of the value of the site for conservation of the species concerned A : excellent valueB : good value; C : significant value

Table 17: Site-Specific Conservation Objectives for the Loggerhead Turtle (Caretta caretta)

MPA	SSCO code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000113	**SSCO_CC_113a**	Maintain the distribution of *Caretta caretta* within MT000013.	Distribution	Sightings of *Caretta caretta* are distributed throughout the MPA, based on systematic visual surveys.	Area covered by sightings
	SSCO_CC_113b	Maintain the population dynamics of *Caretta caretta* in MT0000113, by achieving the following targets by 2030.	Individuals	The average number of individuals of *Caretta caretta* sighted at the MPA through systematic visual surveys over a period of six years is stable and ranging between 60 and 70 individuals.	Number of Individuals sighted
MT0000115	**SSCO_CC_115a**	Maintain the distribution of *Caretta caretta* within MT000015.	Distribution	Sightings of *Caretta caretta* are distributed throughout the MPA, based on systematic visual surveys.	Area covered by sightings
	SSCO_CC_115b	Maintain the population dynamics of *Caretta caretta* in MT0000115, by achieving the following targets by 2030.	Abundance	The population abundance of *Caretta caretta* over a period of six years is stable and ranging between 20 and 30.	Estimated Population Abundance (upscaled to the level of the MPA)
MT0000116	**SSCO_CC_116a**	Maintain the distribution of *Caretta caretta* within MT000016.	Distribution	Sightings of *Caretta caretta* are distributed throughout the MPA, based on systematic visual surveys.	Area covered by sightings
	SSCO_CC_116b	Maintain the population dynamics of *Caretta caretta* in MT0000116, by achieving the following targets by 2030.	Abundance	The population abundance of *Caretta caretta* over a period of six years is stable and ranging between 60 and 70.	Estimated Population Abundance (upscaled to the level of the MPA)

Table 18: Operational Objectives for Caretta caretta within MT0000105, MT0000113, MT0000115 and MT0000116

MPA	Operational Objective code	Conservation Objective
MT0000113 MT0000115 MT0000116	**OO_ CC _1**	Undertake studies between 2024-2025 to improve knowledge on the ecological functions of the protected sites for *Caretta caretta*.
	OO_CC_2	The number of incidentally-caught turtles, as verified through official data collection processes and analysis of stranded specimens, shows a stable or declining trend.
	OO_CC_3	Achieve an increase in number of fishers, who are informed on the procedures of reporting injured/caught turtles to the relevant authority.
MT0000113 MT0000116	**OO_CC_4**	By 2025, improve knowledge on the interaction of turtles with surface long-lining.
MT0000105	**OO_CC_5**	Ensure that the protected area continues to contribute to the maintenance of the range and population size of *Caretta caretta* at a national scale, in terms of the extent of habitat availability and provision of ecological requirements, to support the species as it migrates through Maltese waters.

***Conservation Measures*:**

Measure name	**MITIGATION OF INCIDENTAL BY-CATCH**
Measure code	**CM_ Tu_1**
Category (Art. 17)	CG05 - Reduce bycatch and incidental killing of non-target species
Actions for measure implementation	In 2024, hold workshops with fishers to promote the use of mitigation measures as per GFCM recommendation GFCM/36/2011/4 on the incidental by-catch of sea turtles in the GFCM competence area[53]. Improve data collection and recording on turtle by-catch by facilitating reporting procedures.
Applicable sites	MT0000113; MT0000115; MT0000116
Lead/supporting parties	Environment and Resources Authority, Department of Fisheries and Aquaculture
Timeframe	2024-2025
Performance Indicator	Number of marine turtles incidentally caught in fishing gear

53 http://extwprlegs1.fao.org/docs/pdf/mul201486.pdf

Measure name	**REVIEW AND UPDATE OF PROTOCOLS TO ENHANCE SURVIVAL RATE OF INCIDENTALLY CAUGHT/ENTANGLED TURTLES**
Measure code	**CM_Tu_2**
Category (Art. 17)	CG05 - Reduce bycatch and incidental killing of non-target species
Actions for measure implementation	• By 2024, review and update as necessary existing protocols addressing stranded/injured turtles and their rehabilitation. • Liaise with relevant stakeholders to ensure up-to-date rehabilitation services; • Provision of information/training to fishers and public with respect to handling and reporting on incidentally caught turtles by 2026.
Applicable sites	MT0000113; MT0000115; MT0000116
Lead/supporting parties	Environment and Resources Authority
Timeframe	2024 – 2026
Performance Indicator	Survival rate of incidentally caught/entangled/injured turtles

Measure name	**AWARENESS RAISING ON TURTLES**
Measure code	**CM_ Tu _3**
Category (Art. 17)	N/A
Actions for measure implementation	• Starting from 2023, organise at least one awareness event a year on turtles and anthropogenic impacts thereon. • By 2023, engage in citizen science where the general public is involved in data recording.
Applicable sites	MT0000113; MT0000115; MT0000116
Lead/supporting parties	Environment and Resources Authority
Timeframe	2023
Performance Indicator	Number of people engaged in data collection processes

Loggerhead turtle - *Caretta caretta*
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3.7 SCOPOLI'S SHEARWATER CALONECTRIS DIOMEDEA, YELKOUAN SHEARWATER PUFFINUS YELKOUAN, EUROPEAN STORM PETREL HYDROBATES PELAGICUS - A850, A464, A014 (CD, PY, HP AND SB)

Eight marine sites have been designated as Special Protection Areas for the conservation of the three seabird species breeding on the Maltese islands. Site-specific conservation objectives are listed separately for the three species (Table 20, Table 22, Table 24), with operational objectives (Table 25) and conservation measures presented subsequently for the whole species group. This approach has been adopted in view of the similar or shared ecological requirements of the species.

In accordance with the assessment undertaken as part of the Standard Data Forms (Table 19, Table 21, Table 23), all protected sites, with the exception of MT0000110 for *Puffinus yelkouan*, present an average or reduced conservation status with respect to the features of the habitats which are important for the species concerned and possibilities for restoration. Nevertheless, knowledge on the ecological functions of the sites in question is very limited at this stage and efforts need to focus on improving knowledge with respect to the use of the sites in question by the three breeding seabirds. In this regard, the SSCOs put forward by this document are still seeking maintenance of existing seabird populations within the sites in question and this is pending further knowledge on the required improvements through studies on the ecological functions of the sites.

It should also be noted that the coastal Special Protection Areas (SPAs) MT0000111 and MT0000112 are aligned with the shoreline along which the three seabird species breed. These marine areas complement terrestrial SPAs, hence the need to ensure coherence with the management process for the terrestrial protected sites. Within this context, the SSCOs for these sites are reflecting SSCOs for terrestrial SPAs in terms of breeding distribution and breeding population of the seabirds as relevant to the sites in question. Nevertheless, the measures being put forward through this document focus on the management required to ensure the seabirds' use of marine areas. For this purpose, land-based sources of disturbance with potential effects on marine sites are being addressed. Streamlining of such management measures with the management process for the terrestrial part will be ensured throughout the implementation of both processes.

Scopoli's Shearwater - *Calonectris diomedea*
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Scopoli's Shearwater - *Calonectris diomedea*
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Calonectris diomedea

Table 19: Information from the Standard Data Form in relation to the Scopoli's Shearwater (Calonectris diomedea)

MPA	Size: individuals		Category	Data Quality	Site assessment				Pressures relevant to protected site
	Min	Max			Population[54]	Conservation[55]	Isolation[56]	Global[57]	
MT0000106	6100	6100	Common	Good	A	C	C	A	Professional passive fishing; Marine macro-pollution (i.e. plastic bags, Styrofoam); Leisure fishing
MT0000108	3800	3800	Common	Good	A	C	C	B	N/A[58]
MT0000109	2600	2600	Common	Good	A	C	C	B	N/A[59]
MT0000110	3500	3500	Common	Good	A	C	C	B	Professional passive fishing; Marine macro-pollution (i.e. plastic bags, Styrofoam); Leisure fishing
MT0000111	6000	6000	Common	Good	A	C	C	A	Noise nuisance, noise pollution; Light pollution
MT0000112	7300	7300	Common	Good	A	C	C	A	Shipping Lanes[60]; Other sport; leisure complexes; Outdoor sports and leisure activities and recreational activities

54 **POPULATION:** Size and density of the population of the species present on the site in relation to the populations present within national territory. A: 100% >= p > 15%; B: 15% >= p > 2%; C: 2% >= p > 0%

55 **CONSERVATION:** Degree of conservation of the features of the habitat which are important for the species concerned and possibilities for restoration A: excellent conservation; B: good conservation; C: average or reduced conservation

56 **ISOLATION:** Degree of isolation of the population present on the site in relation to the natural range of the species. A: population (almost) isolated; B: population not-isolated, but on margins of area of distribution; C: population not-isolated within extended distribution range

57 **GLOBAL:** Global assessment of the value of the site for conservation of the species concerned A : excellent value B : good value; C : significant value

58 All pressures are of low importance

59 All pressures are of low importance

60 The terminology 'shipping lanes' is not applicable to Malta, since in Malta there are no traffic separation schemes implemented in terms of international law. In this regard, this terminology is referring to 'normal maritime routes' that are used by vessels when calling or leaving from Malta.

Table 20: Site-Specific Conservation Objectives for Scopoli's Shearwater (Calonectris diomedea)

MPA	SSCO code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000106	**SSCO_CD_106a**	The use of MT0000106 by the breeding population of *Calonectris diomedea* is retained by achieving the following targets by 2030.	Distribution	Sightings or tracking data of *Calonectris diomedea* are distributed throughout the MPA.	Area covered by sightings/ tracking data
	SSCO_CD_106b	Population dynamics of *Calonectris diomedea* in MT0000106 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the site ranging between 5000 and 7000.	Number of individuals
MT0000108	**SSCO_CD_108a**	The use of MT0000108 by the breeding population of *Calonectris diomedea* is retained by achieving the following targets by 2030.	Distribution	Sightings or tracking data of *Calonectris diomedea* are distributed throughout the MPA.	Area covered by sightings/ tracking data
	SSCO_CD_108b	Population dynamics of *Calonectris diomedea* in MT0000108 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the site ranging between 3000 and 4000.	Number of individuals
MT0000109	**SSCO_CD_109a**	The use of MT0000109 by the breeding population of *Calonectris diomedea* is retained by achieving the following targets by 2030.	Distribution	Sightings or tracking data of *Calonectris diomedea* are distributed throughout the MPA.	Area covered by sightings/ tracking data
	SSCO_CD_109b	Population dynamics of *Calonectris diomedea* in MT0000109 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the site ranging between 2000 and 3000.	Number of individuals

MPA	SSCO code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000110	**SSCO_CD_110a**	The use of MT0000110 by the breeding population of *Calonectris diomedea* is retained by achieving the following targets by 2030.	Distribution	Sightings or tracking data of *Calonectris diomedea* are distributed throughout the MPA.	Area covered by sightings/ tracking data
	SSCO_CD_110b	Population dynamics of *Calonectris diomedea* in MT0000110 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the site ranging between 3000 and 4000.	Number of individuals
MT0000111	**SSCO_CD_111a**	Maintain the breeding distribution range of *Calonectris diomedea* along the shoreline of MT0000111, by achieving the following target by 2030.	Distribution	The breeding colony of *Calonectris diomedea* covers at least 45% of the total coastline of the protected area.	Length of coastline occupied by breeding colonies
	SSCO_CD_111b	Maintain the breeding population of *Calonectris diomedea* along the shoreline of MT0000111, by achieving the following target.	Breeding population	The population trend over a period of six years is stable with number of breeding pairs reflecting current minimum and maximum estimates of 700 - 1200 pairs within the site in question.	Estimates of breeding pairs
	SSCO_CD_111c	Population dynamics of *Calonectris diomedea* in the marine part of MT0000111 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the marine part of the site, ranging between 5000 and 7000.	Number of individuals

MPA	SSCO code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000112	**SSCO_CD_112a**	Maintain the breeding distribution range of *Calonectris diomedea* along the shoreline of MT0000112, by achieving the following target by 2030.	Distribution	The breeding colony of *Calonectris diomedea* covers at least 10% of the total coastline of the protected area.	Length of coastline occupied by breeding colonies
	SSCO_CD_112b	Maintain the breeding population of *Calonectris diomedea* along the shoreline of MT0000112, by achieving the following target.	Breeding Population	The population trend over a period of six years is stable with number of breeding pairs reflecting current minimum and maximum estimates of 1700 – 2600 pairs within the site in question.	Estimates of breeding pairs
	SSCO_CD_112c	Population dynamics of *Calonectris diomedea* in the marine part of MT0000112 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the marine part of the site, ranging between 6000 and 8000.	Number of individuals

Scopoli's Shearwater - *Calonectris diomedea*
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Yelkouan Shearwater - *Puffinus yelkouan*
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Puffinus yelkouan

Table 21: Information from the Standard Data Form in relation to the Yelkouan Shearwater (Puffinus yelkouan)

MPA	Size: individuals				Site assessment				Pressures relevant to protected site
	Min	Max	Category	Data Quality	Population[61]	Conservation[62]	Isolation[63]	Global[64]	
MT0000107	380	450	Common	Good	B	C	C	B	N/A[65]
MT0000110	460	770	Common	Good	B	B	C	A	Professional passive fishing; Marine macro-pollution (i.e. plastic bags, Styrofoam); Leisure fishing
MT0000111	840	1350	Common	Good	C	C	C	A	Noise nuisance, noise pollution; Light pollution
MT0000112	3270	4650	Common	Good	A	C	C	A	Shipping Lanes[66]; Other sport/ leisure complexes; Outdoor sports and leisure activities and recreational activities

61 **POPULATION:** Size and density of the population of the species present on the site in relation to the populations present within national territory. A: 100% >= p > 15%; B: 15% >= p > 2%; C: 2% >= p > 0%

62 **CONSERVATION:** Degree of conservation of the features of the habitat which are important for the species concerned and possibilities for restoration A: excellent conservation; B: good conservation; C: average or reduced conservation

63 **ISOLATION:** Degree of isolation of the population present on the site in relation to the natural range of the species. A: population (almost) isolated; B: population not-isolated, but on margins of area of distribution; C: population not-isolated within extended distribution range

64 **GLOBAL:** Global assessment of the value of the site for conservation of the species concerned A : excellent value; B: good value; C : significant value

65 All pressures are of low importance

66 The terminology 'shipping lanes' is not applicable to Malta, since in Malta there are no traffic separation schemes implemented in terms of international law. In this regard, this terminology is referring to 'normal maritime routes' that are used by vessels when calling or leaving from Malta.

Table 22: Site-Specific Conservation Objectives for Yelkouan Shearwater (Puffinus yelkouan)

MPA	SSCO code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000107	**SSCO_PY_107a**	The use of MT0000107 by the breeding population of *Puffinus yelkouan* is retained by achieving the following targets by 2030.	Distribution	Sightings or tracking data of *Puffinus yelkouan* are distributed throughout the MPA.	Area covered by sightings/ tracking data
	SSCO_PY_107b	Population dynamics of *Puffinus yelkouan* in MT0000106 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the site ranging between 350 and 500.	Number of individuals
MT0000110	**SSCO_PY_110a**	The use of MT0000110 by the breeding population of *Puffinus yelkouan* is retained by achieving the following targets by 2030.	Distribution	Sightings or tracking data of *Puffinus yelkouan* are distributed throughout the MPA.	Area covered by sightings/ tracking data
	SSCO_PY_110b	Population dynamics of *Puffinus yelkouan* in MT0000110 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the site, ranging between 450 and 800.	Number of individuals

Yelkouan Shearwater - *Puffinus yelkouan*
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MPA	SSCO code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000111	**SSCO_PY_111a**	Maintain the breeding distribution range of *Puffinus yelkouan* along the shoreline of MT0000111, by achieving the following target by 2030.	Distribution	The breeding colony of *Puffinus yelkouan* covers at least 25% of the total coastline of the protected area.	Length of coastline occupied by breeding colonies
	SSCO_PY_111b	Maintain the breeding population of *Puffinus yelkouan* along the shoreline of MT0000111, by achieving the following target.	Breeding population	The population trend over a period of six years is stable with number of breeding pairs reflecting current minimum and maximum estimates of 250 - 400 pairs within the site in question.	Estimates of breeding pairs
	SSCO_PY_111c	Population dynamics of *Puffinus yelkouan* in the marine part of MT0000111 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the marine part of the site, ranging between 800 and 1400.	Number of individuals

Yelkouan Shearwater - *Puffinus yelkouan*
© EMFF 8.3.1

MPA	SSCO code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000112	**SSCO_PY_112a**	Maintain the breeding distribution range of *Puffinus yelkouan* along the shoreline of MT0000112, by achieving the following target by 2030.	Distribution	The breeding colony of *Puffinus yelkouan* covers at least 15% of the total coastline of the protected area.	Length of coastline occupied by breeding colonies
	SSCO_PY_112b	Maintain the breeding population of *Puffinus yelkouan* along the shoreline of MT0000112, by achieving the following target.	Breeding Population	The population trend over a period of six years is stable with number of breeding pairs reflecting current minimum and maximum estimates of 1400 – 2250 pairs within the site in question.	Estimates of breeding pairs
	SSCO_PY_112c	Population dynamics of *Puffinus yelkouan* in the marine part of MT0000112 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the marine part of the site, ranging between 3000 and 5000.	Number of individuals

European Storm-petrel - *Hydrobates pelagicus*

Hydrobates pelagicus

Table 23: Information from the Standard Data Form in relation to the European Storm Petrel (Hydrobates pelagicus)

MPA	Size: individuals				Site assessment				Pressures relevant to protected site
	Min	Max	Category	Data Quality	Population[67]	Conservation[68]	Isolation[69]	Global[70]	
MT0000107	1700	1700	Common	Good	B	C	C	C	N/A[71]
MT0000108	3800	3800	Common	Good	B	C	C	B	N/A[72]
MT0000111	15000	24000	Common	Good	A	C	C	A	Noise nuisance, noise pollution; Light pollution
MT0000114	250	250	Common	Good	C	C	C	C	N/A[73]

67 **POPULATION:** Size and density of the population of the species present on the site in relation to the populations present within national territory. A: 100% >= p > 15%; B: 15% >= p > 2%; C: 2% >= p > 0%

68 **CONSERVATION:** Degree of conservation of the features of the habitat which are important for the species concerned and possibilities for restoration A: excellent conservation; B: good conservation; C: average or reduced conservation

69 **ISOLATION:** Degree of isolation of the population present on the site in relation to the natural range of the species. A: population (almost) isolated; B: population not-isolated, but on margins of area of distribution; C: population not-isolated within extended distribution range

70 **GLOBAL:** Global assessment of the value of the site for conservation of the species concerned A : excellent value; B : good value; C : significant value

71 All pressures are of low importance

72 All pressures are of low importance

73 All pressures are of low importance

Table 24: Site-specific Conservation Objectives for the European Storm-Petrel (Hydrobates pelagicus)

MPA	SSCO code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000107	**SSCO_HP_107a**	The use of MT0000107 by the breeding population of *Hydrobates pelagicus* is retained by achieving the following targets by 2030.	Distribution	Sightings of *Hydrobates pelagicus* are distributed throughout the MPA.	Area covered by sightings/ tracking data
	SSCO_HP_107b	Population dynamics of *Hydrobates pelagicus* in MT0000107 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the site ranging between 1500 and 2000.	Number of individuals
MT0000108	**SSCO_HP_108a**	The use of MT0000108 by the breeding population of *Hydrobates pelagicus* is retained by achieving the following targets by 2030.	Distribution	Sightings of *Hydrobates pelagicus* are distributed throughout the MPA.	Area covered by sightings/ tracking data
	SSCO_HP_108b	Population dynamics of *Hydrobates pelagicus* in MT0000108 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the site, ranging between 3500 and 4000 .	Number of individuals

MPA	SSCO code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000111	**SSCO_HP_111a**	Maintain the breeding distribution range of *Hydrobates pelagicus* along the shoreline of MT0000111, by achieving the following target by 2030.	Distribution	The breeding colony of *Hydrobates pelagicus* covers at least 3% of the total coastline of the protected area.	Length of coastline occupied by breeding colonies
	SSCO_HP_111b	Maintain the breeding population of *Hydrobates pelagicus* along the shoreline of MT0000111, by achieving the following target.	Breeding population	The population trend over a period of six years is stable with number of breeding pairs reflecting current minimum and maximum estimates of 10,000 – 12,500 pairs within the site in question.	Estimates of breeding pairs
	SSCO_HP_111c	Population dynamics of *Hydrobates pelagicus* in the marine part of MT0000111 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the marine part of the site, ranging between 15,000 and 24,000.	Number of individuals

MPA	SSCO code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000114	**SSCO_HP_114a**	The use of MT0000114 by the breeding population of *Hydrobates pelagicus* is retained by achieving the following targets by 2030.	Distribution	Sightings of *Hydrobates pelagicus* are distributed throughout the MPA.	Area covered by sightings/ tracking data
	SSCO_HP_114b	Population dynamics of *Hydrobates pelagicus* in MT0000114 are maintained or improved by achieving the following targets by 2030.	Abundance	The average number of individuals recorded over a period of six years reflects current estimates within the site ranging between 200 and 300.	Number of individuals

SEABIRDS AS A GROUP

Table 25: Operational Objectives for Seabirds within the Special Protected Areas MT0000106, MT0000107, MT0000108, MT0000109, MT0000110, MT0000111, MT0000112 and MT0000114

MPA	Operational Objective code	Conservation Objective
MT0000106 MT0000107 MT0000108	**OO_ SB_1**	Undertake studies between 2024-2025 to improve knowledge on the ecological functions of the protected sites for the three seabird species and enable further elaboration of site-specific conservation objectives.
MT0000109 MT0000110 MT0000111 MT0000112	**OO_SB_2**	Improve knowledge, by 2024, on the interactions of seabirds with fishing activity, with a view to quantify the scale and extent of fisheries' bycatch through the involvement of fishers.
MT0000114 MT0000111 MT0000112	**OO_SB_3**	Disturbance due to light pollution and other anthropogenic activities within MT0000111 and MT0000112 is reduced.

***Conservation Measures*:**

Measure name	**REGULATION OF ACTIVITIES THAT MAY CAUSE DISTURBANCE TO SEABIRDS**
Measure code	**CM_SB_1**
Category (Art. 17)	CF09 - Reduce/eliminate noise, light, heat or other forms pollution from industrial, commercial, residential and recreational areas and activities
Actions for measure implementation	Development, by 2024, of a Code of Conduct outlining best practices and behaviour within the Marine Protected Areas, primarily targeting disturbance to seabirds from boating activity and commercial vessels. Assess the adequacy of existing regulations to reduce disturbance, and extend as necessary, by 2025, in cooperation with relevant stakeholders. Development, by 2026, of a digital service providing the relevant information to facilitate compliance by recreational boaters/commercial vessels. The information may also be promulgated through the issuance of related Notices to Mariners. By 2026, install a set of surveillance cameras within nesting/breeding sites to support enforcement/monitoring of regulation compliance.
Applicable sites	MT0000111, MT0000112
Lead/supporting parties	Environment and Resources Authority; Authority for Transport in Malta
Timeframe	2024-2026
Performance indicator	Number of maritime users aware of the codes of conducts and regulations

Measure name	**MITIGATION OF INCIDENTAL BY-CATCH**
Measure code	**CM_ SB_2**
Category (Art. 17)	CG05 - Reduce bycatch and incidental killing of non-target species
Actions for measure implementation	• In 2024, hold workshops with fishers to promote the use of mitigation measures as per GFCM recommendation GFCM/35/2011/3[74] on reducing incidental by-catch of seabirds in fisheries in the GFCM competence area. • Improve data collection and recording on seabird by-catch by facilitating reporting procedures.
Applicable sites	MT0000106, MT0000107, MT0000108, MT0000109, MT0000110, MT0000111, MT0000112, MT0000114
Lead/supporting parties	Environment and Resources Authority; Department of Fisheries and Aquaculture
Timeframe	2024-2025
Performance indicator	Number of seabirds incidentally caught in fishing gear

74 https://www.fao.org/3/ax377e/ax377e.pdf

Measure name	**REDUCTION OF LIGHT POLLUTION IN COASTAL MARINE PROTECTED AREAS**
Measure code	**CM_SB_3**
Category (Art. 17)	CF09 - Reduce/eliminate noise, light, heat or other forms pollution from industrial, commercial, residential and recreational areas and activities
Actions for measure implementation	• By 2024, prioritise areas which are subject to light pollution from land-based sources. • Explore the availability of funding to incentivise retrofitting of light fixtures in the selected priority areas. • Implement such retrofitting in collaboration with site owners by making use of funding opportunities. • Promote the installation of alternatives to street lighting, such as reflective signs to guide driving at night • In parallel, continue to recommend mitigation measures to address light pollution from new development as part of permitting processes.
Applicable sites	MT0000111, MT0000112
Lead/supporting parties	Environment and Resources Authority
Timeframe	2024-2026
Performance indicator	Extent of light pollution in coastal MPAs

Scopoli's Shearwater - *Calonectris diomedea*
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3.8 THE MALTESE TOP-SHELL (STEROMPHALA NIVOSA) – 2578 (SN)

The Maltese top-shell *Steromphala nivosa* is a marine gastropod endemic to the Maltese Islands. It is a very rare species which is very difficult to record, even through systematic surveys. The likelihood of finding *S. nivosa* within the areas where it is recorded is low, even when detailed systematic surveys are undertaken within the habitats where it is known to occur.

Within this context, while elaboration of site-specific conservation objectives can be undertaken based on the available data for the two Marine Protected Areas (MT0000101 & MT0000105) as per Standard Data Forms (Table 26), difficulties in monitoring its population status need to be acknowledged. Within a given location, *S. nivosa* can be found in only a subset of the habitat within that location and the population might not be captured through monitoring processes.

Within this context, the SSCOs put forward for this species hinge on the distribution of the species as represented by its presence within the site in question, as well as the availability of the habitat to maintain the population on a long-term basis (Table 27). Operational objectives are set to address knowledge gaps to the extent possible (Table 28).

Maltese Top-shell - *Steromphala nivosa*
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Table 26: Information from the Standard Data Form in relation to the Maltese top-shell (Steromphala nivosa)

MPA	Size: individuals		Category	Data Quality	Site assessment				Pressures relevant to protected site
	Min	Max			Population[75]	Conservation[76]	Isolation[77]	Global[78]	
MT0000101	4400	4400	Very rare	Good	B	A	C	A	Professional passive fishing; Leisure fishing
MT0000105	600	600	Very rare	Good	C	B	C	B	Professional passive and active fishing; Leisure fishing; Outdoor sports and leisure activities, recreational activities; marine macropollution

75 **POPULATION:** Size and density of the population of the species present on the site in relation to the populations present within national territory. A: 100% >= p > 15%; B: 15% >= p > 2%; C: 2% >= p > 0%

76 **CONSERVATION:** Degree of conservation of the features of the habitat which are important for the species concerned and possibilities for restoration A: excellent conservation; B: good conservation; C: average or reduced conservation

77 **ISOLATION:** Degree of isolation of the population present on the site in relation to the natural range of the species. A: population (almost) isolated; B: population not-isolated, but on margins of area of distribution; C: population not-isolated within extended distribution range

78 **GLOBAL:** Global assessment of the value of the site for conservation of the species concerned A : excellent value B : good value; C : significant value

Table 27: Site-specific Conservation Objectives for the Maltese Top-shell (Steromphala nivosa)

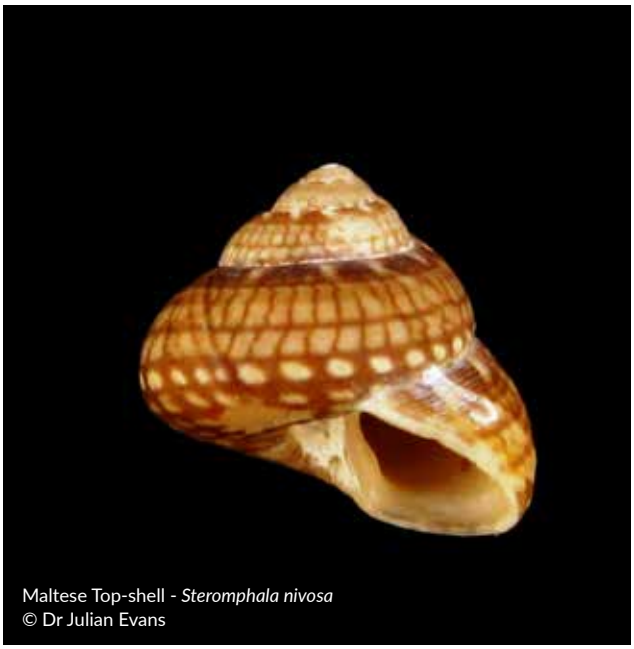
MPA	SSCO code	Conservation Objective	Attribute	Target	Unit of Measurement
MT0000101	**SSCO_SN_101**	Maintain the extent of the habitat type supporting *Steromphala nivosa* within MT0000101.	Extent of habitat for the species	Area covered by the habitat for the species is stable for a period of six years.	Area covered by the species' habitat
		Distribution of *Steromphala nivosa* within MT0000101 is maintained.	Distribution	Presence of *Steromphala nivosa* confirmed within at least one sub-set of the area of the habitat within the protected site.	Presence
MT0000105	**SSCO_SN_105**	Maintain the extent of the habitat type supporting *Steromphala nivosa* within MT0000105.	Extent of habitat for the species	Area covered by the habitat for the species is stable for a period of six years.	Area covered by the species' habitat
		Distribution of *Steromphala nivosa* within MT0000105 is maintained.	Distribution	Presence of *Steromphala nivosa* confirmed within at least one sub-set of the area of the habitat within the protected site.	Presence

Table 28: Operational Objectives for Steromphala nivosa within MT0000101 and MT0000105

MPA	Operational Objective code	Conservation Objective
MT0000101 MT0000105	**OO_ SN_1**	Knowledge on the ecological requirements, including the quality of the habitats, of *Steromphala nivosa* is improved by 2024 through dedicated research.
	OO_ SN_2	Undertake a population genetic study on local populations of *Steromphala nivosa* to assess the extent of connectivity between them by 2026.

Conservation Measures:

Measure name	**REINTRODUCTION OF *Steromphala nivosa***
Measure code	**CM_SN_1**
Category (Art. 17)	CS01 - Reinforce populations of species from the directives
Actions for measure implementation	By 2024, engage experts to develop a strategy for the potential reintroduction of *S. nivosa* in an attempt to re-establish populations in suitable habitat locations previously known to host the species.
Applicable sites	MT0000101, MT0000105
Lead/supporting parties	Environment and Resources Authority
Timeframe	2024-2026
Performance indicator	Development of a reintroduction strategy



Maltese Top-shell - *Steromphala nivosa*
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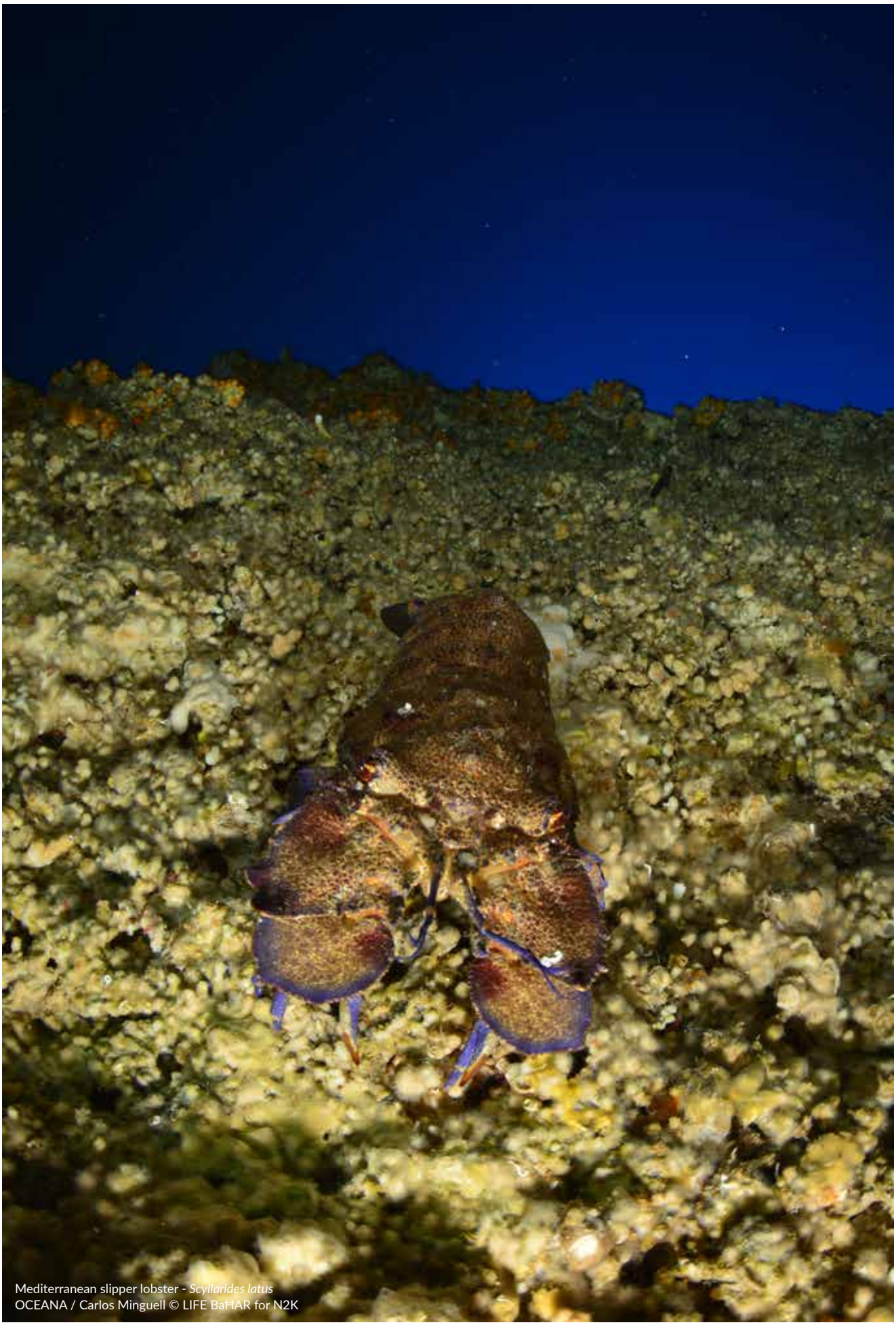

Mediterranean slipper lobster - *Scyllarides latus*
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Part III:
National objectives and measures contributing to Marine Protected Area Management

4. PREAMBLE

The management process pursuant to Article 6(1) of the Habitats Directive is primarily elaborated through site-specific conservation objectives per each habitat and species, as listed in both the Habitats and Birds Directives, as per Part II of this document. However, management at site level needs to be complemented by broader objectives and measures at a national scale.

This section outlines these broad conservation objectives (national objectives – NO) and measures (NM) which support the achievement of favourable conservation status of the habitats and species at a national scale. They primarily address aspects that are overarching and are not specifically related to particular habitats and species, such as education and awareness, involvement of stakeholders, sustainable use of marine resources and knowledge improvement.

Each aspect is addressed in separate sections hereunder.

4.1 EDUCATION AND AWARENESS

The general public is an important stakeholder for the conservation of the marine environment and plays an important role in effective management of Marine Protected Areas. Management processes for the marine environment should thus take into consideration the need for behavioural changes across the general public that would contribute to the conservation of the marine environment. Such behavioural changes are triggered through the provision of information on the importance of the marine environment to humankind, thus enabling the public in general to make informed decisions and contribute to the overall management processes. Awareness raising on the importance of the marine environment and its resources is considered to be the first step towards such behavioural changes. However, behavioural changes are enhanced through adoption of initiatives that promote participation by the public in the management process itself.

NO1: *Raise public awareness and appreciation of the habitats and species among the public to achieve at least a 20% increase in awareness of the public by 2030.*

Measure name	**DEVELOP AND IMPLEMENT AN AWARENESS RAISING STRATEGY ON MARINE PROTECTED AREAS**
Measure code	**CM_NM1**
Actions for measure implementation	A National Awareness Raising Strategy is adopted by 2024 This strategy should include a 'Citizen Science program' for data collection to promote citizen engagement. Implementation of the Strategy in accordance with its set timeframes including the development and distribution of awareness raising material; The general public to be involved in data recording as per conservation measures CM_Ce_3 & CM_CC_3 in Part II of this document.
Lead/supporting parties	Environment and Resources Authority
Timeframe	2024-2030
Performance Indicator	Number of individuals aware of the importance of the oceans and its biodiversity determined through public perception surveys carried out every 3 years.

4.2 STAKEHOLDER PARTICIPATION

In order to work towards effective management of the marine environment, environmental objectives need to be streamlined across sectoral policies, thus ensuring that all sectors are working towards the achievement of common goals. Within this context, it is important to engage all relevant stakeholders throughout the management processes.

NO2: *An increasing trend in the engagement of public and private sectors in the management of MPAs*

Measure name	**STEERING COMMITTEE**
Measure code	**CM_NM2**
Actions for measure implementation	By 2023, establish a Steering Committee involving all relevant stakeholders to oversee the implementation of the management process within MPAs Terms of Reference for Steering Committee as agreed with all relevant stakeholders
Lead/supporting parties	Environment and Resources Authority Representatives of the following sectors: transport, fisheries, oil exploration and exploitation, environmental health, chemicals.
Timeframe	2023
Performance Indicator	Establishment of the Steering committee including representatives of all relevant bodies.


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4.3 SUSTAINABLE USE OF THE MARINE ENVIRONMENT

Management of Marine Protected Areas should be undertaken within the overall protection of the marine environment through the sustainable use of marine resources. The use of the marine environment is governed by various policies and regulations, hence the need to streamline environmental objectives across sectoral policies and provide incentives for marine users to comply with existing regulations.

In addition to working towards compliance, however, there are also opportunities to engage specific public sectors in addressing pressures on the marine environment and work towards sustainable use. This is particularly relevant to the exploitation of marine resources, whereby relevant actors can be engaged in innovative processes that would contribute to sustainable use and prevention of impacts.

The below national objectives and measures are focusing on three specific pressures on marine environment within the context of sustainable use: (i) illegal activity; (ii) introduction of non-indigenous species and (iii) exploitation.

NO3: *Declining trends in illegal activity in Malta's marine waters*

Measure name	**COMPLIANCE STRATEGY**
Measure code	**CM_NM3**
Actions for measure implementation	In coordination with the relevant competent entities, by 2024, develop a strategy to enhance compliance across different sectors. The strategy will seek to combine efforts across different entities to ensure coverage of compliance with various relevant regulations and will involve an assessment of required resources to work towards a concerted effort.
Lead/supporting parties	Environment and Resources Authority, Authority of Transport Malta, Department of Fisheries and Aquaculture, Police Force, Armed Forces of Malta, Malta Tourism Authority.
Timeframe	2024
Performance Indicator	Adoption of the strategy by all relevant entities

NO4: *Stable or declining trend in the abundance or distribution of introduced non-indigenous species in the marine environment.*

Measure name	**CONTROL OF INTRODUCED NON-INDIGENOUS SPECIES**
Measure code	**CM_NM4**
Actions for measure implementation	By 2024, develop and promote a list of edible invasive alien species that have the potential to be commercialised through diversification of fishers' catch. By 2025, establish working relationship with fishers through the development of a scheme for monitoring and targeting introduced non-indigenous species and promoting their consumption
Lead/supporting parties	Environment and Resources Authority; Department of Fisheries and Aquaculture
Timeframe	2024-2025
Performance Indicator	Number of fishers involved in the scheme

NO5: *The abundance and/or composition of marine species are indicative of overall good status of marine ecosystems and/or sustainable exploitation*

Measure name	**ECO-LABELLING**
Measure code	**CM_NM5a**
Actions for measure implementation	By 2025, develop an eco-label for local sustainable fish in collaboration with fishers. Promote the use of such eco-labels with local fishermen.
Lead/supporting parties	Environment and Resources Authority, Department of Fisheries and Aquaculture
Timeframe	2025
Performance Indicator	Development of eco-label

Common cuttlefish - *Sepia officinalis*
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Purple sea urchin - *Paracentrotus lividus*

Measure name	**FISH REVIVAL AREAS**
Measure code	**CM_NM5b**
Actions for measure implementation	By 2023, establish a Committee composed of representatives for the relevant competent authorities, relevant experts and representatives of the local fishing community, so as to oversee the following process: By 2024, reach an agreement, in consultation with the fisheries sector and fishers on the location of a minimum of one pilot 'Fish Revival Area'[79]. The site will be subject to temporal and spatial closure of fishing activity in agreement with fishers for a specified period of time. Compensatory measures for affected professional fishers. Conduct at least two fish stock assessments within Fish Revival Areas[8] and reference zones to assess effectiveness of closure to fishing pressure.
Lead/supporting parties	Department of Fisheries and Aquaculture; Environment and Resources Authority; Fishers
Timeframe	2023-2026
Performance Indicator	Establishment of Fish Revival Area

Measure name	**DEVELOP AND IMPLEMENT A CONTROL SCHEME WITH FISHERS TO PROTECT SEA URCHINS (*Paracentrotus lividus*) FROM UNSUSTAINABLE FISHING PRACTICES**
Measure code	**CM_NM5c**
Actions for measure implementation	By 2024, issue regulations on the exploitation of sea-urchins in consultation with fishers, including consideration of closed seasons. Monitor the effectiveness of the regulations by 2026 and update regulations accordingly.
Applicable sites	MT0000101, MT0000102, MT0000103, MT0000104, MT0000105
Lead/supporting parties	Environment and Resources Authority, Department of Fisheries and Aquaculture
Timeframe	2024-2026
Performance Indicator	Status of *Paracentrotus lividus*

79 The term 'Fish Revival Area' refers to an area where fisheries activity is managed, also through zonation, for the purpose of restoring fish communities as part of wider ecosystems.

4.4 KNOWLEDGE IMPROVEMENT

Effective management of the marine environment can only be ensured through the availability of concrete knowledge and data on the status and desired status of marine resources. The centralisation and use of such data and information across all relevant sectors would also facilitate the achievement of common environmental objectives across sectors. In this regard, it is not only important to ensure sustained and robust data collection processes, but also to facilitate access to such data/information by all relevant entities.

NO6: *Ensure availability of centralised information/data on marine species/habitats and pressures and threats thereon.*

Measure name	**FACILITATE ACCESSIBILITY TO DATA ON THE MARINE ENVIRONMENT**
Measure code	**CM_NM6a**
Actions for measure implementation	Review the structure of existing database/s for the marine environment to ensure accommodation, centralisation and continuous updating of all relevant data and information on the marine environment. Liaise with all relevant entities for the provision of access to the database.
Lead/supporting parties	Environment and Resources Authority
Timeframe	2024
Performance Indicator	Database

Measure name	**SCIENTIFIC ADVISORY BODY**
Measure code	**CM_NM6b**
Actions for measure implementation	Establish a Scientific Advisory body to evaluate marine data and monitoring approaches Set regular meetings with the Advisory body to ensure scientifically robust management approaches.
Lead/supporting parties	Environment and Resources Authority
Timeframe	2023
Performance Indicator	Advisory Body

Flying gurnard - *Dactylopterus volitans*
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