

Performance Audit: The designation and effective management of protected areas within Maltese waters

January 2018



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The designation and effective management of protected areas within Maltese waters

List of Abbreviations

CoE	Council of Europe
DFA	Department of Fisheries and Aquaculture
ERA	Environment and Resources Authority
EU	European Union
EUROSAI	European Organisation of Supreme Audit Institutions
FMZ	Fisheries Management Zone
IMC	Inter Ministerial Committee
IMP	Integrated Maritime Policy
MEA	Multilateral Environmental Agreement
MESDC	Ministry for the Environment, Sustainable Development and Climate Change
MMA	Malta Marittima Agency
MoU	Memorandum of Understanding
MSFD	Marine Strategy Framework Directive
MTCE	Ministry for Tourism, Culture and the Environment
MPA	Marine Protected Area
NAO	National Audit Office
NEP	National Environment Policy
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non Governmental Organisation
PoMs	Programme of Measures
SAI	State Audit Institution
SPAMI	Special Protected Area of Mediterranean Importance
SL	Subsidiary Legislation
ТМ	Transport Malta
UN	United Nations
UoM	University of Malta
WGEA	Working Group on Environmental Auditing

Executive Summary

Introduction

- 1. Since 2008, Malta designated 14 Marine Protected Areas (MPAs) under the Natura 2000 framework and seven artificial reefs. Although protection of coastal waters may be seen as a national issue, conservation of the marine environment has an international dimension. This is especially in the Mediterranean region where agreements concerning marine protection have existed since 1975 in the form of the Mediterranean Action Plan.¹ Moreover, due to their increasing importance, the United Nations Sustainable Development Goal 14 calls for the conservation and sustainable use of the oceans, seas and marine resources.
- 2. The primary aim of this performance audit was to determine the extent to which Malta is safeguarding its biodiversity through the designation and management of its marine protected areas. Within this context this audit's objectives included determining the extent to which:
 - a. Government developed the relevant legal and strategic framework to conserve marine biodiversity;
 - b. National Authorities carried out Assessments to designate MPAs;
 - c. site specific management plans to conserve the marine habitats and species were drafted;
 - d. the proposed measures to utilise MPAs in a sustainable manner are being implemented in an effective and timely manner; and
 - e. National Entities are monitoring that MPAs are managed in an effective and sustainable way.
- 3. This study is being carried out in parallel with six other State Audit Institutions within the auspices of the European Organisation of Supreme Audit Institutions Working Group on Environmental Audit. In due course, these Supreme Audit Institutions will compile a joint report featuring the findings and conclusions outlined in respective national audit reports.

¹ Pirotta & Schembri (2003). A pilot study aimed at the establishment of Marine Protected Areas in the Maltese Islands.

The legislative and strategic framework regulating MPAs in Malta

- 4. Over the years, Malta endorsed and transposed into national legislation a number of international conventions and regulations dealing with marine protection. Nevertheless, National Authorities mainly designated sites as MPA through the Environment Protection Act (Cap. 549), in line with the European Union (EU) Nature Directives concerning the establishment of the Natura 2000 network. The legislative framework is complemented by national strategies, policies and plans. This audit, however, elicited some concerns within the regulatory framework as well as compliance related issues. The following refers:
 - a. At the time of the establishment of Malta Marittima Agency (MMA) the national competent authority responsible for designating MPAs was the Malta Environment and Planning Authority, from which the Environment and Resources Autority (ERA) was subsequently established. Cooperation and coordination between the two entities is based on reciprocal goodwill rather than on legal provisions.
 - b. The Reptiles (Protection) Regulation and Marine Mammals Protection Regulations contemplate penalties of up to €58 and €233 respectively for legal breaches concerning marine biodiversity. On the other hand, the Flora, Fauna and Natural Habitats Protection Regulations outline that penalties for similar infringements range between €465.87 to €46,587.47 or even imprisonment. The foregoing constitutes different penalty regimes, which may have arisen since the penalties outlined in the former regulations have not been updated to take into account subsequent legislative developments. ERA contends that currently action is being taken to revoke the former regulation to avoid inconsistencies in the application of penalties.
 - c. Some of the legislative and strategic frameworks are not always translated into action plans, awarded the necessary resources or include Key Performance Indicators to which performance can be benchmarked. The foregoing inhibits the management planning, directions and control of the designated MPAs.
 - d. National Authorities have thus far been reluctant to invoke the provisions entitled "Power to make conservation orders" within the Flora, Fauna and Natural Habitats Protection Regulation (Subsidiary Legislation (SL) 549.44) so as to adopt management measures by consensus. Until such time that site-specific management plans are in place, ERA could regulate the conservation of MPAs through the provisions of SL 549.44.
 - e. Despite the transboundary influences on marine ecosystems, Malta has not yet developed joint MPAs with neighbouring countries. The main reasons for such circumstances relate to economic considerations, political climate prevailing in a number of Mediterranean countries and focus on coastal areas.

Assessments to designate MPAs

- 5. ERA designated the 14 MPAs mainly on the basis of five studies, which assessed the biodiversity of the Maltese waters against the different habitats and species listed in the Natura 2000 framework. The cost of these assessments, which were carried out for the period 2002 to 2018, amounted to around €4.6 million. While the compilation of these Assessments embraced generally accepted practices, these studies are subject to the following main limitations:
 - Data fragmentation and integrity concerns delayed the commencement of Assessments. a. The prolonged commencement of these studies influenced the designation of MPAs. This state of affairs had two main impacts. Firstly, the integrity of data pertaining to the marine environment, which was available prior to these Assessments was based on studies conducted through non-systematic methodological, occasional and ad hoc Assessments using different non-comparable methodologies and consequently could not be relied on for decision-making purposes. Secondly, delays in undertaking these Assessments raised the risk of environmental degradation. To mitigate such impacts, ERA is developing a digital database structure to ensure an appropriate consolidation of datasets and their sharing; such work is being co-funded by the EU through the ongoing European Maritime and Fisheries Fund Marine Monitoring Project.
 - b. The scope of these Assessments extends only to Malta's Fisheries Management Zone (FMZ). While the legal provisions to carry out research in the high seas are available, political and diplomatic issues within the Mediterranean region influence the undertaking of research in these areas.

Marine Protected Areas Management Plans

- 6. The various economic and recreational activities undertaken in Maltese waters, to varying degrees, threaten the habitats and species within MPAs. To date, however, mitigating and dealing with these threats has been problematic, for three main reasons, namely the absence of site-specific management plans, administrative capacity weaknesses as well as limited monitoring and enforcement initiatives. The following refers:
 - a. The adoption of site-specific management plans is ongoing and in line with legal timelines, although still subject to delays. Whilst Government is committed to have the management measures in place for all the 14 MPAs it designated, the six-year time period for developing and adopting management plans outlined by the EU Habitats Directive has elapsed for one out of these 14 sites.
 - b. Until the management plans are adopted, it will be problematic for national competent authorities to converge their efforts, rather than safeguarding their particularistic interests, to ascertain the sustainability of marine biodiversity. This state of affairs hinders

compliance surveillance and enforcement as National Authorities do not have the common management criteria against which to plan and implement these functions.

c. National Authorities highlighted the need to strengthen their administrative capacity to enable them to implement the measures enlisted within the strategic framework. This implies that National Authorities do not have the appropriate level of funding to engage the necessary expertise and supporting personnel and assets.

Overall conclusions

- 7. Marine protected areas highlight the imperative requisite of, as far as possible, attaining equilibrium between economic activities and the conservation of Malta's marine eco systems. To date Malta has designated 14 MPAs and seven wrecks. This performance audit acknowledges this positive action since these sites constitute 30 per cent of Malta's FMZ. This has enabled Malta to be classed as one of the countries, which registered the best effort during the period 2012 to 2016 in assessment and the creation of new MPAs. On the other hand, this Report identified a number of issues, which, to varying degrees, threaten the sustainability of MPAs. These concerns mainly emanate from limiting the use 'conservation orders' within the legal framework, the converging of competing interests as well as weaknesses in the relevant compliance surveillance and enforcement functions.
- 8. Malta has a comprehensive legal framework, which addresses issues ranging from the declaration to the regulation of marine conservation areas. The legal framework also provides for a six-year period from the designation of MPAs to the formal adoption of site-specific management plans. Nonetheless, Malta's legal framework, through SL 549.44, also provides various management tools to mitigate the risk of habitat and species deterioration through different mechanisms. These include amongst others permitting procedures, the carrying up of appropriate Assessments, formulation of management agreements, and the setting up of management measures through contractual, statutory and administrative means, which measures also include management plans and conservation orders. Despite Non-Governmental Organisations (NGOs) reports of irregularities within certain MPAs, ERA opted not to issue conservation orders in terms of SL 549.44, due to various reasons outlined in the Report, including the fact that some issues are already governed by other legal instruments or management tools.
- 9. The EU has praised Malta's progress in declaring MPAs. However, the declaration of MPAs was not always expediently complemented with the respective site-specific management plans. One of these 14 plans is overdue, with the remaining currently in the process of compilation and expected to be completed by 2020. These circumstances limit National Authorities from securing budgets and technical resources to enable the implementation of these plans as well as inhibit coordination and cooperation between stakeholders.

- 10. The monitoring and enforcement of MPAs is severely limited for a number of reasons. National Authorities lack the financial and human resources, as well as the technology required to enable the effective monitoring of such a vast stretch of sea. Moreover, national competent authorities do not employ formal risk assessment mechanisms to facilitate the monitoring of protected areas.
- 11. A similar situation to the one portrayed in the preceding paragraph exists with respect to enforcement initiatives undertaken by national competent authorities. While each authority is focused on enforcing its respective mandate, there are limited mechanisms in place to ascertain that all enforcement efforts converge to enable a more holistic and comprehensive approach.
- 12. This performance audit acknowledges that designating, managing and enforcing the regulatory framework concerning MPAs is complex, involves many stakeholders with competing interests and necessitates that National Authorities allocate significant resources to this end. Until such time that these elements are robustly in place, the good work undertaken to designate MPAs will remain an end in itself rather than the means to encourage sustainability of the marine environment through equilibrium between conservation and blue growth.

Recommendations

13. In view of the findings and conclusions emanating from this performance audit, the National Audit Office (NAO) is proposing a number of recommendations. These proposals relate to the main issues influencing the sustainability of Marine Protected Areas. Within this context, recommendations target the strategic, administrative capacity and operational factors.

Strategic recommendations

- i. Where circumstances permit, National Authorities are to consider establishing MPAs (Specially Protected Areas of Mediterranean Importance [SPAMIs]) in conjunction with neighbouring countries. Such action would contribute towards creating MPAs within the Mediterranean high seas. Cooperation and coordination on a bilateral or multilateral basis between Mediterranean countries widen the scope of conservation of the marine environment.
- ii. The Ministry for Environment, Sustainable Development and Climate Change (MESDC) and ERA are to startup a process to draft and finalise a National Strategy on the Environmental Policy, the scope of which extends beyond 2020. This is especially important as the current National Environmental Policy covers up to this period. MESDC and ERA are encouraged to ascertain the immediate embarkation of this process in view of the lead-time required to compile and adopt a new strategic plan.

- iii. Malta Marittima Agency (MMA) is encouraged to expedite the process of formally adopting an action plan relating to the operationalisation of the Integrated Maritime Policy. This would enable the set-up of timeframes and key performance indicators against which to benchmark the Policy's implementation progress.
- iv. Consideration is to be given to minimise the potential conflict of interest faced through ERA's dual role as environmental regulator and implementer of measures. ERA's dual role becomes emphasised in circumstances where national strategies and plans – such as those related to the National Biodiversity Strategy and Action Plan (NBSAP) and Programme of Measures (PoMs) allocate implementation responsibilities to this Authority. While acknowledging that ERA houses key marine sector expertise, the Authority's main role as national regulator should trump all other considerations.

Administrative capacity recommendations

- v. Responsible entities for the maritime sector are to initiate action to ascertain that the appropriate administrative capacity is in place. This will enable better planning and a timelier implementation of the measures and related resource mobilisation. Subsequently, it would enable more effective monitoring and enforcement of the measures listed in the legal and strategic frameworks.
- vi. Consideration is to be given to compile relevant surveillance compliance monitoring and enforcement plans, which embrace risk analysis principles. These plans are to detail the administrative capacity requirements and the approaches to be adopted by the national competent authorities. Such plans will render enforcement more effective and transparent.

Operational recommendations

- vii. ERA is to consider invoking the legislative provisions related to Conservation Orders as a measure to safeguard MPAs until such time that site-specific management measures are formally adopted and implemented. Invoking these provisions enables ERA to exercise its role as the sector's regulator and thus be in a strong legal position to address marine ecosystems threats and irregularities.
- viii. Cooperation and coordination between National Authorities are to be strengthened. While, in this regard, the work of the inter-ministerial committee is acknowledged, the opportunity exists for these stakeholders to formalise their commitments, including the allocation of respective resources, through memoranda of understanding. This approach will encourage good governance in implementing measures of the sustainable use of marine protected areas. To this end, Memordum of Understandings (MoUs) will encourage efficiency, the optimisation of resources as well as transparency.

ix. The compliance surveillance and enforcement functions concerning MPAs is to be supported through the use of technology and relevant authorities regulating different activities from different sectors. Investment in Information Technology systems would offer the possibility of broadening the scope of surveillance, especially in view of the vast area, which has been designated as MPAs. Moreover, it is proposed that such systems are to be made available to the different national entities involved in the maritime sector.

Chapter 1

Terms of Reference

1.1. Introduction

- 1.1.1. Marine Protected Areas (MPAs) are recognised at a supranational level as the means through which conservation and protection of marine environment can take place.² Although protection of coastal waters may be seen as a national issue, conservation of the marine environment has an international dimension. This is especially true in the Mediterranean region where agreements concerning marine protection have existed since 1975 in the form of the Mediterranean Action Plan.³ Moreover, due to their increasing importance, the United Nations Sustainable Development Goal 14 calls for the conservation and sustainable use of the oceans, seas and marine resources.
- 1.1.2. However, this conservation regime is affected by delays in the designation of marine protected areas and the implementation of plans to ensure the effective management of these sites by a number of Mediterranean countries. As a result, many sites have protection levels enshrined in legal documents, but with implementation in fragmented approaches depending on sectoral aspects (such as environment protection, fisheries management, maritime transport, environmental health and tourism). The situation is further compounded as multiple users of the sites are exerting pressures on marine resources, which in turn is affecting the sustainability of the area. To varying degrees, such circumstances also affect marine protected areas within Maltese jurisdiction.
- 1.1.3. For the purpose of this audit, a "Marine Protected Area" is being considered to relate to a delineated marine site, which may have been already designated or is to be designated under an international, regional or national legal frameworks and policies. The main objective of an MPA is to conserve and nurture the marine biodiversity while striking a balance with any economic activity permitted in the area. For the purpose of this audit, this definition includes, but is not restricted to, Natura 2000 sites, Specially Protected Areas of Mediterranean Importance (SPAMIs) designated under the Protocol concerning Specially Protected Areas and Biological Diversity of the Barcelona Convention, artificial reefs or designated Marine Parks.

² The 2012 Forum of Marine Protected Areas in the Mediterranean, "Marine Protected Areas: Everyone's Business", page 6.

³ Pirotta & Schembri (2003). A pilot study aimed at the establishment of Marine Protected Areas in the Maltese Islands.

- 1.1.4. Towards this end, this Office conducted the performance audit: *The designation and effective management of protected areas within Maltese waters*. The primary aim of this audit was to determine the extent to which Malta is safeguarding its biodiversity through the designation and management of its marine protected areas.
- 1.1.5. This study is also being carried out in conjunction with six other State Audit Institutions (SAIs) within the auspices of the European Organisation of Supreme Audit Institutions Working Group on Environmental Auditing (EUROSAI WGEA). The partners to the cooperative audit are the SAIs of Albania, Cyprus, France, Greece, Malta, Portugal and Slovenia.
- 1.1.6. This cooperative audit performed by different countries aims to determine the degree to which countries in the Mediterranean region are effectively conserving marine biodiversity to attain the targets set in international protocols. The topic under review was selected by participating SAIs as this subject portrays common regional interests, whereby countries within the Mediterranean basin are facing challenges to balance the conservation of the marine biodiversity with commercial interests, mainly emanating from the tourism, shipping and fishing industries.

1.2. Malta has around a third of its waters declared as MPAs

1.2.1. National Authorities have stepped up their efforts to declare MPAs. Up to April 2016, the only declared MPAs related to around two per cent of the Fisheries Management Zone (FMZ).⁴ Following the implementation of studies and projects, as at 2016, MPAs' designation increased to cover around a third of Malta's FMZ following the identification of species and habitats.⁵ Table 1 identifies the sites declared as MPA and their characteristics.

⁴ The Fisheries Management Zone : the territorial waters of Malta shall, with respect to the exercise of sovereign rights for the purpose of exploring and exploiting, conserving and managing the living and or non-living natural resources therein, extend to all other parts of the open sea, within 25 nautical miles from the baselines from which the breadth of the territorial waters measures, and, for the purpose aforesaid, jurisdiction shall extend accordingly (CAP. 226).

⁵ Area of FMZ is approximately 11,480km². (Source: MSP Worldwide Conference June 2016, European MSP Platform, page 1).

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		Year site	Year site	Directive	tive		
Site number	Site name	designated on national level	designated as Natura 2000 site	Habitats	Birds	Size (Km²)	Reason for protection
MT0000101	ll-Baħar bejn Rdum Majjiesa u Ras ir-Raħeb	2005	2008	>		8.49	Posidonia beds; sandbanks; reefs; caves
MT0000102	ll-Baħar fl-inħawi ta' Għar Lapsi u Filfla	2010	2013	>		24.51	Posidonia beds; reefs
MT0000103	ll-Baħar fl-inħawi tad-Dwejra	2010	2013	>		2.29	Posidonia beds; caves; reefs
MT0000104	ll-Baħar fl-inħawi ta' Mġarr ix-Xini	2010	2013	>		0.31	Posidonia beds; sandbanks; caves; reefs
MT0000105	II-Baħar fil-Grigal ta' Malta	2010	2013	>		155.19	Maltese top-shell; <i>Posidonia</i> beds; sandbanks; caves; reefs
MT0000107	ll-Baħar tal-Grigal	2016	N/A		>	351.90	European storm petrel; Yelkouan shearwater
MT0000108	ll-Baħar tal-Lvant	2016	N/A		>	625.50	Scopoli's shearwater; European storm petrel
MT0000109	ll-Baħar tax-Xlokk	2016	N/A		>	219.30	Scopoli's shearwater
MT0000111	ll-Baħar tal-Lbić	2016	N/A		>	256.30	Scopoli's shearwater; European storm petrel; Yelkouan shearwater
MT0000112	ll-Baħar ta' Madwar Għawdex	2016	N/A		>	556.70	Scopoli's shearwater; Yelkouan shearwater
MT0000114	ll-Baħar tal-Majjistral	2016	N/A		>	55.92	European storm petrel
MT0000113	ll-Baħar tal-Punent	2016	N/A	>		231	Loggerhead turtle; bottlenosedolphin
MT0000106	ll-Baħar tat-Tramuntana	2016	N/A	>	>	319.20	Scopoli's shearwater; bottlenose dolphin; loggerhead turtle
MT0000110	ll-Baħar ta' Nofsinhar	2016	N/A	>	>	835.40	Scopoli's shearwater; loggerhead turtle; Yelkouan shearwater; bottlenose dolphin

Table 1: MPAs designated through the Natura 2000 network

- 1.2.2. Table 1 shows the nationally designated MPAs and the subsequent acceptance of sites in terms of the European Union (EU) Habitats and Birds Directives as part of the Natura 2000 network. The first declared MPAs are mainly characterised by *Posidonia* beds, a priority habitat type under the EU Habitats Directive, due to it being threatened and essentially endemic to the Mediterranean region. In the Mediterranean, this habitat provides food and shelter for a number of marine species, acts as a carbon sink and protects beaches from sand depletion.⁶
- 1.2.3. On the other hand, the eight MPAs designated in 2016, some of which partially overlap with the sites declared previously, aim to protect various species such as seabirds, loggerhead turtles and the bottlenose dolphin, all of which are included under the EU Birds and Habitats Directives (collectively known as the EU Nature Directives). Through the declaration of these sites, Malta is expected to monitor and manage these areas in a sustainable manner, making sure that protected populations are safeguarded for future generations.⁷
- 1.2.4. Table 1 also shows that a significant period elapses since the designation of sites on a national level and their subsequent acceptance as a Natura 2000 site. Further to this duration, in accordance with EU requirements, National Authorities are permitted a further six years to undertake more site-specific studies and to compile the respective management plans. This implies that nearly a decade may elapse since national designation of sites and effective management of the respective areas.
- 1.2.5. In addition to these MPAs, seven other protected marine areas relate to sites where artificial reefs were created following the scuttling of wrecks. The majority of these sites fall within the Natura 2000 network. Through Notice to Mariners No. 5 of 2008, Transport Malta declared an approximate radius of 200 meters around these artificial reefs as a No Stopping Zone.

Location	Wreck	Area (Km ²)
Wied iż-Żurrieq	Um el Faroud	0.11
	MV Xlendi	
Off Xatt I-Aħmar	Cominoland	0.22
	Karwela	
Marsascala	Tug St. Michael	0.14
WidfSdSCdid	Tug 10	0.14
Off Qawra point	Imperial Eagle	0.16
Off Cirkewwa	Rożi	0.17
Off Cirkewwa	P29	0.17
Off Xrobb I-Għaġin	Blenheim bomber	0.17
Off Exiles point	Bristol Beaufighter	0.17

Table 2: Sites given protection through Notice to Mariners 5 of 2008

⁶ https://www.mepa.org.mt/outlook5-article2 as at 10 January 2017.

⁷https://www.independent.com.mt/articles/2016-05-02/local-news/ERA-designates-eight-new-marine-protected-areas-on-behalf-of Malta-6736157185 as at 1 January 2017.

1.2.6. Table 2 shows the seven sites that were declared as No Stopping Zones in 2008. Today, the Notice serves as a mechanism to maintain the abundance and diversity of fish species.

1.3. ERA is the main national entity entrusted to designate and monitor MPAs

- 1.3.1. The Environment and Resources Authority (ERA) is the responsible authority for designating protected areas through the Environment Protection Act (Cap. 549). This also relates to MPAs under the EU Natura 2000 framework as well as provisions related to the drafting and monitoring and management of MPAs.⁸ To this effect, ERA carries out and/or commissions studies to explore the possibilities of designating MPAs. Within ERA, the Biodiversity and Water Unit assumes responsibility for these designation and policy functions, with tasks linked with authorisations and permitting, compliance monitoring and enforcement addressed through the Environmental Permitting Unit as well as Compliance and Enforcement Unit, respectively.
- 1.3.2. Furthermore, to various degrees, ERA is dependent on the input of the Inter Ministerial Committee (IMC) composed of the relative Ministries' representatives. These include the Policy Development and Programme Implementation Directorate of the Ministry for the Environment, Sustainable Development and Climate Change (MESDC), the Beach Cleansing Directorate, Continental Shelf Department, Environmental Health Directorate, Department of Fisheries and Aquaculture, Malta Tourism Authority, Malta Marittima Agency (MMA), Transport Malta (Maritime), the Energy and Water Agency, the Water Services Corporation and other relevant governmental stakeholders. To date, however, MMA has not been contacted to participate in any IMC meetings.
- 1.3.3. This IMC is responsible for assisting and supporting the implementation of the Marine Strategy Framework Directive (MSFD), including its marine monitoring programme and programme of measures (PoMs). The MSFD is a critical mechanism, which promotes and enforces the need for "Good Environmental Status" in Europe's Marine Waters by 2020, in the process promoting and ensuring streamlining and synergy between different sectoral approaches.

1.4. The economic activity in and around MPAs increases the threats on biodiversity

- 1.4.1. Multiple activities from different sectors, which are governed by different National Authorities, occurring within or around marine protected areas may be a threat or exert pressures on the sustainability of biodiversity. Such a situation materialises as different users compete for the same resources through shipping, diving, fishing and other activities.
- 1.4.2. Shipping lanes were regarded as having a high negative impact by ERA during the designation of the site between Rdum Majjiesa and Ras ir-Raħeb.⁹ The designation of an area requires that ERA, as the national competent Authority, identifies threats, pressures and activities, which

⁸ While ERA is the main national entity responsible for MPAs under the Natura 2000 framework, Transport Malta is the responsible entity for declaring safety zones around wrecks. Similarly, the Department of Fisheries can also declare safety zones to protect fish.

⁹ http://era.org.mt/en/Documents/SCI_MT0000101_BaharRdumMajjiesaRasIr-Raheb.pdf as at 17 January 2017.

have a high, medium and low impact. Through this exercise, ERA identified that this site has high negative threats, pressures and activities among others, emanating from nautical sports, motorised vehicles, other forms of transportation and communication.¹⁰

- 1.4.3. Shipping poses multiple adverse effects on the marine environment. For instance, the anchoring of ships may have ecological impacts on the seabed. A case in point relates to Is-Sikka I-Bajda which is a designated bunkering area within the MPA "II-Baħar fil-Grigal ta' Malta" where stakeholders frequently report that ships anchoring at this site were damaging the seabed, particularly those characterised by *Posidonia* beds and related biodiversity.
- 1.4.4. The impacts of the shipping industry are of further significance in the case of offshore bunkering. A number of bunkering sites are found within or adjacent to marine protected areas. Bunkering activity is in the majority of cases found close to shore, such as in the case of Qawra, Delimara and Marsaxlokk.¹¹ The effect on MPAs is that bunkering areas take up a considerable amount of sea surface, creating conflicts with other uses and the risk of oil spilling. Bunkering can also affect the seabed due to anchoring.¹²
- 1.4.5. Another two conflicting industries are fishing and diving, which potentially threaten ecosystems within MPAs. The Diving Master Plan acknowledges that there is a need to protect dive sites as there is a problem with overfishing, spear fishing (in particular with scuba gear) and fishing at dive sites and on wrecks.¹³ Furthermore, the Coastal Strategy Topic Paper identifies fishing and aquaculture as an activity posing a threat to a number of habitats including *Posidonia* beds.¹⁴ The latter is a priority habitat and is one of the characteristics of a number of MPAs. ERA contends that these issues are currently being addressed through more stringent permitting and licensing of the aquaculture industry.

1.5. A number of species remain with an unknown conservation status

1.5.1. Maltese waters are home to at least 2,200 different species, representing 20 per cent of the total number found in the Mediterranean. Furthermore, Malta's National Biodiversity Strategy and Action Plan (2012 – 2020) outlines that 44 and 64 per cent of species and habitats (terrestrial, freshwater and marine) do not have a favourable conservation status and hence require enhanced protection action.¹⁵ This situation continues to reflect the position at 2010 where Malta did not attain EU targets related to the loss of biodiversity; to various degrees, this situation also prevails in the case of other EU countries.

¹⁰ http://era.org.mt/en/Documents/SCI_MT0000101_BaharRdumMajjiesaRasIr-Raheb.pdf as at 17 January 2017.

¹¹ THE ENVIRONMENT REPORT 2008 Sub-Report 6 Coastal and Marine Environment, page 13.

¹² Source: http://www.tvm.com.mt/en/news/allegat-hsara-mill-ankri-tal-vapuri-fis-sikka-l-bajda/ as at 16 January 2017.

¹³ Adi Associates Environmental Consultants Ltd, 2011. Master Plan to Support a Sustainable Diving Industry for Malta , page 19.

¹⁴ PWC, DRAFT Environmental Report in relation to the SEA of Malta's EMFF Operational Programme 2014 – 2020, page 31.

¹⁵ MEPA & Ministry for Tourism, Culture and the Environment, Malta's National Biodiversity Strategy and Action Plan, page 7.

- 1.5.2. Notwithstanding this, ERA contends that the status of marine habitats and species is relatively good. Indeed, all four marine habitat types in Malta have an overall favourable conservation status.
- 1.5.3. On the other hand, only five of the seventeen marine species have a similar favourable conservation status. In this regard, one of these species, the noble pen-shell, *Pinna nobilis*, has an unfavourable status while the remaining eleven species have an unknown status. These include eight migratory cetaceans (whales and dolphins) for which Mediterranean-wide studies may be required; one coral species (the red coral, *Corallium* rubrum); and one marine snail (the endemic Maltese top-shell, *Gibbula nivosa*).
- 1.5.4. Conversely, other assessments carried out in terms of other policies, namely the EU Water Framework Directive, are indicative of 'good ecological status' within the majority of Maltese coastal waters. These assessments are based on the condition of *Posidonia* beds, macroalgae and benthic invertebrates.
- 1.5.5. During recent years, Government entities embarked on a number of co-financed projects to identify habitats and species of ecological importance in Maltese waters, which include studies relating to the afore-mentioned species with an unknown conservation status. These projects carry an expenditure of around €4.6 million.¹⁶ However, work in this regard is still in progress and scheduled for conclusion by 2018.
- 1.5.6. The current projects aim to extend and identify new MPAs.¹⁷ Without the identification of marine species and habitats, their location and status assessments, National Authorities would not be in a position to draft plans to manage the marine area in a sustainable manner and national contingency plans for responding to incidents that can threaten protected sites.¹⁸
- 1.5.7. Nevertheless, Malta was highly regarded by the Mediterranean MPA Roadmap Mid-Term Evaluation 2016. This evaluation classified Malta as one of the countries, which registered the best effort during the period 2012 to 2016 in science, assessments and the creation of new MPAs.¹⁹

1.6. Audit focus and methodology

1.6.1. The discussion outlined in this Chapter identified the main factors, which influence the conservation and sustainable use of Marine Protected Areas. Towards this end, this performance audit sought to evaluate the extent to which Malta is effectively safeguarding its marine biodiversity.

¹⁶ The cost relating to the assessment on *Posidonia* is an estimate.

¹⁷ http://lifebahar.org.mt/life-bahar-for-n2k/ as at 16 January 2017.

¹⁸ PWC, DRAFT Environmental Report in relation to the SEA of Malta's EMFF Operational Programme 2014 – 2020, page 32 and THE ENVIRONMENT REPORT 2008 Sub-Report 6 Coastal and Marine Environment, page 36.

¹⁹ MedPan (2016), Mediterranean MPA Roadmap mid-term evaluation 2016, page 36.

- 1.6.2. Consequently, this audit aimed to determine the extent to which:
 - a. Government developed the relevant legal and strategic framework to conserve marine biodiversity;
 - b. National Authorities carried out assessments to designate Marine Protected Areas;
 - c. site specific management plans to conserve the marine habitats and species were drafted;
 - d. the proposed measures to utilise MPAs in a sustainable manner are being implemented in and effective and timely manner; and
 - e. National Entities are monitoring that MPAs are managed in an effective and sustainable way.
- 1.6.3. The attainment of the aforementioned objectives entailed a number of methodological approaches. These involved the following:
 - a. **Documentation review** This included a thorough analysis of a broad legislative framework, together with a number of related strategies and policies, as well as documentation related to assessments and management of MPAs both locally and abroad.
 - b. **Semi-structured interviews** These interviews enabled the collation of qualitative data, which in turn was used to corroborate information arising from other sources and approaches. To this end, the National Audit Office (NAO) interviewed key officials within ERA, Transport Malta (TM) and Malta Marittima Agency.
 - c. **Conference and Informative Talks** The LIFE BaĦAR for Natura 2000 conference on Mediterranean Marine Protected Areas in Malta was attended by the audit team. This three-day conference, whose participants and speakers included both local and foreign stakeholders and experts in the field, covered various aspects directly related to the audit. These included management as well as monitoring aspects and the various issues encountered by all countries in ensuring that MPAs are protected. The presentation entitled 'Existing Marine Sites of Community Importance (SCIs) in Malta: Overview of Issues' gave information on alien species, plastics, anchoring and the lack of public awareness.
 - d. **Benchmarking** This involved comparing the methods used by other countries in designing assessments and management plans. The way MPA monitoring is carried out in other countries was also analysed, in order to get an overview of how Malta can benefit in adopting such measures for our local monitoring and conservation process.
 - e. Harmonisation of methodology with other member SAIs of EUROSAI WGEA In view that this audit is being undertaken in parallel by six Mediterranean SAIs, initiatives were directly at ensuring a common approach and timeframe for conducting the audit.
- 1.6.4. Furthermore, all issues and conclusions presented in this Report relate to the period up to end of 2017.

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1.7. Report structure

- 1.7.1. Following this introductory Chapter, the Report proceeds to discuss the following:
 - a. Chapter 2 discusses the sustainability of MPAs in terms of Malta's legislative and strategic framework.
 - b. Chapter 3 evaluates ERA commissioned assessments to assess the feasibility of designating sites as MPAs.
 - c. Chapter 4 assesses the progress relating to the drafting of management plans, to the implementation of the various measures indicated in the various strategies related to safeguarding the sustainability of marine biodiversity. The Chapter also reviews the monitoring activities undertaken by National Authorities to ascertain that no irregular activities take place within and around MPAs.
- 1.7.2. The overall conclusions and recommendations related to this performance audit are presented in this Report's Executive Summary from page 8 to 11.

Chapter 2

The legislative and strategic framework regulating Marine Protected Areas in Malta

2.1. Introduction

- 2.1.1. International law, through Multilateral Environment Agreements (MEAs), regional environmental law (example the European Union (EU) acquis) and national legislation form the regulatory framework, which establishes and safeguards marine protected areas. Generally, national legislation reflects the provisions stipulated in international and EU regulatory framework. This statement applies equally to the legislative framework, which directly aims to designate and sustain species within Marine Protected Areas (MPAs), as well as to other legislative provisions that regulate the various maritime economic activities.
- 2.1.2. Malta's National Strategic Framework governing MPAs, as can be expected, draws on the legislative framework. To this end, the strategic framework aims to project Government's vision in safeguarding and promoting the sustainability of marine eco-systems.
- 2.1.3. Nonetheless, this audit noted that National Authorities mainly adopted selected management tools in favour of others (such as issuing of conservation orders in terms of Subsidiary Legislation (SL) 549.44).²⁰ Moreover, the strategic framework identifies the Environment and Resources Authority (ERA) as responsible for the designation and the formulation of management plans or management measures, but also as the competent authority implementing these, which raises the risks of conflict of interest as ERA assumes the role of regulator and implementer.
- 2.1.4. Against this backdrop, this Chapter focuses on the following issues:
 - a. An outline of the legislative and strategic framework in place;
 - b. The use of legal provisions to safeguard marine biodiversity;
 - c. Bilateral and multi-lateral agreements between Malta and other Mediterranean countries concerning MPAs;
 - d. Gaps in the legislative framework;
 - e. Revisions to the current penalty regime to eliminate inconsistencies therein; and
 - A qualitative review of national strategies concerning MPAs. f.

²⁰ SL 549.44 relates to the Flora, Fauna and Natural Habitats Protection Regulations.

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2.2. The legislative framework comprises National Legislation, EU Directives and United Nations Conventions

- 2.2.1. Over the years, Malta accepted and/or ratified and transposed in national legislation a number of MEAs and regulations dealing with marine protection. The main criteria for designation of MPAs under the Environment Protection Act (Cap. 549) are established through SL 549.44, which transposes a number of international legal commitments linked with the United Nations (UN), Council of Europe (CoE) and EU legislation, and which also implements the Natura 2000 Network established through the EU Nature Directives. Appendix I provides an outline of the legislative framework, which directly govern MPAs. It is to be noted that the scope of this audit mainly focuses on these legislative provisions.
- 2.2.2. Complementing these provisos are other legislative acts, which regulate the spectrum of maritime activities and users. Examples in this regard relate to legislative provisions regulating fisheries, shipping, bunkering and marine spatial planning. Most of the latter legislative requirements also incorporate clauses pertaining to the conservation of the marine environment.

2.3. National Authorities do not always invoke legislative provisions to safeguard the marine eco-system

- 2.3.1. The legislative framework concerning MPAs developed over a number of years to cater for changing circumstances, inter alia to satisfy additional international obligations, mainly those emanating from MEAs under UN, CoE, and, more recently, through EU obligations and commitments. These provide specific provisions to the mechanisms to be employed to protect designated marine protected areas. In cases, the procedures therein outline that the competent National Authorities are to implement in the chronological order stipulated, the various mechanisms, such as management plans, to protect the marine ecosystems within designated areas. This implies that a considerable period might elapse before National competent Authorities can adopt and implement measures - in line with the EU Habitats Directive. The timeline for adopting management measures may take up to six years from the designation of an area as a Natura 2000 site, although entities may employ other management tools to regulate activities for which they are responsible. This does not imply that the marine ecosystems are to suffer damage since in the interim period Government is to ensure that the conservation status of the features, for which the area has been designated does not degenerate. Nonetheless, the absence of management plans and availability of resources increases the risks to effectively safeguard these sites.
- 2.3.2. The national legal framework identifies a number of statutory, administrative or contractual management tools, which may be used to enable the implementation of management measures. These include, amongst others, the setting up of a permitting regime; appropriate assessments of plans and projects; the formulation of management plans and/or conservation measures; the setting up of management agreements; and/or the issuing of conservation

orders. The latter specifying "those operations or activities which appear to the competent authority likely to destroy or damage the flora, fauna, or habitat by reason of which the site is a protected site, including its geological, geomorphologic or physiographic features". Moreover, the provisions on conservation orders mitigate the risk of threats arising out of prolonging the implementation and enforcement of MPAs.

- 2.3.3. Nonetheless, ERA is not resorting to invoking in full SL 549.44. This particularly relates to the issuing of conservation orders – which regulate activity to achieve a better balance between conservation and economic activity. Consequently, invoking conservation orders, in terms of SL 549.44, would to varying degrees mitigate the following situations:
 - a. Anchoring which in cases threaten protected marine habitats and species is still being undertaken at designated MPAs, for instance at is-Sikka I-Bajda and Comino.²¹
 - b. Bunkering, which exerts pressures on the marine environment through potential fuel spills. A case in point relates to Anchor Bay.
 - c. Excessive diving as noted by the Non Governmental Organisations (NGOs) and in the Malta's Diving policy, which poses risks to the marine biodiversity. These sources identified Mgarr ix-Xini as an example of such a situation.
- 2.3.4. The above circumstances could be the result of a number of issues, namely:
 - ERA does not consider that the above activities constitute such a significant risk that a. necessitates invoking the provisions of SL 549.44 to issue a conservation order.
 - b. Selected operations or activities within MPAs are already regulated or subject to other management tools established by law, such as appropriate assessments and authorisations from ERA as stipulated via SL 549.44 and SL 549.46, as well as permitting provisions from other legislation or relevant bodies (example many issues are already subject to permitting and other legal provisions under the Environment Protection Act, Cap. 549; Development Planning Act, Cap. 552; and the Fisheries Conservation and Management Act, Cap. 425).
 - c. Site-specific management plans or conservation measures have not yet been compiled or adopted and it is likely that some of these will be Conservation Orders or alternative mechanisms (Protection Orders) being envisaged by the Authority to enhance its monitoring and enforcement functions.
 - d. Imposing a conservation order to all stakeholders would likely lead to further conflicts leading to top-down driven policy rather than an agreed management plan. ERA contends

²¹ Sources: LIFE BAĦAR FOR N2K Conference; Din I-Art Ħelwa Conference on Alien Species.

that invoking conservation orders, may lead to prolonging the agreement on the drafting and implementation of management plans, to the detriment of more inclusive and less imposing process.

- e. Invoking the provisions of SL 549.44, without making alternative arrangements, including legislative amendments, would impose certain restrictions on economic and recreational activities around conservation areas. In turn, this would affect business activities within the newly designated conservation sites to the detriment of the industries involved. A case in point relates to making alternative bunkering arrangements instead of operations at the current sites, which are within designated MPAs.
- 2.3.5. It is within the spirit of the last point of the preceding paragraph that ERA is seeking agreement with stakeholders on issues such as anchoring, bunkering and excessive diving. To this end, ERA is undertaking discussions with Transport Malta (TM), Ministry for Gozo, Malta Tourism Authority and other concerned entities to resolve issues arising from anchoring, bunkering and excessive diving. ERA has also secured funding under 'LIFE 16 IPE MT 008' for the implementation of a strategic measure on anchoring "Pilot implementation of selected management options aimed at addressing impacts from anchoring on the seabed". This EU co-funded project is scheduled for completion by 2023.

2.4. Malta has not yet developed MPA networks with neighbouring countries

- 2.4.1. To varying degrees, marine conservation is dependent on the extent to which neighbouring countries cooperate and coordinate marine activities within their respective jurisdictions. The national, international and supranational legislative framework reflects the transboundary elements involved in ensuring effective conservation measures. To this effect, the legal framework provides for the designation of Specially Protected Areas of Mediterranean Importance (SPAMI), that is a network of MPAs across the various Mediterranean countries, as established through the Protocol for Specially Protected Areas and Biological Diversity in the Mediterranean (the so-called SPA/BD Protocol) under the UN Barcelona Convention.
- 2.4.2. To date, Malta has no formal agreement with its neighbouring countries with respect to SPAMIs. This situation is a common occurrence within the Mediterranean as evidenced that it is only recently that Italy, France and Monaco established the first high sea SPAMI. In Malta's case, the following main reasons inhibit the establishment of MPA with neighbouring countries:
 - a. In many instances, discussions between Mediterranean countries on national marine jurisdiction and boundaries remain ongoing;
 - b. Political difficulties, particularly those relating to North African countries, shifted downwards marine conservation priorities;

- c. Malta has not yet extended assessments of biodiversity within the high seas; and
- d. Work and funds are being focused on the Maltese waters to establish and manage MPAs within Malta's legal jurisdiction.

2.5. The Act establishing Malta Marittima Agency does not consider ERA as one of the stakeholders on its Steering Committee

- 2.5.1. ERA is the National Authority entrusted with the designation, management and monitoring of Marine Protected Areas. Consequently, ERA assesses all matters that influence the status of MPAs. On the other hand, Malta Marittima Agency's remit includes the promotion, development and growth of the maritime sector. The Act establishing this Agency outlines that its Steering Committee is composed of Transport Malta, Malta Enterprise, the Malta Freeport Corporation, the Department of Fisheries and Aquaculture as well as the Regulator for Energy and Water Services.
- 2.5.2. The foregoing illustrates that ERA, the national competent authority responsible for designating and drafting of management plans for marine protected areas, does not form part of Malta Marittima Agency's Steering Committee. Nonetheless, cooperation and coordination between Malta Marittima Agency and ERA is evident. However, to date, this cooperation has been based on the goodwill of the two entities rather than on legal provisions. Initiatives to formalise the relationship between the two entities through a Memorandum Of Understanding (MoU) are currently ongoing.

2.6. The current penalty regime concerning offences within marine eco-systems is being revised to eliminate inconsistencies therein

- 2.6.1. The Flora, Fauna and Natural Habitats Protection Regulations establish the procedures for designating sites as MPAs and their ensuing management. Articles within these Regulations outline that penalties for infringements of provisions therein range between €465.87 to €46,587.47 or even imprisonment.
- 2.6.2. On the other hand, the Reptiles (Protection) Regulation and Marine Mammals Protection Regulations stipulate that the penalties for infringements under these Regulations will be penalised through fines amounting to €58 and €233 respectively.
- 2.6.3. The different penalty regimes stipulated implies that offences within MPAs are deemed more serious. The foregoing shows that the main intention of the legislative framework relates to where the offence took place rather than on the protection of species throughout Maltese jurisdiction. This situation has mainly arisen since the Reptiles (Protection) Regulation and Marine Mammals Protection Regulations pre-date the Flora, Fauna and Natural Habitats Protection Regulations. Moreover, the penalties outlined in the former regulations have not been updated to take into account other legislative developments.

2.6.4. ERA contends that the Authority is planning for these older Regulations to be integrated in amended Flora, Fauna and Natural Habitats Protection Regulations. This change forms part of "ERA's Better Regulation" process. This aims to streamline legislation, to lessen administration burdens and bureaucracy by having one single nature permitting regime. This would also aid in better site management.

2.7. The current strategic framework reflects international and EU obligations

2.7.1. The National Environmental Policy (NEP) is the main overarching strategy governing the management and monitoring of Marine Protected Areas. This document outlines Government's general vision with respect to ascertaining the integration of the various components of the maritime domain in congruence with the spirit of sustainable development. Sector-specific strategies complement the aforementioned overarching framework outlined by the NEP. Within the marine environment context, these namely relate to the National Biodiversity Strategy and Action Plan (NBSAP). A Programme of Measures (PoMs) supports the sector-specific strategic documents. Moreover, the Marine Strategy Framework Directive, is the environmental pillar of the Integrated Maritime Policy (IMP), providing a direct link with MPAs through its monitoring programme and Programme of Measures. In this regard, National Authorities are in the process of securing arrangements through EU funds. Figure 1 refers.

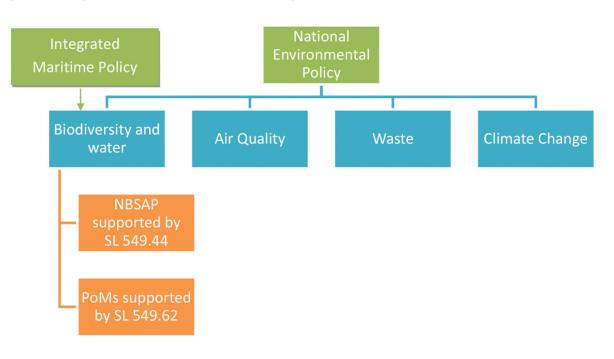


Figure 1: The general marine environment strategic framework (2017)

- 2.7.2. Figure 1 shows the relationship between the various strategic documents. The wide spectrum of sectoral strategies, generally, covers Malta's national, EU and UN obligations. This state of affairs results through the relative transposition in national legislation, which formed the basis of Malta's strategic framework.
- 2.7.3. This review also evaluated the extent to which the national strategic framework concerning marine ecosystem sustainability is conducive to effective implementation. To this end, this evaluation considered generally accepted business management criteria, such as clear definition of objectives, ownership, timeframes, whether it was subject to public consultation, whether it proposes a set of measures, allocates resources and outlines key performance indicators. Table 3 refers.

	National	NDCAD	Integrated Maritime
	Environmental Policy	NBSAP	Policy
	Former Ministry	Former MTCE and Malta	
Ownership	for Tourism Culture and	Environment and	Malta Marittima
Ownership	Environment	Planning Authority	Agency
	(MTCE) (MESDC)	(MESDC and ERA)	
Duration	2012 – 2020	2012 – 2020	2015 - 2025
Considers the wider			
implications of	Holistic strategy	Holistic strategy	Holistic strategy
environmental policy			
Public consultation	Yes	Yes	Yes
Proposes a set of	Yes	Yes	No
measures	100		
Key Performance			
Indicators to quantify	Yes	Yes	No
status of measures			
Resourcing	Not in place when	Not in place when	Not in place when
Nesourcing	finalised	finalised	finalised

Table 3: Evaluating the strategic framework against business management criteria (2017)

2.7.4. Table 3 shows the following:

- a. Ownership of the main strategic framework is distributed amongst two Ministries, namely Ministry for Environment, Sustainable Development and Climate Change as well as Ministry for Tourism, where ERA and Malta Marittima Agency have implementation roles. Additionally, ERA is also the national environmental regulator. This situation raises two main issues:
 - i. Legal or administrative mechanisms are not in place to encourage the convergence of initiatives undertaken by ERA and Malta Marittima Agency.

- ii. ERA's dual role of implementer and national regulator with respect to the marine environment raises potential conflicts of interest concerns. However, as will be noted in the next Chapter, such circumstances mainly arise due to the availability of expertise within this Authority. Within this context, the establishment of the new Entity "Ambjent Malta" in accordance with Budget 2018 – is envisaged to mitigate issues concerning ERA's potential conflict of interests since the former will assume responsibilities for implementing management plans, conservation orders, management agreements and other management tools devising conservation measures which currently pertain to ERA's remit.
- b. The strategic framework under review generally promotes a holistic approach, where sector-specific strategies are brought together through the National Environmental Policy and the IMP.
- c. The strategic framework was subject to public consultation. This implies that the risk that the strategic framework does not appropriately reflect the interests of Government entities and stakeholders were appropriately mitigated.
- d. Currently there are no formal mechanisms in place to ascertain an equilibrium between environmental sustainability and blue growth. MMA contends that its Board is in the process of approving an action plan to operationalise the IMP. This process is considered as a milestone, which leads to concrete measures being taken in the interest of marine sustainability.
- e. The IMP does not include Key Performance Indicators related to the measures proposed therein. This potentially influences management direction as well as the monitoring function with respect to progress achieved in the implementation of the IMP.
- f. The strategic framework or related documentation does not outline the resource requirements for its implementation. These circumstances limit entities from building up their respective administrative capacity to enable the expedient implementation of measures.

2.8. Delays in the submission of the Programme of Measures potentially influence implementation schedules

2.8.1. The Programme of Measures (PoMs) which contributes to the implementation of the NBSAP is afforded legal status through SL 549.62. The provisions therein stipulate that the PoMs was to be drafted by 2016 and in operation by 2017. However, this process was prolonged due to the need for an adequate and appropriate inter-Ministerial and public consultation processes; in this respect, the PoMs were eventually finalised and approved by Cabinet during April 2017.

The foregoing raises the following:

- a. PoMs drafting delays influences the degree to which National Authorities can secure resources and make the necessary logistical arrangements to implement the measures. This implies that the commencement of initiatives relating to PoMs implementation, in instances, will be further prolonged. ERA has already mobilised resources to implement the MSFD PoMs, including the securing of funding for implementation of one of the new measures. The Authority contends that efforts are being made to ensure the timely implementation of PoMs.
- b. Prolonging the implementation of the PoMs, to varying degrees, raises the risks of environmental degradation as National Authorities would not be in a position to take the necessary actions. Moreover, such delays increase the risk that Malta will not fulfill the relative EU targets emanating out of the NBSAP.
- 2.8.2. On the other hand, it should be clarified that various PoMs adopted are already implemented. These mainly include existing and to a lesser extend new measures. Appendix II refers. These measures were identified on the basis of earlier assessments and monitoring and are/were carried out by relevant competent bodies. These were streamlined under one operating function under MESDC, with the technical assistance of ERA, and are subdivided between different entities to ensure adequate collaboration, streamlining and coherence during implementation. Existing measures make up about 82 per cent of the measures, with about 18 per cent of the measures being new. Chapter 4 discusses further the status of the programme of measures.

2.9. Conclusions

- 2.9.1. The legal and strategic framework in place, generally, enables National Authorities to embark on initiatives to ensure the sustainability of the marine environment. Malta has a comprehensive regulatory framework in both substance and scope. Notwithstanding the foregoing, this performance audit has identified some issues where this regulating framework is subject to varying degrees of limitations.
- 2.9.2. Legislation, strategies and their respective implementation developed at varying paces in different situations. Consequently, a degree of inconsistencies or anomalies within the regulating framework arise. For instance, the legislation defining bunkering sites developed significantly earlier than the designation of MPAs. A similar situation prevails with respect to the penalty regime associated with, for instance, the conservation of marine reptiles and mammals. Despite the ongoing public discussion, some issues need to be addressed before the finalisation of the management planning exercise to ascertain the consistent application of the national legal framework.

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2.9.3. ERA and major stakeholders contend that prolonging the adoption of management plans is the major contributory factor to the situation depicted in the preceding paragraph. To a degree, this assertion has its validity. Moreover, EU regulations provide for a six-year period for the drafting and introduction of management plans or equivalent management tools. However, National Authorities have not sought to invoke conservation orders in terms of SL 549.44 to provide additional protection to MPAs in relation to those operations or activities until such time that the management plans are adopted.

Chapter 3

Assessments to designate Marine Protected Areas

3.1. Introduction

- 3.1.1. Scientific data relating to marine habitats and species is a key factor which influences the designation of Marine Protected Areas (MPAs). The Environment and Resources Authority (ERA) and other lead entities derive such information through studying the marine ecosystems within Maltese waters. These assessments, apart from gathering information relating to Maltese waters, are also a requirement under the Natura 2000 network and the Marine Strategy Framework Directive (MSFD).
- 3.1.2. During the period 2002 to 2018, Malta would have incurred an expenditure of around €4.6 million in funds with respect to these Assessments. This expenditure is financed from national and EU funds.
- 3.1.3. Recently, Malta has stepped up its efforts to carry out assessments and subsequently designate sites as MPAs. Nonetheless, Non Governmental Organisations (NGOs) contend that the limited scope of these Assessments hinder data availability on a critically important zone in terms of the marine ecosystem and its economical potential.
- 3.1.4. The first Assessments were undertaken in 2002 and focused on *Posidonia oceanica* within the Maltese Territorial Waters. Since then, ERA and other entities commissioned five more Assessments, which mainly focused on seabirds, bottlenose dolphins, loggerhead turtles and the Maltese top-shell. Table 4 refers.

Table 4: Assessment	Table 4: Assessments leading to the designation	ation of MPAs (2008 - 2018)	2018)			
Assessment	Baseline Survey of the Extent and Character of <i>Posidonia Oceanica</i> (L) Delile Meadows in the Territorial Waters of the Maltese Islands	Report on the distribution and abundance of the Maltese top-shell, <i>Gibbula nivosa</i> , in Maltese waters	LIFE Malta Seabirds	LIFE MIGRATE	LIFE BAĦAR FOR N2K	Gibbula nivosa Second Assessment
Duration	2002	2013	September 2011 - June 2016	October 2012 - April 2016	October 2013 - June 2018	2017 - 2018
Habitat or species under review	Posidonia oceanica	Maltese top-shell	European storm Petrel; Scopoli shearwater; Yelkouan shearwater	Loggerhead turtle; Bottlenose dolphin	Sandbanks; Reefs; Submerged or partially submerged sea caves	Maltese top-shell
MPAs designated following the assessment	Yes	Yes	Yes	Yes	To be determined	To be determined
Costs incurred	€100,000 ²²	€5,310	€873,964	€952,006	€2,612,810	€20,000

²² ERA does not have available the cost of this assessment. However, based on estimates provided by the Planning Authority to ERA, this study costed in the range of 100,000.

- 3.1.5. The activity portrayed in Table 4, supports comments raised in the Natura 2000 Barometer, whereby this publication acknowledged Malta's recent efforts in this respect. The Assessments carried out to date covered 55 per cent of the marine Natura 2000 framework requirements. As at July 2017, this level of activity ranked Malta in the 15th place among the European Union (EU) Member States. These studies also contributed to knowledge gaps identified by ERA in the Initial Assessment process concluded in 2013, which is the preliminary research required under the Marine Strategy Framework Directive.
- 3.1.6. In view of the foregoing, this Chapter discusses the extent to which:
 - a. the assessments carried out followed generally accepted practices;
 - b. the studies acknowledged data limitations; and
 - c. there is a need to carry out further assessments to designate other MPAs under the Natura 2000 framework.

3.2. The Assessments carried out followed generally accepted practices

3.2.1. While this Office did not analyse the technical aspects of these Assessments, the scope of this performance audit entailed determining the extent to which these studies adhered to generally accepted practices. Criteria in this respect encompassed a number of attributes as indicated in Table 5.

Assessment	Baseline Survey of the Extent and Character of <i>Posidonia</i> <i>oceanica</i> (L.) Delile Meadows in the Territorial Waters of the Maltese Islands	Report on the distribution and abundance of the Maltese top-shell, <i>Gibbula</i> nivosa, in Maltese waters	LIFE MALTA SEABIRDS	LIFE MIGRATE	LIFE BAĦAR FOR N2K
Lead entity	Geological Assistance and Services of Bologna S.R.L	University of Malta	BirdLife Malta	ERA	ERA
Key stakeholders involved			MESDC ²⁴ ; RSPB (BirdLife in the UK) and SPEA (BirdLife in Portugal)	MESDC ^{25,} KAI Marine Services	MESDC ²⁶ ; UoM; Department of Fisheries and Aquaculture; Fundacion Oceana
Public consultation	Not Required	Not Required	Yes	Yes	Yes
Marine jurisdiction considered	12 nautical miles	12 nautical miles	25 nautical miles	25 nautical miles	25 nautical miles
Assessment influenced the designation of MPAs	Yes	Yes	Yes	Yes	Yes
Extent of implementing recommendations proposed in Assessments	Not Applicable	Not Applicable	Not Applicable	Recommendations are going to be implemented as part of the Programme of Measures	Project is not concluded yet
Timely in terms of EU and programme obligations	Not Applicable	Not Applicable	Yes	Yes	Yes
Timely in terms of attaining 2020 targets	Yes	Yes	Yes	Yes	Yes
Assessment limitations	Yes	Yes	No	Yes	Yes

Table 5: Quality of the Assessments carried out (November $2017)^{23}$

²³ Analysis relating to the quality of the Gibbula nivosa study during 2017 / 2018 was not undertaken as the assessment is still work in progress.

²⁴ During the project duration, the Ministry responsible for this project was the Ministry for Tourism, Culture and the Environment and then the Ministry for Sustainable Development, Environment and Climate Change.

²⁵ During the project duration, the Ministry responsible for this project was the Ministry for Sustainable Development, Environment and Climate Change.

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- 3.2.2. In general, Table 5 shows that the Assessments carried out were of the appropriate quality and enabled National Authorities to designate 14 MPAs. However, these studies also raise the following issues:
 - a. Two out of the five Assessments extended only to the 12 nautical miles around Malta, which constitute national territorial waters, and consequently excluded research within the Fisheries Management Zone (FMZ), which also falls within Malta's jurisdiction. The reason for this being that the feature being studied did not occur at depths within the whole 25 nautical mile zone. ERA contends that most of the FMZ is characterised by deep waters in which neither the Maltese top-shell or the Neptune sea-grass occur (the former being limited to littoral and coastal waters, and the latter up to about 50 meter depth, due to lack of light at higher depths).
 - b. None of the Assessments undertaken extended beyond the 25 nautical mile zone around Malta. As outlined in the preceding Chapter, while the legal provisions to carry out research in the high seas are available, political and diplomatic issues within the Mediterranean region influences the undertaking of research in these areas.
 - c. The Assessments undertaken led to the designation of 14 MPAs. However, the full value of these studies is to be reaped when ERA concludes its work on the relative management plans and programme of measures. While EU obligations provide for a six-year period from designation of sites to the adoption of area specific management measures, Malta has to ensure that implementation delays do not raise the risks of degradation of the marine ecosystem.
 - d. The five Assessments undertaken complied with EU requirements. Nonetheless, financial and technical expertise limitations prohibited National Authorities from embarking on these studies at an earlier date. Consequently, National Authorities, for a considerable period of time, were in possession of data which was collated through methods which are now considered outdated. In this regard, ERA contend that data available prior to the conclusion of the Assessments highlighted in Table 5 delayed decision making regarding a number of parameters including the marine waters bathymetry and habitats.

3.3. Data availability and resources limited the quality of the Assessments

3.3.1. As highlighted in Table 5, the Assessments undertaken were subject to some technical limitations. The studies themselves acknowledged these methodological issues, which in part related to the quality of the data, which was held by National Authorities. Table 6 refers.

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	Baseline	Report on the				
Limitations	Survey of the	distribution				
	Extent and Character	and abundance	LIFE	LIFE MIGRATE ²⁷	LIFE	
	of Posidonia oceanica	of the Maltese top-	MALTA		BAĦAR	
	(L.) Delile Meadows in	shell, Gibbula	SEABIRDS		FOR N2K	
	the Territorial Waters	<i>nivosa,</i> in Maltese				
	of the Maltese Islands	waters				
Desk research not						
complemented by						
on-site assessments /	Yes					
in-depth research						
Fragmentation of data						
held by various national				Yes	Yes	
entities						
Resources	Yes				Yes	
Time				Yes	Yes	
Capping on cost of					Yes	
assessments					162	

Table 6: Assessments limitations

3.3.2. Table 6 shows the following:

- Desk research was influenced by the limited data harmonisation and information availability.
 This situation materialised as data is fragmented across various governmental entities.
 Moreover, it also influenced the deployment of specialised equipment in inadequate areas.
- b. The considerable costly and resource-intensive nature of marine research has impeded further analysis leading to the eventual designation of additional sites.
- 3.3.3. The foregoing implies that while Assessments were undertaken, further investment in human and technical equipment would improve detection and analysis. This influences the species under which a site will be designated as an MPA and subsequent conservation measures adopted. On the other hand, it is to be acknowledged that through the recent Assessments, Malta has reached a good sufficiency level of designated sites.

3.4. ERA is in the process of designating additional sites

3.4.1. On the basis of the five Assessments undertaken, ERA designated, so far, 14 MPAs. The prolonged undertaking of Assessments restrained ERA from designating MPAs at earlier dates. To this effect, nine of the 14 sites were designated in 2016 on a national level and are still awaiting approval as a Natura 2000 site. Up to this date, Malta's progress in designating MPAs did not reflect European Union (EU) and United Nations (UN) obligations.

²⁷ Information derived from Progress Report, covering the project activities from 01/12/2014 to 30/11/2015.

- 3.4.2. The EU Habitats and Birds Directives stipulated the establishment of a network of MPAs since the inception of the former in 1992. Therein it is provided that Malta (following its accession to the EU in 2004) is to take measures, through the designation of sites, to protect species listed in these Directives. Up to 2015, the designated sites pertained to *Posidonia* beds, sandbanks, reefs, submerged sea caves and the Maltese top-shell.
- 3.4.3. Similarly, the Convention on Biological Diversity set targets for its signatories, namely the Aichi Targets. These targets aim to address, by 2020, the underlying causes of biodiversity loss by:
 - a. mainstreaming biodiversity across government and society;
 - b. reducing the direct pressures on biodiversity and promoting sustainable use;
 - c. improving the status of biodiversity by safeguarding ecosystems, species and genetic diversity;
 - d. enhancing the benefits to all from biodiversity and ecosystem services; and
 - e. enhancing implementation through participatory planning, knowledge management and capacity building.
- 3.4.4. The minimal progress registered by Malta up to 2015 in designating MPAs was due to the prolonged undertaking of Assessments on marine ecosystems. This situation raised the risk that Malta may not attain Target 11 of the Aichi Targets. This target stipulates that by 2020, signatories should designate at least 10 per cent of coastal and marine areas. Up to 2015, Malta had only designated two per cent of its coastal and marine areas (FMZ).
- 3.4.5. During 2016, Malta registered a great improvement in the designation of sites where a further nine sites were designated as MPAs raising the total marine protected sites to a third of the FMZ. By the end of 2016, Malta designated MPAs to protect all the species as stipulated by the Natura 2000 Directives. Such action mainly related to the conservation of bottlenose dolphin, the loggerhead turtle and the three relevant species of seabirds. These led to the European Commission, through the Natura 2000 Nature and Biodiversity Newsletter,²⁸ acknowledging the progress registered by Malta in designating MPAs. The Mid-term evaluation (2016) of the Mediterranean Roadmap 2012 2020²⁹ also remarked on Malta's progress. It is estimated that a number of additional MPAs will be designated during 2018 on the basis of the results of the LIFE BAHAR project. This implies that Malta will achieve Aichi Target 11. Despite the recent and envisaged designation of MPAs, the conservation of these sites cannot be fully undertaken until such time that formal site-specific management plans are adopted.

²⁸ European Commission (2017). Natura 2000 Nature and Biodiversity Newsletter, Number 42, pages 8 – 9.

²⁹ RAC/SPA-UNEP/MAP & MedPAN, 2016. Mid-term evaluation (2016) of the Mediterranean MPA Roadmap 2012 – 2020 and recommendations for 2020: Draft Report by Arturo López Ornat, page 29.

3.5. Conclusions

- 3.5.1. The five Assessments undertaken have generally served the purpose of identifying habitats and species, the sustainability of which depended on the designation of MPAs. Generally, these Assessments adhered to generally accepted practices. The process leading to the conduct of these Assessments was largely effective. Moreover, the adequacy of these Assessments was confirmed through the various reviews at the national and supranational levels. Whenever it was required or mandatory, these Assessments were subjected to public consultation. Nonetheless, these studies were subject to some limitations in view of data fragmentation and availability of resources to study the marine environment beyond the FMZ and in the deeper areas of national waters.
- 3.5.2. The prolonged commencement of these studies influenced the designation of MPAs. This state of affairs had two main impacts. Firstly, the integrity of data pertaining to the marine environment which was available prior to these Assessments was based on studies conducted through non-systematic methodological, occasional and *ad hoc* Assessments using different non-comparable methodologies and consequently could not be relied on for decision-making purposes. Secondly, delays in undertaking these Assessments raised the risk of environmental degradation even though National Authorities have the obligation not to allow potential sites to be designated as MPAs to degenerate. This state of affairs arises since, up to the time the site-specific management plans are adopted, it is potentially problematic to secure the required resources to ensure their conservation.
- 3.5.3. On the basis of these Assessments, in recent years, Malta designated more sites as MPAs. However, designation of sites as conservation areas is only the starting point in ascertaining the sustainability of ecosystems within these sites. To this effect, the next Chapter of this Report discusses the degree to which ERA, as the national competent authority, is in a position to implement and enforce measures to protect these habitats and species.

Chapter 4

Marine Protected Areas Management Plans

4.1. Introduction

- 4.1.1. The designation of Marine Protected Areas (MPAs) would be a futile exercise unless necessary measures are implemented to ensure that the features for which they were designated are appropriately protected. As a consequence, appropriate balance between conservation and economic interests have to be sought. To this end, both the legislative and strategic framework outline various mechanisms, such as site-specific plans and measures. Moreover, other legislative provisions, such as those related to shipping and fisheries, also outline parameters which are intended to set an equilibrium between the main competing interests. The process of drafting, adopting, implementing and the undertaking of the relative enforcement in conjunction with site-specific measures has, in cases, extended beyond the set time-frame.
- 4.1.2. In view of the above, this Chapter discusses the following:
 - a. An outline of the various mechanisms as well as site-specific measures intended to balance conservation and economic interests;
 - b. The progress registered in the implementation of site-specific management plans and other measures; and
 - Enforcement action undertaken by the competent National Authorities. C

4.2. The regulatory framework obliges National Authorities to implement conservation measures including site-specific measures

- 4.2.1. The overarching strategic document, the National Environment Policy (NEP), which is valid for the period 2012 to 2020, provides for the implementation of a number of measures to safeguard the marine environment. These measures aim to:
 - a. achieve the sustainable development of coastal and marine waters;
 - b. attain better protection for marine areas of high ecological value;
 - c. provide for a comprehensive policy framework for biodiversity and eco-system conservation;
 - d. improve the status of biodiversity through the safeguard of ecosystems, species and genetic diversity; as well as
 - e. enhance cooperation between government ministries and agencies.

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- 4.2.2. Critical to the attainment of the NEP is the adoption and implementation of the various measures proposed within the National Biodiversity Strategy and Action Plan (NBSAP). The measures outlined within the latter also seek to address Malta's obligations emanating from the European Union (EU) legislation and policy, including the EU Biodiversity Strategy to 2020, the EU Nature Directives and the Marine Strategy Framework Directive (MSFD). The NBSAP stipulates that the Environment and Resources Authority (ERA), as the competent authority, is obliged to implement these NBSAP measures by 2020. Together with ERA, other implementing governmental entities include the Ministry for Environment, Sustainable Development and Climate Change (MESDC), Transport Malta (TM), Continental Shelf Department and the Department of Fisheries and Aquaculture (DFA). The NBSAP measures mostly relate to assessing, managing and monitoring biodiversity within Maltese waters. This entails, amongst others, the undertaking of various studies relating to habitats and species listed within the European Union *acquis*; the drafting of site-specific management plans or related management measures, the implementation of environmental assessments and permitting systems in cases of marine spatial planning, marine species and other operations or activities; monitoring the status of Maltese waters; resource mobilisation; and the streamlining of activities and policies. To this effect, the strategy acknowledges the need of human and technical resources, which are spread across the various governmental entities. Thus, it proposes a number of initiatives relating to capacity building.
- 4.2.3. In part, some of the measures listed in the NBSAP in relation to the marine environment are to be implemented through a specific set of initiatives known as the Programme of Measures (PoMs). These also directly address Malta's obligations under the MSFD. The PoMs outline a set of "existing" measures, which are being implemented under various national and EU regulations together with a set of "new" initiatives. These measures relate to various issues, including marine reptiles, mammals, seabed habitats, contaminants, underwater noise, commercially exploited fish and shellfish as well as marine litter. Appendix II outlines the measures listed in the PoMs. Existing measures are funded through both national and EU funds, while MESDC and ERA are still to secure funds with respect to the "new" initiatives.
- 4.2.4. The measures listed in the PoMs contribute to attain "Good Environment Status" within Maltese waters rather than being site-specific. While noting that these, together with the Water Framework Directive provisions, are of an over-arching nature, together they would facilitate or contribute to site-specific management. To this effect, the NBSAP proposes that MPAs designated under the Natura 2000 framework should have site-specific management plans or equivalent measures.
- 4.2.5. This Section outlined that the legal and strategic framework comprises four key sets of measures. The ensuing section discusses the implementation status of these measures.

4.3. Prolonging further the full implementation of measures raises the risks that Malta does not attain national and EU targets

4.3.1. The legislative and strategic frameworks generally outline that Malta is to implement the measures listed in the preceding section by 2020. Most of these targets are intended to ascertain a 'Good Environmental Status' within Maltese waters. To this effect, National Authorities have already commenced initiatives to implement these measures. However, many measures remain as works-in-progress or not yet initiated. Table 7 refers.

	Responsibility	Duration	Status	
NEP	MESDC	2012 – 2020		
NBSAP	MESDC through ERA	2012 – 2020		
	Lead by MESDC but involves a			
PoMs "existing"	number of key stakeholders,	Ongoing up to 2020		
measures	including ERA, DFA, TM and	Ongoing up to 2020		
	Continental Shelf			
	Lead by MESDC but involves a			
PoMs "new" measures	number of key stakeholders,	2017 2020		
POINS New measures	2017 – 2020 namely Fisheries, TM and			
	Continental Shelf			
Site-specific		Ongoing up to 2020; six years after site		
	ERA			
Management Plans		designated as MPA		

Table 7: Progress attained with respect to the implementation of MPAs Action Plans (2017)

4.3.2. It is evident that progress relating to the implementation of measures is progressing at varying speeds. To this effect, Table 7 shows that the implementation of measures outlined in the PoM "Existing Measures" has progressed according to schedule. However, national competent authorities have fallen behind schedule with respect to the provisions outlined in the NEP and NBSAP. The prolonging of management plans drafting is leading to a situation where ERA will be constrained to forfeit piloting associated with the implementation of these plans to enable implementation schedules. Although the deadline for adopting these Management Plans has

been extended from 2017 to 2020, ERA plans only refer to a public consultation phase and do not refer to piloting as envisaged by the NEP.³⁰ ERA contends that this situation is being mitigated through a number of measures which have already been carried out. These include:

- a. a carrying capacity Assessment for Comino;
- b. a study for Comino to establish the number of vessels and swimmers/divers;
- c. pre-market consultation on Dwejra;
- d. discussions with TM on ecological moorings;
- e. ongoing discussions with DFA on implementation of measures linked with fisheries, Nature Directives and MSFD; and
- f. ongoing applications on fish farm relocations;
 - drafting of Memorandum of Understandings (MoUs) with relevant entities (including TM, Malta Marittima Agency, Department of Fisheries and Aquaculture, National Statistics Office).
- 4.3.3. A number of factors, to varying degrees, contribute to the circumstances portrayed in Table 7. The following refers:
 - a. ERA is encountering administrative capacity issues. To this effect, the Authority is still in the process of establishing its internal structures, including relevant resources for its biodiversity, assessments, permitting, compliance and enforcement section.
 - b. The problem of available resources is a common issue across the various Government entities involved in the implementation of initiatives related to MPAs. This implies that while there is commitment, in reality implementation of the measures is proving challenging.
 - c. An MoU between government departments such as Civil Protection Department, Armed Forces of Malta and TM, governing the monitoring of marine waters for irregularities relating to Marine Protected Areas, is not yet in place.

4.4. Currently, site-specific MPA enforcement is of a reactive and incidental nature

4.4.1. Malta's obligations under the MSFD outline that monitoring of national waters is to be carried out to determine, on a periodical basis, progress attained with respect to attaining "Good Environmental Status". Similarly, other national legislation, such as those relating to bunkering and fisheries, requires that monitoring in relation to these activities takes place. However, the

³⁰ Pilot Project 2 – Management of Marine Protected Areas at Comino, Dwejra and Ĉirkewwa. This measure outlines that need for developing a pilot project exploring best practices in the management and promotion of marine protected areas at Comino, Dwejra and Ĉirkewwa, by 2015.

competent National Authorities' monitoring does not often extend to the status of marine habitats and birds within MPAs. The foregoing materialises as:

- a. Monitoring and enforcement require two key elements namely resources and legally established penalties. ERA, however, is still in the process of setting up its facilities and resources in these spheres of work.
- b. Administrative capacity weaknesses prevail among other National Authorities involved in safeguarding the marine environment. These include ERA, the Department of Fisheries, the Armed Forces of Malta and the Civil Protection Department. This situation inhibits MESDC, as the Chair of the Inter-Ministerial Committee, to ascertain the tangible commitment of stakeholders, particularly with respect to the monitoring of national waters.
- c. The prolonging of adoption of site-specific management plans, in part, illustrates that an imbalance between the competing interests of stakeholders prevail. Until such time that ERA formally adopts management plans, the Authority's and stakeholders' compliance surveillance and enforcement initiatives will be severely inhibited.
- 4.4.2. The foregoing shows that National Authorities are not yet in a position to adequately safeguard national waters from potential irregularities relating to Marine Protected Areas. This implies that Malta cannot take immediate action to safeguard the eco-system within the 14 designated MPAs. In the circumstances, ERA's compliance surveillance function is heavily dependent on reports drawn up by third parties who operate vessels within Maltese waters, including other entities like Armed Forces of Malta, Civil Protection Department, TM and DFA, as well as fishermen, divers and Non Governmental Organisations (NGOs) as part of citizen science initiatives. However, the situation depicted above severely limits ERA from verifying, following up and initiating legal proceedings in cases of infringements.

4.5. Conclusions

- 4.5.1. The various economic and recreational activities undertaken in Maltese waters, to varying degrees, threaten the habitats and species within MPAs. To date, however, mitigating and dealing with these threats has been problematic, for three main reasons, namely the absence of site-specific management plans or similar management measures, administrative capacity weaknesses as well as minimal monitoring and enforcement initiatives.
- 4.5.2. The adoption of site-specific management plans is ongoing and in line with legal timelines, although still subject to delays. Whilst Government has committed to have the management measures in place for all the 14 MPAs it designated, the six-year time period for developing and adopting management plans outlined by the EU Habitats Directive has elapsed for one out of these 14 sites. Malta has announced that it would develop management plans by 2020 for the fourteen marine protected area sites it designated, comprising roughly 3,487 square kilometres, covering an area significantly larger than the country itself. Nonetheless, the risks

that the remaining plans pertaining to the other designated MPAs will not be completed by the established deadlines prevail. Within this context, it is imperative that ERA secures the necessary resources to ascertain that the remaining plans are completed by the established deadlines.

- 4.5.3. Until such time that these plans are in place, it will be problematic for national competent authorities to converge their efforts rather than embark on initiatives to safeguard their particularistic interests to ascertain the sustainability of marine biodiversity. This is evident as the various National Authorities are focusing their efforts to ensure compliance to their respective mandate rather than taking a holistic view and approach to ascertain the sustainability of marine ecosystems. Additionally, this state of affairs hinders compliance surveillance and enforcement as National Authorities do not have the common management criteria against which to plan and implement these functions.
- 4.5.4. National Authorities highlighted the need to strengthen their administrative capacity to enable them to implement the measures enlisted within the strategic framework. This implies that National Authorities do not have the appropriate level of funding to engage the necessary expertise and supporting personnel and assets. Until such time, that the administrative capacity issues are addressed, it is unlikely that National Competent Authorities will be in position to fulfil their obligations in terms of national, EU and international legal frameworks.

Appendix I - The Regulatory Framework governing MPAs

					gnated legal fra	mework /	policy			
Site number / designated	Year designated in Malta	Habitats Directive	Birds Directive	UN Convention on Biological Diversity	COE Bern Convention	Wreck	Marine Framework Strategy Directive	Integrated Maritime Policy	National legislation	
MT0000101	2005	\checkmark		\checkmark	\checkmark		\checkmark	\checkmark	SL 549.44; SL 549.62	
		1		1			1	/	SL 549.44;	
MT0000102	2010	\checkmark		\checkmark	\checkmark		\checkmark	\checkmark	SL 549.62	
MT0000103	2010	\checkmark		\checkmark	\checkmark		\checkmark	\checkmark	SL 549.44; SL 549.62	
									SL 549.02	
MT0000104	2010	\checkmark		\checkmark	\checkmark		\checkmark	\checkmark	SL 549.44,	
									SL 549.44;	
MT0000105	2010	\checkmark		\checkmark	\checkmark		\checkmark	\checkmark	SL 549.62	
N4T0000107	2010		1	\checkmark	1		\checkmark	,	SL 549.44;	
MT0000107	2016		\checkmark	v	\checkmark		V	\checkmark	SL 549.62	
MT0000108	2016		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	SL 549.44;	
1110000100	2010		V	V	V				SL 549.62	
MT0000109	2016		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	SL 549.44;	
			•	•	•			*	SL 549.62	
MT0000111	MT0000111 2016		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	SL 549.44;	
					-					SL 549.62
MT0000112	2016		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	SL 549.44; SL 549.62	
									SL 549.44;	
MT0000114	2016		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	SL 549.62	
							✓	\checkmark	SL 549.44;	
MT0000113	2016	\checkmark		\checkmark	\checkmark				SL 549.62	
MT0000106	2016	1	\checkmark	1	1		\checkmark	1	SL 549.44;	
10110000106	2010	\checkmark	V	\checkmark	\checkmark		V	\checkmark	SL 549.62	
MT0000110	2016	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	SL 549.44;	
	2010	•	•	•	•				SL 549.62	
									Notice to	
Vied iż-Żurrieq	2008					\checkmark			Mariners 5	
									of 2008 Notice to	
Off Xatt	2008					\checkmark			Mariners 5	
l-Aħmar	2000					v			of 2008	
									Notice to	
Marsascala	2008					\checkmark			Mariners 5	
								of 2008		
Off Qawra							\checkmark		Notice to	
Point 2008	2008					\checkmark			Mariners 5	
									of 2008	
									Notice to	
Off Cirkewwa	2008					\checkmark			Mariners 5 of 2008	
Off Xrobb I-Għaġin									Notice to	
	2008					\checkmark			Mariners 5	
- Gridgini									of 2008	
						-			Notice to	
Off Exiles Point	2008					\checkmark			Mariners 5	

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Appendix II - PoMs list of Measures

Existing Measures:

- 1. Environmental Impact Assessment Regulations & Strategic Environmental Assessment Regulations
- 2. Continue to strengthen the relationship between environmental and planning regulatory processes (including Marine Strategy Framework Directive concerns)
- 3. Oil exploratory drilling and exploitation licensing system
- 4. Designation of terrestrial SPAs and respective management plans
- 5. Designation of marine SPAs
- 6. Predator control programmes
- 7. Restrictions on use of light by navigating vessels within buffer zones surrounding protected breeding grounds
- 8. Establishment of appropriate codes of conduct addressing all forms of disturbance (trampling, light, noise, poaching, agricultural practices, pesticide use) within terrestrial SPAs
- 9. Establishment of signage prohibiting trespassing during the breeding season and promoting appropriate codes of conduct within terrestrial SPAs
- 10. Assessment of all forms of disturbance relevant to terrestrial SPAs emanating from proposed urban/infrastructural/ agricultural development
- 11. Control of seabird by-catch: weighted lines, side-setting and use of thawed bait
- 12. Prohibition of Hunting/Capture/Killing/Nest and colony disturbance (seabirds, reptiles, marine mammals)
- 13. Designation of marine SACs
- 14. Emergency Conservation Orders for protection of turtle nesting sites
- 15. Measures related to by-catch of marine reptiles and mammals
- 16. Measures for the mitigation of underwater noise impacts (particularly in relation to marine mammals)
- 17. Rescue and rehabilitation (marine reptiles)
- 18. Improve operational standards for the aquaculture sector via the environmental permitting process
- 19. Study the impacts of the national spoil ground off Xghajra
- 20. Carry out seasonal surveys of mooring and anchorage areas
- 21. Marine Protected Areas and the EU funded project LIFE BA#AR for N2K
- 22. Permitting system for disposal and movement of waste at sea
- 23. Spatial management of fisheries (including Fisheries Management Plan)
- 24. Technical feasibility assessment regarding the management of ballast waters
- 25. Implementation of the measures in the National Biodiversity Strategy and Action Plan including National Strategy on Invasive NIS
- 26. Interim and Voluntary Arrangements of Ballast Water Management (pending ratification of the Ballast Water Management Convention)
- 27. Regulation of trade (in relation to non-indigenous species)
- 28. Aquaculture regulations (in relation to non-indigenous species)
- 29. Permitting of hull cleaning activities

- 30. Fisheries Management Plans
- 31. Management of Fishing capacity and effort
- 32. Catch limits in fisheries management
- 33. Restrictions on fishing gear
- 34. Management of discards from fisheries
- 35. Data collection processes and compliance in relation to fishing activity
- 36. Management of recreational fisheries
- 37. Protection of elasmobranchs
- 38. Labelling and recovery of fishing gear
- 39. Creation and implementation of the Agriculture Waste Management Plan
- 40. Carry out joint inspections with Transport Malta, the Civil Protection Directorate, the Occupational Health and Safety Authority and the Water Services Corporation to ensure that industrial operations abide to best environmental practice
- 41. Streamline designated bathing waters as defined by the Environmental Health Directorate with designated Swimming Zones as regulated by Transport Malta where these two areas overlap or are in close proximity to each other
- 42. Develop a strategic policy framework to encourage integrated valley management
- 43. Operation of three Urban Waste Water Treatment plants and further improvements thereto
- 44. CoGap and Nitrates Action Programme
- 45. Regulation of discharge of sewage from ships
- 46. Standards for recreational craft
- 47. Continue to refine the regulatory framework for industrial operational practices
- 48. Continue to control priority hazardous substances, priority substances and other substances of concern via the environmental permitting process
- 49. Update of the WFD inventory of discharges
- 50. Establish a Mercury Management Plan to enable the investigation of potential sources of mercury and potential mitigation measures
- 51. Characterise and quantify hydrological input of land based contaminants (including litter) to coastal waters from major sub-catchments
- 52. Investigate the role of transboundary contaminants through hydrographic pathways and the extent of its contribution to marine contamination
- 53. Carry out investigations to gauge the potential contribution of contaminants to our coastal waters by atmospheric deposition
- 54. Carry out a survey of all direct discharges to sea and identify their source with the objective of setting up a plan to curtail/regulate such discharges
- 55. Publish guidelines for disposal of dredged material
- 56. Targeted awareness campaign on the appropriate disposal of chemicals and/or chemical containers, including medicines, pesticides, fertilisers and related packaging
- 57. Creation of a working group tasked with the updating of sensitivity maps to enable better marine emergency response
- 58. Create an ERA (Environment and Resource Authority) pollution response log for environmental incidents occurring at land and at sea
- 59. Environmental Permitting and General Binding Rules
- 60. Authorisation of the placing on the market of Plant Protection Products and Biocidal Products

- 61. Malta's National Action Plan for Sustainable Use of Pesticides (2013-2018)
- 62. Regulation and prevention of pollution from ships, including prohibition of discharges, penalties, reporting and information systems, inspections and licensing
- 63. Provision of Port Reception Facilities for Ship-Generated Wastes and Cargo Residues
- 64. National Marine Pollution Contingency Plan
- 65. Monitoring and reporting of contaminants in foodstuff to prevent human exposure to contaminants
- 66. Measures to ensure traceability of analysed samples of fish and seafood
- 67. Develop a system to encourage adequate litter management and control in coastal areas
- 68. Targeted awareness campaign on impacts of marine litter
- 69. Implementation of Waste Management Plan

New Measures (2017 – 2021):

- 1. Strengthening liaison between relevant government bodies with a view to streamline MSFD requirements in offshore licensing and permitting regimes
- 2. Awareness and educational campaigns targeting disturbance issues (noise, light and littering) in recreational areas where the presence of litter has been tied to rat predation on seabirds
- 3. Preparation of official guidance documents aimed at providing direction with respect to reduction/ control/mitigation of light and noise pressures driven by both land based and sea based activities
- 4. Knowledge improvement on the interactions of seabirds, marine reptiles and marine mammals with fisheries activity and definition of good practice as necessary
- 5. Preparation and promotion of a code of good practice for sea-farers including guidelines for navigation within marine protected areas or otherwise sensitive areas
- 6. Pilot implementation of selected management options aimed at addressing impacts from anchoring on the seabed
- 7. Inventory of fishery activity in coastal Marine Protected Areas designated for the protection of seabed habitats
- 8. Awareness raising campaign on protected species associated with benthic communities
- 9. Launching of an educational programme targeting knowledge improvement to facilitate management of pressures associated with fishing activities
- 10. Improvement and harmonisation of data collection processes in relation to contaminants reported in Maltese waters
- 11. Identification and mapping of areas with accumulated litter on the seabed or in the water column and potential removal of such litter
- 12. Establish formal collaboration with NGOs for participation in Mediterranean coastal cleanup day
- 13. Educational campaign for seafarers on marine litter
- 14. To identify options for re-designing fishing gear or practices to reduce discarded or lost fishing gear
- 15. Implementation of 'Fishing for Litter' scheme

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May 2017	Performance Audit: Protecting Consumers through the Market Surveillance Directorate's Monitoring Role
June 2017	Performance Audit: Procuring the State Schools' Transport Service
July 2017	An Investigation of Property Transfers between 2006 and 2013: The Transfer of the Property at 83 Spinola Road, St Julian's
July 2017	An Investigation of Property Transfers between 2006 and 2013: The Expropriation of the Property at Fekruna Bay, St Paul's Bay
September 2017	Performance Audit: Landscaping Maintenance through a Public-Private Partnership
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November 2017	Performance Audit: Outpatient Waiting at Mater Dei Hospital
November 2017	Report by the Auditor General Public Accounts 2016
December 2017	Annual Audit Report of the Auditor General - Local Government 2016
December 2017	An Analysis on Revenue Collection
January 2018	The use of IT systems to identify skills and professional development needs within the Public Service

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