

EUROSAI Working Group on Environmental Auditing **Cooperative Audit** Are adequate mechanisms in place for the designation and effective management of MPAs within the Mediterranean Sea? 0000000

Participating Supreme Audit Institutions:

Supreme Audit Institution of Albania Audit Office of the Republic of Cyprus Cour des Comptes France Court of Audit Hellenic National Audit Office Malta Tribunal de Contas Portugal Court of Audit Republic of Slovenia

Project Coordinators: Audit Office of the Republic of Cyprus, National Audit Office Malta

Layout and production by: IT Unit, National Audit Office Malta

Printed at the Government Printing Press Malta

https://www.eurosaiwgea.org/

ISBN: 978-99957-60-27-4



Cooperative Audit

"Are adequate mechanisms in place for the designation and effective management of MPAs within the Mediterranean Sea?"

> Report July 2019



Participating Supreme Audit Institutions:

Supreme Audit Institution of Albania Audit Office of the Republic of Cyprus Cour des Comptes France Court of Audit Hellenic National Audit Office Malta Tribunal de Contas Portugal Court of Audit Republic of Slovenia

Project Coordinators:

Audit Office of the Republic of Cyprus, National Audit Office Malta

Layout and production by :

IT Unit, National Audit Office Malta

Printed at the Government Printing Press Malta

https://www.eurosaiwgea.org/

ISBN: 978-99957-60-27-4





Table of Contents

List o	fAbbreviations	5
Mess	age from Heads of participating Supreme Audit Institutions	6
Execu	utive Summary	8
Chap	ter 1: Terms of reference	10
1.1.	Introduction	10
1.2.	EUROSAI WGEA Cooperative audit	10
1.3.	Marine protected Areas (MPAs)	12
1.4.	Pressures threatening the biodiversity of the Mediterranean Sea	12
1.5.	Marine Protected Areas in the Mediterranean Sea	13
1.6.	Audit focus and methodology	15
1.7.	Report structure	17
Chap	ter 2: The legislative framework	18
2.1.	Introduction	18
2.2.	The legislative framework comprises National Legislation,	
	EU Directives and United Nations Conventions	18
2.3.	Limitations of the legal framework	20
2.4.	Conclusion	25
Chap	ter 3: Strategies	26
3.1.	Introduction	26
3.2.	Formal adoption of national strategies	26
3.3.	Scientific input to the strategic framework	28
3.4.	Measurable targets	28
3.5.	Operationalising strategies	29
3.6.	Conclusion	31
Chap	ter 4: Assessments of the marine environment for designating MPAs	32
4.1.	Introduction	32
4.2.	Quality of assessments conducted	32
4.3.	Conclusion	35



Chapt	er 5: Design and Implementation of Management Plans	36			
5.1.	Introduction	36			
5.2.	5.2. Site-specific management plans and measures				
5.3.	Management plans, including PoMs limitations	39			
5.4.	Conclusion	42			
Chapt	er 6: Monitoring of Marine Protected Areas	44			
6.1.	Introduction	44			
6.2.	Extent of Monitoring and Enforcement	44			
6.3.	Operational issues influencing enforcement action undertaken	46			
6.4.	Conclusion	49			
Chapt	er 7: Conclusions and Recommendations	50			
Appe	ndix I: Abstracts of national audits	54			
Appe	ndix II: Audit Matrix	66			
Appendix III: Partners					
Appe	ndix IV: References	70			
List o	f tables				
Table	1: The main pressures affecting the Mediterranean Sea	13			
Table	2: The international regulatory framework	19			
Table	3: Protection mechanism defined in the MPA legislative framework	21			
Table	4: National Strategic Frameworks	27			
Table	5: Technical limitations noted by participating SAIs	34			
Table	6: Progress attained by participating countries with respect to				
	site-specific management plans	38			
Table	7: Factors influencing the enforcement function within MPAs	46			
List o	f figures				
Figure	e 1: SAIs participating in the joint audit	11			
Figure	e 2: Characteristics of Mediterranean MPAs	14			
Figure	e 3: Timeline leading to the publication of the cooperative audit (2016 – 2019)	16			
List o	f charts				
Chart	1: Management Plans and PoMs limitations	39			

5

List of Abbreviations

AAMP	Agence des aires marines protégées
AFB	Agence française pour la biodiversité
AL	Albania
CFP	Common Fisheries Policy
СОВ	Contrats d'objectifs
СҮ	Cyprus
DFMR	Department of Fisheries and Marine Research
DGRM	Directorate-General for Natural Resources, Safety and Maritime Services
EL	Greece
ERA	Environment and Resources Authority
EU	European Union
EUROSAI	European Organisation of Supreme Audit Institutions
FMZ	Fisheries Management Zone
FR	France
FTE	Full-Time Equivalent
GEF	Global Environment Facility
ICNF	Institute for Nature Conservation and Forests
IMP	Integrated Maritime Policy
IPMA	Portuguese Institute for Sea and Atmosphere
ISSAI	International Standards of Supreme Audit Institutions
IUCN	International Union for Conservation of Nature
KPIs	Key Performance Indicators
MARPOL	International Convention for the Prevention of Pollution from Ships
MEAs	Multilateral Environment Agreements
MP	Management Plan
MNP	Marine National Park
MPA	Marine Protected Area
MSFD	Marine Strategy Framework Directive
MT	Malta
NGOs	Non Governmental Organisations
OECMs	Other Effective are-based Conservation Measures
PMA	Protected Marine Areas
PNC	Parc National des Calanques
PoMs	Programme of Measures
PT	Portugal
SAC	Special Area of Conservation
SAI	Supreme Audit Institution
SCI	Site of Community Importance
SL	Slovenia
SPA	Special Protection Area
SPAMIs	Specially Protected Areas of Mediterranean Importance
SPEA	Portuguese Society for the Study of Birds
UN	United Nations
UNDP	United Nations Development Program
WGEA	Working Group on Environmental Auditing



Message from Heads of participating Supreme Audit Institutions



Mr. Bujar Leskaj Chairman Supreme Audit Institution of Albania

Dr. Odysseas Ph. Michaelides Auditor General Audit Office of the Republic of Cyprus

have the greed

M. Didier Migaud First President Cour des Comptes France

Ms. Androniki Theotokatou President Court of Audit Hellenic

Mr. Charles Deguara Auditor General National Audit Office Malta

Increasingly, environmental matters and sustainability are becoming areas of concern for Supreme Audit Institutions (SAIs). In view of their cross-border implications, these themes are also high on the agenda of several international forums. Within this spirit, seven SAIs, members of the EUROSAI Working Group on Environmental Audit (EWGEA), carried out national audits focusing on the extent to which mechanisms are in place to ensure the effective designation and management of Marine Protected Areas within the Mediterranean Sea and the Portuguese Atlantic coast. The results and conclusions elicited from these national audits are outlined in this cooperative audit report. Given the close geographical proximity and similar regulatory setup, SAI Portugal embarked on this project together with the SAIs of Albania, Cyprus, Greece and Malta. The report includes contributions from SAIs France and Slovenia, from recent audits performed by them in this area.

Carried out under the auspices of the EWGEA, this cooperative audit promoted the spirit of cooperation based on integrity, open communication and professional excellence. This facilitated the sharing of knowledge and experience between our respective SAIs with the common aim of ensuring that Marine Protected Areas (MPAs) contribute towards a balance between blue growth and marine conservation.

All activities within our marine waters are interconnected and their impact is evident on resources, marine ecosystems and coastal communities. MPAs are a means to protect our planet as human activity in terms of pollution, overexploitation and coastal degradation as well

Mr. Vítor Caldeira President Tribunal de Contas Portugal

Mr. Tomaž Vesel President Court of Audit Republic of Slovenia

as climate change have severely affected the quality and quantity of biodiversity and marine ecosystems. MPAs also permit commercial species to reproduce and thrive, support heritage and sustainable exploitation while contributing to the economy. During 2017, these critical factors instigated the European Union (EU) to commit to the creation of another 2.5 million square kilometres of Marine Protected Areas.

This cooperative audit confirmed the understanding and commitment for the protection of the marine environment, as attested by the increasing number of MPAs. On the other hand, in some cases, the lack of site-specific management plans and regulation, as well as the designation of MPAs within the high-seas, remain issues of concern.

In our respective countries, the maritime environment is a key economic driver with the potential for innovation and growth. Nevertheless, it remains critical that these ambitions are attained without compromising the sustainability of the marine environment. Within this context, this cooperative audit recommends that national authorities step up their efforts to ascertain the right balance between conservation of the marine environment and socio-economic development.

8

Executive Summary

The cooperative audit identified that the necessary mechanisms for the designation and effective management of Marine Protected Areas (MPAs) within the Mediterranean Sea were not always in place to achieve the desired equilibrium between the sustainability of Marine Protected Areas and blue growth.

This cooperative audit based its findings and conclusions on seven individual national audit reports, which were compiled by the Supreme Audit Institutions (SAIs) of Albania, Cyprus, France, Greece, Malta, Portugal and Slovenia. These national reports considered MPAs to entail a delineated marine site, which may have been already designated or is to be designated as such under international, regional or national legal frameworks and policies. The main objective of a MPA is to conserve and nurture the marine biodiversity while striking a balance with any economic activity permitted in the area. 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.

The aim of the cooperative audit was to determine the degree to which countries in the Mediterranean region are effectively conserving marine biodiversity to attain the targets set in national legislation and international protocols. To address this aim, the participating SAIs compiled an audit design matrix based on issues relating to the regulatory framework, strategies, site' assessments undertaken, management plans drafted and national surveillance efforts. The analysis of these five key areas, led to these main findings:

- a. The legal framework regulating MPAs is sufficiently robust and mandates national authorities to ascertain the sustainability of the marine environment. However, it does not provide a common definition of what constitutes a MPA. In addition, overlapping and in some instances conflicting provisions were identified within the national regulatory frameworks.
- b. National strategic frameworks, generally, reflected the political will and aimed to outline the relevant outputs as well as outcomes through the designation of MPAs. However, in three of the participating countries no comprehensive sector specific strategies are in place, while all SAIs identified the potential of strengthening national strategic frameworks, so as to optimize their impact.

- c. Participating SAIs noted that national authorities have carried out the relevant site assessments to designate MPAs. Nonetheless, the scope of these assessments was not always appropriately broad, either due to resource and technical expertise limitations, or to diplomatic issues when the site assessments concerned joint jurisdictions or the high-seas.
- d. While it is recognised that management plans are key to the implementation of measures to ensure the sustainability of MPAs, most participating SAIs reported that site-specific plans are not yet in place. Moreover, other technical and logistical limitations, such as coordination issues and the non-deployment of resources, influenced the degree to which participating countries could implement specific measures to ascertain the conservation of protected species within MPAs.
- e. SAIs reported that site-specific management plans, administrative capacity weaknesses and coordination limitations between stakeholders are the key elements that hindered adequate monitoring and enforcement of measures in MPAs. Monitoring and enforcement shortcomings do not guarantee that MPAs and therefore the biodiversity they aim to protect are being managed, as well as utilised, in a sustainable manner.

Governments' responsibilities in designating, managing and enforcing the regulatory framework concerning MPAs is a complex endeavour. This audit has noted that more needs to be done to find a balance between the protection of the marine environment and the economic activities within. Within this context, site-specific plans and the deployment of the appropriate level of resources are a prerequisite to effective management, regulation and monitoring of Marine Protected Areas.

The equilibrium between marine conservation and blue growth also necessitates cross-border cooperation. To this effect, the strengthening of bi-lateral and multi-lateral frameworks of cooperation in this area between Mediterranean countries is critical to the sustainability of this biodiversity and socio-economic rich sea.



Chapter 1: Terms of reference

1.1. Introduction

The most effective management and conservation tool to deal with the unprecedented alteration to marine ecosystems and mitigate its effects is the designation of sites as Marine Protected Areas (MPAs).¹ Various national and supranational entities recognise MPAs as key to managing marine resources and biodiversity.²

While the protection of coastal waters is, to varying degrees, seen as a national issue, conservation of the marine environment has a cross-border dimension. Similar circumstances prevail in the Mediterranean region, where various international and European conventions and directives recognise the need for and call for the conservation and sustainable use of oceans, seas and marine resources.

However, a number of factors are influencing the effectiveness of this management and conservation regime. These relate to increased pressure from various externalities on the Mediterranean Sea, delays in the designation of marine protected areas and the implementation of plans to ensure the effective management of these sites.

1.2. EUROSAI WGEA Cooperative audit

Within this context, seven Mediterranean Supreme Audit Institutions (SAIs), members of the European Organisation of Supreme Audit Institutions (EUROSAI) Working Group on Environmental Auditing (WGEA), participated in a cooperative audit entitled, *"Are adequate mechanisms in place for the designation and effective management of MPAs within the Mediterranean Sea?"* The aim of the cooperative audit was to determine the degree to which countries in the Mediterranean region are effectively conserving marine biodiversity to attain the targets set in national legislation and international protocols.

¹ Medpan.org. (2018). MARINE PROTECTED AREAS – MedPAN. [online] Available at: http://medpan.org/marine-protected-areas/ [Accessed 2 October 2018].

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

This Report considers the findings and conclusions of seven individual national audit reports from Albania, Cyprus, France, Greece, Malta, Portugal and Slovenia. The SAI of Portugal participated in the cooperative audit in view of the country's proximity to the Mediterranean Sea and the similar problems encountered, in designating and managing MPAs in Portugal to those of countries within the Mediterranean basin. Figure 1 refers.

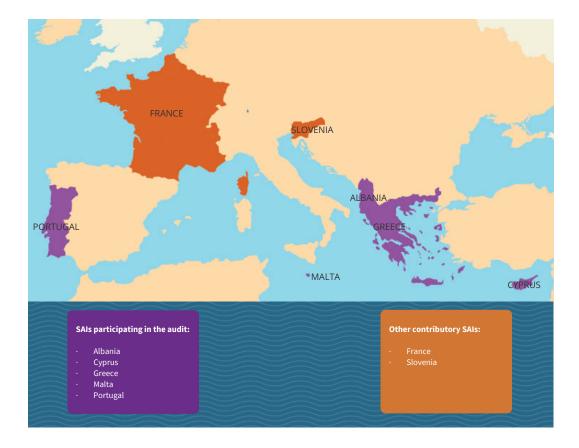


Figure 1: SAIs participating in the joint audit

The cooperative audit Report elicits findings emanating from the national audit report prepared by each SAI. Moreover, it identifies area specific case studies.

1.3. Marine protected Areas (MPAs)

Various national, European and international laws and Conventions provide different definitions relating to Marine Protected Areas. In most cases, such definitions draw on concepts related to marine protection introduced within the legal framework. From the early stages of the audit it was noted that there is no universally accepted definition as to what constitutes an MPA. For the purposes of the audit, the participating SAIs agreed on a common definition, whereby a *Marine Protected Area relates to a delineated marine site, which may have been already designated or is to be designated as such under 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. 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.*

1.4. Pressures threatening the biodiversity of the Mediterranean Sea

The Mediterranean Sea encompasses the coast of 21 countries and covers about 2.5 million km². A quarter of this area falls under the full jurisdiction of these countries while the remaining part potentially pertains to countries' respective exclusive economic zones – in some cases this is still to be declared and agreed upon.³

The Mediterranean is considered to be one of the planet's most important areas for marine biodiversity⁴, as it hosts seven to 10 per cent of the world's marine biodiversity⁵, in the form of habitats, species and assemblages of particular ecological importance.⁶ However, the Mediterranean marine ecosystems are subject to a number of pressures. These affect biodiversity, with impacts on human health, lifestyle, food production and the availability of natural resources.⁷ Table 1 provides a snapshot of the main pressures affecting the Mediterranean Sea.

.....

³ IUCN. (2018). *Mediterranean Marine Programme*. [online] Available at: https://www.iucn.org/regions/mediterranean/our-work/ mediterranean-marine-programme [Accessed 2 October 2018].

⁴ Medpan.org. (2018). *Mediterranean challenges* – MedPAN. [online] Available at: http://medpan.org/mediterranean-realities/ [Accessed 2 October 2018].

⁵ Cordis.europa.eu. (2018). CORDIS | *European Commission*. [online] Available at: https://cordis.europa.eu/news/rcn/128339_en.html [Accessed 2 October 2018].

⁶ Medpan.org. (2018). *Mediterranean challenges – MedPAN*. [online] Available at: http://medpan.org/mediterranean-realities/ [Accessed 2 October 2018].

⁷ Medpan.org. (2018). *Mediterranean challenges – MedPAN*. [online] Available at: http://medpan.org/mediterranean-realities/ [Accessed 2 October 2018].

Pressure	Effect	
Aquaquitura	Fisheries and the associated stocks of raw material required to feed	
Aquaculture	the fish	
Availability of resources	Reduces surface area available for MPAs and traditional stakeholders	
and the cost of energy		
Climate Change	Coastal erosion, spatio-temporal evolution of new marine species	
	Degraded landscapes, soil erosion, increase waste discharges to the	
Coastal development	sea, loss and fragmentation of natural habitats as well as a deterioration	
	of the state of vulnerable or endangered species	
Fishing	Decline of many fish stocks	
Marine transport	Accidental or deliberate pollution	
	Uncontrolled coastal zone development and its impact on the	
Tourism	degradation of seagrass meadows, through the use of water resources	
	and the production of solid wastes and sewage	

Table 1: The main pressures affecting the Mediterranean Sea⁸

1.5. Marine Protected Areas in the Mediterranean Sea

The pressures outlined in Table 1 influence the degree to which Mediterranean countries can reach Aichi Target 11.⁹ This target stipulates that "by 2020 ... 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes."¹⁰

The Natura 2000 network facilitated the designation of MPAs in European waters. As at the end of 2016, there were 1,231 MPAs and OECMs (Other Effective area-based Conservation Measures) in the Mediterranean Sea, which covered 179,798 km² that is 7.14 per cent of its surface water. Despite the increase from 2008, where only four per cent of the Mediterranean Sea was designated as MPA, there is still a lot to be done to achieve the Aichi Target 11.

Figure 2 shows the main features of Mediterranean MPAs. These characteristics were also evident in the countries that participated in the Cooperative Audit.

••••••

⁸ Medpan.org. (2018). Mediterranean challenges – MedPAN. [online] Available at: http://medpan.org/mediterranean-realities/ [Accessed 2 October 2018].

⁹ IUCN. (2018). Mediterranean Marine Programme. [online] Available at: https://www.iucn.org/regions/mediterranean/our-work/ mediterranean-marine-programme [Accessed 2 October 2018].

¹⁰ Cbd.int. (2018). [online] Available at: https://www.cbd.int/aichi-targets/target/11 [Accessed 3 October 2018].

More than Around 65 per cent three quarters Shallow waters Most of MPAs of MPAs have a of nationally home the majority safeguard more marine surface area designated MPAs of MPAs than two habitats of less than 50km² are over 10 years old

Figure 2: Characteristics of Mediterranean MPAs¹¹

In principle, it is not generally necessary that MPAs preclude socio-economic activities. According to MedPAN, only 0.04 per cent of the 179,798 km² designated conservation areas is a no-go, no-take or no-fishing zone.

The designation of MPAs in the countries represented in the cooperative audit has increased significantly. The designation of MPAs is, to varying degrees, influenced by the various economic situations and jurisdictional remits. Nonetheless, over the years, the participating countries have declared a number of MPAs, which constitute between 0.02 per cent and 99.6 per cent of the maritime area under their jurisdiction.

The designated MPAs ensure the protection of a number of habitats and birds, particularly those listed in the EU Habitats Directive (92/43/EEC), that are protected in areas of the Natura 2000 network. Moreover, most of the sites provide protection and conservation to more than one habitat or bird. In this regard, the majority of sites provide multi-protection. Reefs and sandbanks are the most common habitat in the MPAs of the five countries participating in this cooperative audit. On the other hand, some species are country specific, such as the bottlenose dolphin and the tufted ghost crab.

.....

¹¹ Medpan.org. (2018). Mediterranean MPAs – MedPAN. [online] Available at: http://medpan.org/marine-protected-areas/ mediterranean-mpas/ [Accessed 9 October 2018].



1.6. Audit focus and methodology

This cooperative audit sought to elicit good practices and issues of concern, which influence the sustainability of biodiversity in the Mediterranean Sea. Consequently, this cooperative audit aimed to determine the extent to which:

- a. Governments developed the relevant legal and strategic framework to conserve marine biodiversity;
- b. National authorities carried out the required 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.

Five of the participating SAIs, namely, Albania, Cyprus, Greece, Malta and Portugal carried out their respective national audits based on the aforementioned objectives during 2017 and 2018. The SAIs of France and Slovenia contributed towards the joint report findings from national audits completed in 2017. Thus, while acknowledging that developments would have materialised during the period 2017 to 2019, for the purpose of the cooperative audit, findings are being reported as exhibited in the respective outlined national reports.

The kick off meeting of the cooperative audit was held in Nicosia in December 2016. During this meeting, the participating SAIs agreed on the audit objectives and audit design matrix. Following this meeting, national audits were carried out and concluded by 2018. Figure 3 refers.





Figure 3: Timeline leading to the publication of the cooperative audit (2016 – 2019)

Figure 3 shows that the joint audit entailed cooperation between SAIs for a period of three years.

The attainment of the audit objectives entailed a number of methodological approaches which were applied to varying degrees by the partner SAIs. Collectively, the following were applied at the national level:

- Adherence to ISSAIs In most cases, national audits were carried out in accordance with the Standard for Performance Auditing, International Standards of Supreme Audit Institutions (ISSAI), namely ISSAI 3000.
- 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.
- c. 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, participating SAIs interviewed key officials within their respective national authorities
- 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 countries can benefit in adopting such measures for their respective national monitoring and conservation process.

At the cooperative level, participating SAIs (with the exception of France and Slovenia who performed independent national audits and are contributing to the joint report) harmonised their methodologies to ensure a common approach and timeframe for conducting the audit. In order to collect and assess comparable information on national governments' actions, the partner SAIs agreed on a common framework setting out the audit issues and corresponding audit questions to be addressed in the national audits, depending on the defined scope of individual audits at the national level. The full set of audit questions agreed upon is set out in Appendix II to this Report. To enable the compilation of this Report, participating SAIs completed a common matrix depicting national findings and conclusions. This enabled the identification of common issues. SAIs complemented this input through the identification of case studies from their respective national reports. Coordination of the cooperative audit entailed communication through emails, video conferencing and meetings at European Organisation of Supreme Audit Institutions (EUROSAI) WGEA events. Participating SAIs confirmed the facts and figures pertaining to their respective countries presented in this Report.

1.7. Report structure

Following this introductory Chapter, the Report proceeds to discuss the following:

- a. Chapter 2 discusses the legislative framework across Mediterranean countries.
- b. Chapter 3 evaluates the degree to which the strategic framework ascertains the sustainability of Mediterranean MPAs.
- c. Chapter 4 outlines the extent to which national authorities carried out the required assessments to determine the feasibility of designating sites as MPAs.
- d. Chapter 5 analysis the progress attained to the drafting of site-specific management plans and the implementation of measures to safeguard Mediterranean MPAs.
- e. Chapter 6 reviews the monitoring activities undertaken to ascertain that no irregular activity take place within MPAs and that current activities do not have an adverse impact on the status of protected sites.
- f. Chapter 7 summarises the overall conclusions of the cooperative audit.



Chapter 2: The legislative framework

2.1. Introduction

Participant Supreme Audit Institutions (SAIs) identify, in their respective national reports, that despite its comprehensiveness, the legal framework is in cases fragmented, subject to overlaps and in instances conducive to conflicting provisions. SAIs concluded that these circumstances result in national authorities encountering problems in designating and managing Marine Protected Areas (MPAs), as well as coordinating among them, which influences the efficient monitoring of the sites and the effective enforcement of the law. In view of the foregoing, this Chapter discusses the following:

a. the legislative framework adopted by participating SAIs; and

.....

b. the limitations of the legislative framework.

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

International, regional and national legislation regulate the designation, management and safeguarding of MPAs in the Mediterranean Region. This framework has been evolving on an European level since 1976 through the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, originally the Convention for Protection of the Mediterranean Sea against Pollution. Table 2 illustrates the development of the international regulatory framework as well as provides an outline of the main aims of the various pieces of legislation.

Year	Legislative framework	Aim	Countries (of participating SAIs) that are signatories
1976	Barcelona Convention (and Protocols 1976- 2004)	The key goal of the Convention is to reduce pollution in the Mediterranean Sea and improve the marine environment in the area, so as to contribute to its sustainable development.	AL, CY, EL, FR, MT, SL
1979	Birds Directive	The Directive aims for the conservation of all species of naturally occurring birds in the wild state. It covers the protection, management and control of these species and lays down rules for their exploitation.	CY, EL, FR, MT, PT, SL
1982	Bern Convention	The Convention aim is to ensure conversation of wild flora and fauna species and their habitats. Special attention is given to endangered and vulnerable species, including migratory species.	AL, CY, EL, FR, MT, PT, SL
1983	The Convention on Biological Diversity	The Convention aims for the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.	AL, CY, EL, FR, MT, PT, SL
1992	Habitats Directive	The Directive aims to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of member states.	CY, EL, FR, MT, PT, SL
1992	OSPAR Convention	The key goal of the Convention is to reduce pollution and to protect the marine environment of the North-East Atlantic.	PT
2008	Marine Strategy Framework Directive	The Directive aims to establish a framework within which Member States shall take the necessary measures to achieve or maintain good environmental status in the marine environment by the year 2020 at the latest.	CY, EL, FR, MT, PT, SL

Table 2: The international regulatory framework

The legislative framework portrayed by Table 2 is directly related to the designation and management of MPAs. Various other relevant legal provisions that broaden the scope of this framework, are included in additional legal instruments, which seek to regulate specific commercial and leisure activities within the Mediterranean Sea. These include the International Convention for the Prevention of Pollution from Ships (MARPOL) and the Common Fisheries Policy (CFP). The MARPOL is the main International Convention preventing pollution from ships while the CFP sets the rules for managing European-fishing fleets and for the conservation of fish stocks.

Participating SAIs of EU Member States reported that their respective country is a signatory to the United Nations Conventions and EU Directives outlined in Table 2 and have transposed these legal provisions in their national regulatory framework. Albania, as an EU candidate country since 2009, is not yet a signatory to EU Directives and is still in the process of transposing such provisions in national law. Nonetheless, all participating SAIs noted that subject to the limitations discussed later within this Chapter, the legal framework generally mandated their respective countries to designate and manage MPAs.

2.3. Limitations of the legal framework

Participating SAIs, through their national reports, highlighted a number of limitations in the legal framework, which are impinging on the designation and management of MPAs. These limitations relate to the definition of MPAs, fragmentation of duties and responsibilities, overlapping and conflicting provisions in different laws as well as coordination problems between stakeholders.

Definition of a MPA

The complex and fragmented regulatory framework makes it difficult to define what constitutes a Marine Protected Area. The legislative framework developed over the years represents the evolvement of knowledge as well as the international and regional institutions with respect to the protection of species and marine biodiversity. For example, the Habitats and Birds Directive, aims to protect specific species. On the other hand, the recently enacted Marine Strategy Framework Directive (MSFD) aims to protect the marine eco-system through various measures including MPAs.

Such evolvement constitutes a paradigm shift as the focal point becomes the marine eco-system and the biodiversity therein, which will support a wide spectrum of organisms rather than just specific species. Within this context, over time, a situation developed whereby the legislative framework encompassed different protection mechanisms and included a broad range of provisions to define marine protected areas. Table 3 reflects this situation.

Directive / Convention	Designation	Definition
Birds Directive	Special Protection Area (SPA)	Member States shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species in the geographical sea and land area where this Directive applies. ¹²
Habitats Directive	Special Area of Conservation (SAC)	A site of Community importance designated by the Member States through a statutory, administrative and/or contractual act where the necessary conservation measures are applied for the maintenance or restoration, at a favourable conservation status, of the natural habitats and /or the populations of the species for which the site is designated. ¹³
Marine Strategy Framework Directive	Marine Protected Areas	The establishment of marine protected areas, including areas already designated or to be designated under Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (5) (hereinafter referred to as the 'Habitats Directive'), Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (6) (hereinafter referred to as the 'Birds Directive'), and under international or regional agreements to which the European Community or Member States concerned are Parties, is an important contribution to the achievement of good environmental status under this Directive. ¹⁴
OSPAR Convention	Marine Protected Areas	Contracting Parties bordering the North-East Atlantic have nominated areas for which protective, conservation or precautionary measures have been established for the purpose of protecting and conserving species, habitats, ecosystems or ecological processes of the marine environment, both in the national waters as well as collectively in the areas beyond national jurisdiction.
The Council of Europe Bern Convention		Each Contracting Party shall take appropriate and necessary legislative and administrative measures to ensure the conservation of the habitats of the wild flora and fauna species, especially those specified in the Convention Appendices I and II, and the conservation of endangered natural habitats. ¹⁵
Convention on Biological Diversity	Protected Area	A geographically defined area, which is designated or regulated and managed to achieve specific conservation objectives. ¹⁶

Table 3: Protection mechanism defined in the MPA legislative framework

^{••••••}

¹² Curia.europa.eu. (2019). [online] Available at: http://curia.europa.eu/juris/celex.

jsf?celex=62005CJ0388&lang1=en&lang2=BG&type=TXT&ancre= [Accessed 18 February 2019]. ¹³ Curia.europa.eu. (2019). [online] Available at: http://curia.europa.eu/juris/celex.

jsf?celex=62008CC0226&lang1=en&lang2=Fl&type=TXT&ancre= [Accessed 18 February 2019].

¹⁴ Eur-lex.europa.eu. (2019). [online] Available at: https://eur-lex.europa.eu/LexUriServ/LexUriServ. do?uri=OJ:L:2008:164:0019:0040:EN:PDF [Accessed 18 February 2019].

¹⁵ Rm.coe.int. (2019). [online] Available at: https://rm.coe.int/1680078aff [Accessed 18 February 2019].

¹⁶ Cbd.int. (2019). Protected areas and the CBD. [online] Available at: https://www.cbd.int/protected/pacbd/ [Accessed 18 February 2019].

The common denominator implied by Table 3 is that a Marine Protected Area is a site that offers a spectrum of elements leading to the protection of a range of organisms whose sustainability depends on the good status of marine eco systems. The different designations attributed by the legislative framework suggest that MPAs encompass both SACs and SPAs. Similarly, all the provisions listed in Table 3 seek to provide a level of protection to the marine environment with the ultimate aim of ensuring its sustainability. However, despite of all these common elements, no uniform definition of what constitutes a Marine Protected Area is given. Matters were rendered even more complicated by national legislations setting up Marine Parks or artificial reefs.

The intricacy to define what constitutes a marine protected area is evident through the various definitions included in the database "MPAtlas", which is regarded as the most accurate and widely accepted tally of all MPAs.¹⁷ The complexity of defining what constitutes a MPA, was also evident at the initial stages of this cooperative audit, whereby participating SAIs found it difficult to coin a common definition of what constitutes a Marine Protected Area.

As a result of the absence of a clear definition of what constitutes a MPA, it has been observed that different countries allocate different meaning to the term. To overcome this problem, this audit adopted the broad definition outlined in Section 1.3. This situation influenced also, participating SAIs to determine the number of MPAs pertaining to the different regimes within the legislative framework.



The Malta Declaration, entitled "Assessing real progress towards effective ocean protection", in 2017 outlined that "the term MPA is now being used so loosely that it no longer connotes meaningful protection. As currently used, the term is a catchall bucket that contains everything from fully protected marine reserves to an area in which only one species is protected or one activity is disallowed. Even fishery management areas are counted as "protected" by some countries."

.....

¹⁷ The Malta declaration: Assessing real progress towards effective ocean protection.



Fragmentation and Overlap

While participant SAIs acknowledged the comprehensiveness of the existing legal framework, they reported that, to varying degrees, national authorities encounter implementation and site monitoring difficulties due to the fragmentation and overlap of the legal framework. As implied by Table 2, fragmentation occurs, as the legislative framework comprises United Nations (UN) Conventions, EU Directives and national legislation. This situation resulted in instances where different pieces of legislation designated the same site and species in it with protection status. Fragmentation further occurs when considering other complementary provisos, such as those regulating maritime industry and marine recreational activities.



SAI Greece noted that spatial plans were thematic and distinct by sector (e.g. tourism, fisheries and aquaculture etc.), without taking into account conflicting land uses, resulting in confusion with respect to spatial planning. Furthermore, due to the lack of a general spatial plan, overlaps of legislative provisions were noted, such as the ones regarding the protection of the natural environment, tourism, fishing, aquaculture and marine antiquities.

Three participating SAIs (Portugal, Malta and Greece) specifically raised concerns that such fragmentation is influencing the designation and ultimate management of Marine Protected Areas.



In Cyprus, the overlap of protection status in two MPAs, where multiple regulatory frameworks apply (EU Habitats and Birds Directives, national legislation and international Convention provisions) was not seen as a concern regarding the effectiveness of the protection regime. SAI Cyprus considered this situation as a reinforcement of the protection status of the areas.



Conflicting provisions

Two of the participating SAIs reported instances of conflicting provisions within the legal framework. The "EC Guidance on the implementation of the EU nature legislation in estuaries and coastal zones" published in 2011 recognises that individually or collectively, human activities in coastal and estuarine areas can potentially generate significant effects on the nature conservation objectives of estuaries and coastal zones.¹⁸ On the other hand, the aforementioned guidelines outline that the Habitats and Birds Directives do not preclude a priori, the possibilities for further development and use of estuaries and coastal zones within or around Natura 2000 sites. Instead they lay down stepwise procedures to ensure that any such developments are done in a way that is compatible with the protection of species and habitats of European importance for which the sites have been designated. In the case of projects of overriding public interest, and in the absence of alternative solutions, the Directive provides a mechanism that can allow damaging developments, provided that compensation and adaptation ensures that the overall coherence of the Natura 2000 Network is not compromised.¹⁹



In the current legislative framework governing the protection of marine areas in Greece, contradictory provisions were noted by the SAI regarding the management of the Marine Park of Zakynthos. These primarily relate to Law No 2971/2001 concerning coastlines, whose provisions are not always consistent with marine area protection. Similarly, the General Port Regulation 38 deregulates the rental of high-speed vessels without a specific starting point (Issue of Marine Space Carrying Capacity).

Coordination between the involved stakeholders

In situations where numerous stakeholders and competent entities are involved, it is critical that an effective coordination mechanism is established, so that no overlaps or gaps arise to the detriment of the conservation of MPAs. Two of the participating SAIs reported that, in instances, the complexity

¹⁸ Ec.europa.eu. (2011). GUIDELINES ON THE IMPLEMENTATION OF THE BIRDS AND HABITATS DIRECTIVES IN ESTUARIES AND COASTAL ZONES. [online] Available at: http://ec.europa.eu/environment/nature/natura2000/management/docs/guidance_doc.pdf [Accessed 19 February 2019]. page13.

¹⁹ Ec.europa.eu. (2011). GUIDELINES ON THE IMPLEMENTATION OF THE BIRDS AND HABITATS DIRECTIVES IN ESTUARIES AND COASTAL ZONES. [online] Available at: http://ec.europa.eu/environment/nature/natura2000/management/docs/guidance_doc.pdf [Accessed 19 February 2019]. page 7.



and broadness of the legal framework gave rise to coordination problems between the responsible national entities.

2.4. Conclusion

The legal framework regulating the designation, management and enforcement of MPAs is comprehensive and largely mandates national authorities to safeguard and conserve the marine biodiversity. However, the fact that the international legal framework has evolved over a period of 32 years, through the initiatives of different international, regional and national organisations, resulted in a broad legal framework. This situation caused concern to participating SAIs, to varying degrees, regarding the extent to which it is conducive to vertical and horizontal coordination among national as well as international stakeholders.



Albania has only one Marine Protected Area (MPA), the Karaburun-Sazan National Park. At least seven public institutions are known to have administrative functions in this area. Although the purpose of safeguarding the MPA is common, these seven entities mostly operate independently, without the necessary coordination and information-sharing. The impact of this segregation of responsibilities is noted by SAI Albania to be adverse for the efficiency of the park. management process.

At the outset, the legal framework provides a range of interrelated definitions of what constitutes a marine protected area. This state of affairs implies that countries are using the term as an allencompassing phrase to relate to any type of marine protection status. As mentioned above, because of this it was deemed necessary to agree to a common definition for the purpose of this audit, which encompasses all the various definitions adopted by participant countries.

The broad and complex legislative framework is in cases conducive to operational overlap. Within this vein, participant SAIs reported that the national authorities' responsibilities were not always coordinated effectively. This state of affairs mainly results as the legal framework is not integrated and is subject to fragmentation.



Chapter 3: Strategies

3.1. Introduction

The main objectives of the National Strategic Framework governing Marine Protected Areas (MPAs) is to ensure compliance with International law, through Multilateral Environment Agreements (MEAs), regional environmental law (example the European Union (EU) acquis) and national legislation in order to safeguard the sustainability of the marine environment.

This cooperative audit noted that most national authorities pertaining to participating Supreme Audit Institutions (SAIs) had formally adopted national strategies. On the other hand, these SAIs reported a number of issues, which, to varying degrees, influence the implementation of the respective national framework. This will in turn affect the designation and sustainability of MPAs.

Within this context, this Chapter discusses the following:

- a. The extent to which national authorities drafted and formally adopted MPA related strategies;
- b. The scientific input to the strategic framework;
- c. The definition of measurable targets;
- d. The existence of action plans and the appropriate level of resources to enable the full implementation of strategies.

3.2. Formal adoption of national strategies

The SAIs of Albania, Cyprus, Malta and Portugal reported that their countries have MPA strategies in place. Nonetheless, these SAIs raised various concerns relating the effectiveness of these documents.

Conversely, SAI Slovenia highlighted that the national strategy that will include strategic goals on (M)PAs is still in the process of being drafted.²⁰ SAI Greece outlined that in lieu of strategies, national authorities incorporated MPA related obligations in national law and special frameworks.²¹

²⁰ Draft National Environmental Action Programme 2030 (NEAP 2030).

²¹ These include the Specific Framework for Spatial Planning and Sustainable Development for Aquaculture and the strategic study on its environmental impact (B' 2505/2011) and the Specific Framework for Spatial Planning and Sustainable Development for Tourism and the strategic Study of its Environmental Impact (B' 1138/2009)). Source: Hellenic Court of Audit, 2018. Audit Report, "Marine Protected Areas in Greece", (Within the framework of the Cooperative Mediterranean Audit), page 15.

Table 4 below shows the strategic framework pertaining to the countries participating in this cooperative audit. In some cases, national strategies comprise of an overarching document, which is complemented and supported by other sector specific strategies. These circumstances prevailed in Malta and Portugal. On the other hand, in other countries, such as Cyprus, sector specific strategies are in place, which however are not integrated, whereas in Albania it was noted that the national strategy focuses on biodiversity rather than being MPA specific.

SAI	Strategic Document	Adoption Date	Period Covered
Albania	National Strategy for the Protection of Biodiversity	December 2015	2012 – 2020
Cuprus	Strategic Plan of the Ministry of Agriculture, Rural Development and Environment	August 2015	2016 – 2018
Cyprus	A strategy for the creation of artificial reefs	December 2011	Not defined in the strategy
	Programme of Measures	November 2016	2016 - 2022
	National Environmental Policy	February 2012	2012 - 2020
Malta	National Biodiversity Strategy and Action Plan	December 2012 ²²	2012 – 2020
	Integrated Maritime Policy	2015	2015 – 2025
Portugal National Ocean Strategy			2013 - 2020
Slovenia	National environmental action programme 2030 (NEAP 2030)	Being drafted	Till 2030

Table 4: National Strategic Frameworks

Source: SAIs national reports.

The foregoing implies that in some cases the government's long-term perspective, objectives and priorities in terms of prevailing risks and threats for MPAs are not properly documented. Moreover, in these circumstances, task ownership remains ambiguous.

.....

²² Era.org.mt. (2019). National Biodiversity Strategy & Action Plan. [online] Available at: https://era.org.mt/en/Pages/NBSAP.aspx [Accessed 8 February 2019].



3.3. Scientific input to the strategic framework

As will be discussed in the ensuing Chapter, scientific input is a key element to the compilation of national strategies. Most SAIs reported that their respective national authorities carried out the required scientific assessments relating to marine protected areas. However, certain limitations were noted in some cases.

3.4. Measurable targets

An effective strategic framework should include clear references relating to measureable targets and expected results. It is desirable that anticipated outcomes and impacts are, as far as possible documented in quantifiable terms. Nevertheless, SAIs Cyprus, Malta and Portugal reported that these requirements were not consistently met in their countries.

(

National strategies in Portugal were developed by a technical team coordinated at the national level by the Directorate-General for Natural Resources, Safety and Maritime Services (DGRM), the Regional Directorate for Spatial Planning and Environment, on behalf of the Autonomous Region of Madeira, and the Regional Directorate for Maritime Affairs, on behalf of the Autonomous Region of the Azores, based on scientific work coordinated by the Portuguese Institute for Sea and Atmosphere (IPMA). This work involved specialists from the Institute for Nature Conservation and Forests (ICNF), 11 universities, three state laboratories (Portuguese Environment Agency, Hydrographic Institute and National Laboratory for Civil Engineering) as well as to a non-governmental organization (SPEA – Portuguese Society for the Study of Birds). The DGRM, together with the Directorate-General for Maritime Policy and the Task Group for the Extension of the Continental Shelf, created conditions for the IPMA to coordinate and develop large-scale oceanographic campaigns, currently ongoing, for the management of offshore MPAs. Environmental indicators for monitoring will be proposed as a function of these campaigns.





In Cyprus, the national Strategy for the creation of artificial reefs was based on the scientific knowledge of the staff of the competent authority and the knowledge of and experience in other countries (especially in the Mediterranean) where similar programmes are being implemented. However, the audit undertaken did not identify the relevant documentation supporting that the Strategy was based on scientific research and results. Furthermore, the Strategy does not define implementation periods and performance indicators for the expected results.

Similarly, the Programme of Measures prepared according to the Marine Strategy Directive does not include specific timeframes for the implementation of the individual measures with the exception of a general reference for implementation of the proposed measures in the period 2016 to 2022.



The Integrated Maritime Policy (IMP) of Malta does not include Key Performance Indicators related to the measures proposed therein. According to SAI Malta, this potentially influences management direction as well as the monitoring function with respect to progress in relation of the IMP.

3.5. Operationalising strategies

Strategies provide the policy direction, which in turn needs to be translated into action plans, whereby government entities are allocated the necessary resources to be able to attain the targets established therein. To this end, SAIs Malta and Portugal noted that strategies were not supported with an action plan or with the allocation of the necessary resources.

SAI Portugal noted that, on a national level, there is a robust strategic framework in relation to marine protected areas. However, the operationalisation of the strategic framework is hindered as the required level of resources was still to be allocated, in particular with regard to the monitoring of the MPAs.



One of the sector specific strategies in Malta, namely the Integrated Maritime Policy, has not been formally operationalised through an action plan, which defines the key milestones and implementation responsibility. Furthermore, in this case, the absence of an action plan precluded the allocation of resources to enable the expedient implementation of this strategy. A similar situation with respect to the EU's Programmme of Measures, set of "new measures" concerning the Marine Strategy Framework Directive prevails. These measures relate to various issues, including biodiversity, seabirds, marine reptiles, mammals and seabed habitats, commercially exploited fish and shellfish, contaminants, marine litter as well as underwater noise. This situation implies that the commencement of these initiatives was precluded until such time that the appropriate level of resources was made available to national authorities. Prolonging the implementation of the PoMs "new measures", 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 fulfil the relative EU targets.



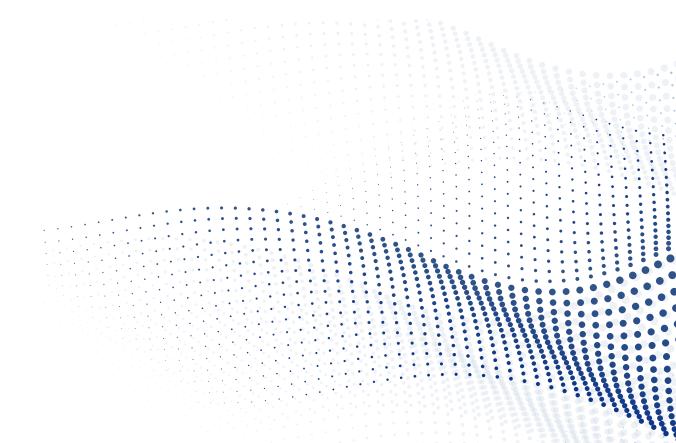
3.6. Conclusion

The strategic frameworks in place, generally, enable national authorities to embark on initiatives to ensure the sustainability of the marine environment within their respective jurisdiction. Moreover, national strategies embody the political will and are intended to outline the relevant outputs and impacts.

With three exceptions, participating SAIs acknowledged that countries have comprehensive sector specific strategic frameworks in terms of substance and scope. Notwithstanding the foregoing, this cooperative audit identified some issues where national strategies could be further strengthened to ascertain that their impact is optimised.

In some cases, strategies were deemed to be fragmented or that they do not relate to the relative outputs and outcomes. In addition, some SAIs commented that in some cases national strategies were not supported by action plans and the appropriate level of resources.

The foregoing indicates that national strategies appropriately consider national and international obligations as well as the implied political will to ensure the sustainability of the marine environment. Nonetheless, in some cases, opportunities for improvement were identified, so that implementation of the respective national strategic framework can be more expedient and effective in terms of project management, allocation of resources as well as monitoring of outcomes and impacts.





Chapter 4: Assessments of the marine environment for designating MPAs

4.1. Introduction

The gathering and assessment of scientific data relating to marine habitats and species is a prerequisite to designating Marine Protected Areas (MPAs). Moreover, knowledge of the threats and risks faced by these species influences competent authorities' decisions regarding policies and action plans to safeguard the marine environment. The EU Directives (92/43/EEC and 2008/56/EC) require Member States to undertake assessments of the marine environment and species to determine their current status and to provide a base line for future monitoring purposes. This Chapter of the Report discusses the degree to which the countries of participating Supreme Audit Institutions (SAIs) have completed studies to assess the feasibility of designating MPAs and whether the assessments undertaken were subject to any limitations.

4.2. Quality of assessments conducted

Generally, all participating SAIs commented positively that respective national authorities carried out assessments prior to the designation of MPAs. To this effect, SAIs Malta and Portugal noted that assessments mainly followed generally accepted practices, which include stakeholder involvement, public consultation, marine jurisdiction considered, timeliness and the extent of implementing recommendations proposed in these studies. However, as outlined below, some participating SAIs also noted that these assessments were subject to a number of shortcomings.

While all SAIs noted that national authorities carried out assessments, three major shortcomings characterised these studies. These limitations relate to the scope of these assessments, particularly with respect to that these assessments did not cover all the protected species listed in the legislative framework, had a limited technical scope as certain types of threats and pressures were not specifically assessed and the studies did not cover all waters within national jurisdiction.

Scope of Assessments

Two of the participating SAIs identified limitations in the scope of the assessments of the marine environment performed by competent authorities. Such limitations were, in one case, also noted by the European Commission. Such scope limitations lead to an insufficient number or extent of marine protected areas or the inadequate conservation of protected species of marine fauna and flora.



SAI Malta noted that the minimal progress registered by Malta up to 2015 in designating MPAs, 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). During 2016, a further nine sites were designated as MPAs raising the total marine protected sites to a third of the FMZ, protecting all the species as stipulated by the Natura 2000 Directives.



SAI Cyprus noted that according to a recent review by the European Commission, 65 per cent of marine species and habitats of Community interest require the designation of further "Natura 2000" sites in order to complete the network in the country. Similarly, further scientific research is required with respect to 13 per cent of marine species and habitats to determine the most appropriate sites to be added to the network.

Technical limitations

Three participating SAIs noted that while national authorities carried out the relevant assessments prior to the designation of MPAs, some of these studies had technical limitations. Table 5 outlines the main issues noted by participating SAIs.

Table 5: Technical limitations noted by participating SAIs

Country	Issues noted	
Cyprus	Certain types of threats and pressures were not specifically assessed such as the	
	impact of coastal activities and coastal tourism infrastructure development.	
Malta	In cases, desk research was influenced by the limited data harmonisation and	
	information availability. This situation influenced the deployment of specialised	
	equipment in adequate areas.	
Portugal	In the initial cases, the studies that supported the designation were not systematised	
	and, in some, stakeholder's involvement and public consultation did not take place.	
	Those issues have been or are being overcome in the review processes currently	
	under way.	

International MPA networks

.....

The World Summit on Sustainable Development, the International Union for Conservation of Nature's (IUCN's) World Commission on Protected Areas, the Convention on Biological Diversity, and the G8 group of Nations have all called for establishing a global system of MPA networks by the year 2012. Yet global progress on building marine protected area networks has been slow, in part because they embrace a range of issues greater than conservation alone. For conservationists and natural resource managers, identifying the conservation actions needed to establish MPA networks can be a difficult process, but including concerns outside their immediate sphere of experience can be even more challenging and complex.²³

In view of the foregoing, a good practice noted is that France, Italy and Monaco, on 25 November 1999 signed an international agreement for the creation of a sanctuary for marine mammals in the Mediterranean (Pelagos). The agreement entered into force on 21st February 2002 and is the only international marine protected area that includes high seas for marine mammals.

²³ Cbd.int. (2018). [online] Available at: https://www.cbd.int/doc/pa/tools/Establishing%20Marine%20Protected%20Area%20 Networks.pdf [Accessed 3 December 2018].

On the other hand, SAIs Cyprus, Malta and Portugal reported that their countries did not yet develop MPA networks with neighbouring countries.

*

To date, Malta has no formal agreement with its neighbouring countries with respect to SPAMIS. According to SAI Malta, the main reasons inhibiting the establishment of MPA with neighbouring countries include the ongoing negotiations between Mediterranean countries on national marine jurisdiction and boundaries; political difficulties, particularly those relating to North African countries, that have shifted downwards marine conservation priorities; the fact that Malta has not yet extended assessments of biodiversity within the high seas; work and funds being focused on the Maltese waters to establish and manage MPAs within Malta's legal jurisdiction.

4.3. Conclusion

This Chapter has shown that participating countries have carried out assessments to designate MPAs. However, resource allocation, technical limitation and diplomatic issues hindered participating countries from broadening the scope of their respective studies.

The undertaking of assessments is considered as a costly endeavor as it entails the deployment of specialised technical resources over a considerable time in national waters. Moreover, the Mediterranean Sea is surrounded by other countries, which are not party to the legislative framework endorsed by the participating SAIs. Such a situation hinders countries from extending their collaboration with neighbouring parties to carry out research in high seas. This situation is further compounded since a number of countries have not yet declared their Exclusive Economic Zones.



36

Chapter 5: Design and Implementation of Management Plans

5.1. Introduction

The designation of Marine Protected Areas (MPAs) would be a futile exercise unless the necessary measures are in place to facilitate the protection of the biodiversity therein. To this end, both the legislative and strategic frameworks outline various mechanisms, such as site-specific plans and measures. These measures should be designed in a way that balances conservation and economic interests, which are usually conflicting. Other legislative provisions, such as those related to shipping and fishing activities outline parameters, which are intended to set an equilibrium between the main competing interests.

For EU member states, Directive 92/43/EEC applies article 6 which specifies that "for special areas of conservation, Member States shall establish the necessary conservation measures involving, if need be, appropriate management plans [...] and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements" of the natural habitat types and the species defined in the Directive. The Directive also stipulates that "Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated".

In view of the above, this Chapter discusses the following:

- a. progress in the implementation of site-specific management plans and other measures; and
- b. Management Plans and Programme of Measures (PoMs) limitations as reported by participating Supreme Audit Institutions (SAIs).

5.2. Site-specific management plans and measures

Management Plans aim to identify the environmental significance of the protected area, while clearly establishing the management objectives. These plans also indicate the actions to be implemented while retaining flexibility to cater for unforeseen events, which might arise during the currency of the plan. To facilitate their implementation, management plans may include detailed information on zoning as well as visitor and business plans. Nonetheless, the Management Plan remains the prime document from which other plans flow, and it should normally take precedence if there is doubt or conflict.²⁴

SAIs participating in this cooperative audit reported that their respective countries either have compiled or are in the process of drafting the Management Plans. In some cases, these plans are still subject to approval or require the enactment of a legal mandate to enable implementation. One SAI also raised comments about the limitations within the PoMs pertaining to its country. PoMs are mandatory for European Union (EU) Member states and seek to contribute or facilitate site-specific management in terms of the Marine Strategy Framework Directive (MSFD).

Table 6 portrays the extent of progress attained by participating countries with respect to management plans pertaining to sites under audit.

••••••

²⁴ Source: https://portals.iucn.org/library/efiles/documents/pag-010.pdf as at 5 February 2019.

Country	Number of sites under audit	Number of formally approved management plans	Main reasons for outstanding management plans
Albania	1	1	NA
Cyprus	8	6	In one case, (Nissia site) no Management Plan is to be prepared, as the competent authority considers the existing legislative provision as adequate for the protection of the site.
Cyprus			In the case of Moulia site unresolved objections raised during the consultation phase led to the suspension of the procedures for the preparation of Management Plan.
France	2	2	NA
Greece	156	0	Management Plans have been drawn up, which, however, have not been approved and thus, do not bear legal effect.
Malta	14	0	National authorities are in the process of drafting management plan and the deadline for adopting these plans has been extended from 2017 to 2020. In the absence of site-specific management plans, national authorities are in the process of implementing the PoMs in terms of the MSFD.
Portugal	35	35	Each MPA has a planning instrument, including management measures but with few measurable objectives and effective indicators. In the view of these shortfalls, these plans are currently under review.
Slovenia	1	1	One national Management Plan (Natura 2000 Management Programme 2015-2020) for all the designated Natura 2000 sites (355 sites: 343 terrestrial sites + 12 terrestrial and marine sites). ²⁵

Table 6: Progress attained by participating countries with respect to site-specific management plans

Table 6 illustrates the mixed results attained by Mediterranean countries with respect to the existence of management plans concerning the MPAs under audit. On the positive side all SAIs reported that the drafting of management plans has either commenced or been completed. However, four SAIs noted that for various reasons, has been either delayed or even stalled.

.....

 $^{\rm 25}\,$ All the Natura 2000 MPAs are next to the coastline or include a part of it.



On a general level, SAIs noted that until appropriate site-specific management plans are adopted, it will be difficult or even impossible, for the respective national competent authorities to ensure the protection and sustainability of marine biodiversity within these sites. Prolonging the adoption and implementation of management plans also hinders surveillance for enforcement purposes, as national authorities will not have the legal or operational basis against which to carry out such a function.

5.3. Management plans, including PoMs limitations

Generally, accepted practices outline that the effectiveness of management plans is greatly dependent on a number of factors. These include the assignment of clear responsibilities for the various tasks included therein, the setting of key performance indicators (KPIs) with respect to outputs and outcomes, the definition of key milestones and the appropriate deployment of resources. Management plans should also address in detail key operational aspects.

The above criteria should also be considered in the preparation of the Programme of Measures that EU Member States are obliged to draft, adopt and implement with respect to attaining "good environmental status" by 2020 of marine waters within respective jurisdictions in terms the Marine Strategy Framework Directive.

Chart 1 summarises the limitations identified by SAIs regarding the design and implementation of Management Plans and PoMs. In some cases, SAIs expressed concerns, despite that respective countries had not yet formally adopted Management plans or PoMs.

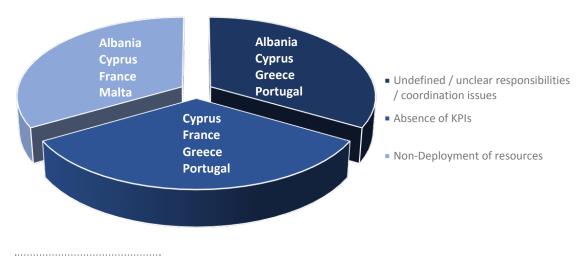


Chart 1: Management Plans and PoMs limitations²⁶

²⁶ Analysis relating to Slovenia could not be included as the scope of information audited differs from the other countries.



Chart 1 shows the three main limitations are influencing the effectiveness of Management Plans and PoMs. Four SAIs reported that the Management Plans or other measures pertaining to MPAs under audit did not clearly identify or allocate implementation responsibilities. SAIs Albania, Cyprus, Greece and Portugal noted that these issues are translating themselves into coordination concerns among the respective implementing national authorities.



Contrary to other designated sites in Cyprus, in the case of Akamas peninsula possible fragmentation of responsibilities was noted by the SAI, due to the involvement of a number of responsible bodies. These bodies appear to act in consultation with other stakeholders yet independently of each other. The involvement of four national responsible bodies and the preparation of five distinct management plans for the terrestrial and marine areas, based on different legislation, pose risks of weaknesses in coordination, the implementation of plans and their effectiveness.





The Hellenic Court of Audit noted that the draft management plans do not include either measurable targets or specific measures and actions to address risks and threats to specific habitat sites (Posidonia meadows - Habitat Type 1120, Coastal Lagoons - Habitat Type 1150 and Reefs - Habitat Type 1170) in selected areas, since the roles and responsibilities have not been clearly defined, while the measures included in the plans have not been selected after a relative cost-benefit analysis. More importantly, it is not clarified which bodies have drawn up the management plans and why these have not been approved.



Most SAIs reported that the resources allocated for the implementation of the management plans and PoMs are not adequate, therefore causing difficulties in the conservation efforts for MPAs. Nevertheless, some instances of good practice were identified with regard to the implementation of the initiatives in these plans, particularly with regard to public awareness actions and the establishment of exclusively dedicated bodies.



SAI Cyprus outlined that financial resources are generally available through the state budget, however the competent authority experiences staff shortages that hinder effective supervision of MPAs.

Nevertheless, there are some measures in place to raise public awareness. Also,, with the exception of Akamas penisula, the audit did not reveal particular coordination gaps as, generally, the competent authorities identified in the management plans have their responsibilities clearly defined.



SAI Malta reported that the national competent authority 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. This implies that while there is commitment in reality implementation of the measures is proving challenging.

The SAI also noted that, through the Programmes of Measures, the national competent authorities are in the process of implementing measures to raise public awareness with respect to protected species within MPAs.



SAI France highlighted that in the case of Port-Cros Fichier Park progress still needs to be made by the park in its administrative and financial management, even if significant improvements have been made since 2015. The Cour des Comptes recommended that the park is to rapidly improve the reliability of its assets, strengthen its system for managing budgetary and accounting risks, pursue its strategy of diversifying its own resources, make better use of its property assets, as well as regularise the conditions for making housing available to its staff. Notwithstanding the above weaknesses, the SAI noted that France is the only major maritime country to have an agency dedicated exclusively to marine protected areas. This set-up has enabled the Agency to become an essential partner of the International Union for Conservation of Nature (IUCN) in less than 10 years and to be quickly recognised by its peers. During the investigation, the Cour des Comptes was able to perceive a certain scepticism regarding a loss of international visibility of France's actions in the field of marine protected areas due to changes in this set-up.

5.4. Conclusion

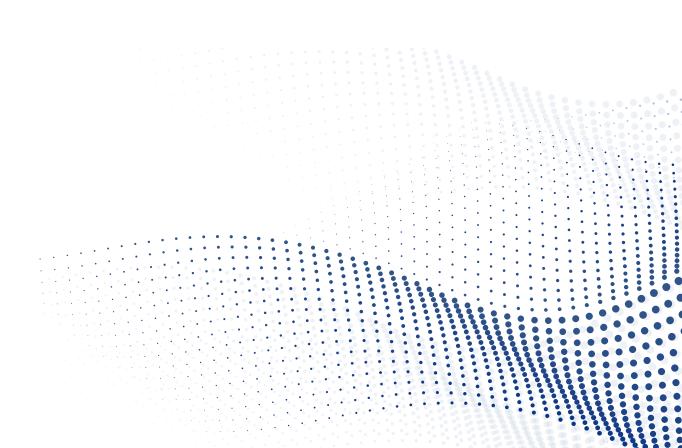
The designation and management of MPAs is a complex issue, involving many stakeholders with competing interests and necessitates that national authorities allocate significant resources to this end. Therefore these factors should be appropriately considered, otherwise, the designation of MPAs, even if based on solid scientific evidence and research will remain an end in itself rather than encourage sustainability of the marine environment through striking a balance between conservation and blue growth.

In this respect, the adoption and implementation of site-specific management plans is considered of paramount importance. Such plans constitute good practice and are advocated by the relevant EU Directives. SAIs participating in this cooperative audit presented mixed results with respect to the adoption of site-specific management plans. A good practice identified relates to actions for increase public awareness of the marine life being protected within particular MPAs.

On the other hand, SAIs detected a range of technical and logistical limitations and in cases, the complete absence of management plans. Such circumstances hinder the effective implementation and enforcement to ensure the sustainability of marine protected areas.



SAI Albania identified that there have been no evaluations on the resources needed to implement the management plan pertaining to Karaburun - Sazan. However, the SAI noted that although not yet at the required levels, there are measures to increase public awareness relating to marine biodiversity.





Chapter 6: Monitoring of Marine Protected Areas

6.1. Introduction

In order to ensure that Marine Protected Areas (MPAs) are protected from the effect of the various economic and recreational activities undertaken within the Mediterranean Sea, appropriate legislative provisions and management plans have been put in place. Enforcement, as the main means of ensuring the appropriate implementation of these measures, is essential for the effective management of MPAs and may take the form of surveillance, policing and prosecution. Traditionally, to discourage violators and establish compliance, enforcement has been mainly achieved through citations and penalties. The level of such enforcement and the surveillance mechanisms employed by national authorities may vary significantly. These tools can range from high-tech mechanisms to more community-based strategies. The selection of the surveillance tool depends on the strategies in place, namely budget availability, management capacity and the characteristic of each MPA.²⁷

The EU Marine Strategy Framework Directive requires member states to monitor national waters, on a periodical basis, to determine the progress attained with respect to attaining "Good Environmental Status". Similarly, pieces of national legislation, such as those relating to bunkering and fisheries, requires that monitoring in relation to these activities take place.

In view of the foregoing, this Chapter discusses:

- a. Whether adequate enforcement mechanisms are in place in the countries of participating
 State Audit Institutions (SAIs) ensue the sustainability of Marine Protected Areas; and
- b. Operational issues that are hindering effective monitoring.

6.2. Extent of Monitoring and Enforcement

The Supreme Audit Institutions (SAIs) of Albania, Cyprus and France recognised in their Reports that a formal type of monitoring system is in place to supervise activities within Marine Protected Areas. The SAI of Portugal found that the monitoring, surveillance and enforcement functions are distributed among several entities and that they are not always well coordinated or effective.

²⁷ Causey, B. (1995). Enforcement in marine protected areas. Marine Protected Areas, pages. 119-148; Openchannels.org. (2019). Marine Protected Area Enforcement | OpenChannels: Sustainable Ocean Management and Conservation. [online] Available at: https://www.openchannels.org/top-lists/marine-protected-area-enforcement [Accessed 11 February 2019].

On the other hand, the other two participating SAIs, namely Greece and Malta remarked that either the monitoring systems are not yet established or surveillance in MPAs is of an incidental and reactive nature.

F

SAI Malta outlined that the competent authorities' compliance surveillance function is heavily dependent on reports drawn up by third parties who operate vessels within Maltese waters, including other entities as well as fishermen, divers and Non-Governmental Organisations (NGOs) as part of citizen science initiatives.

The audit of SAI Slovenia revealed that in the period of 13 years at least EUR 14.3 million was spent for management of the St Jernej Canal and disclosed several inefficiencies, such as illicit mooring of more than a hundred vessels to illegally set piers and buoys. Many of the vessels in the Canal are abandoned, damaged and fully or partially sunk which is considered a potential danger with possible harmful effects. Within a span of more than 12 years, the Government of the Republic of Slovenia and the Ministry of the Environment and Spatial Planning failed to carry out activities to remedy the concerned situation. The ministry did not exercise a single supervision procedure for removing the illegally set piers, mooring buoys and vessels from the Canal, nor did it carry out a procedure in order to find out when the piers and mooring buoys were actually set and whether any legal base for their removal existed.

As the audit report was issued, the Municipality of Piran and the company Soline commenced implementation of activities (exercising supervision, and removing abandoned vessels along the shore). The Ministry of the Environment and Spatial Planning started implementing control as well.

With respect to the monitoring of the Marine Park of Port Cross Fichier, SAI France highlighted that environmental monitoring and policing activities on land and at sea are at the core of the Park's mission and are implemented in accordance with the objectives of the contrats d'objectifs (COB). The park gives priority to public information and awareness-raising actions over sanctions. Park authorities also give due importance to violations of professional or recreational marine fisheries. In 2016, on the island of Port-Cros, the competent authority recorded 550 offences on land and at sea.

6.3. Operational issues influencing enforcement action undertaken

Regardless of the extent of monitoring undertaken, the SAIs participating in the cooperative audit remarked that various issues are influencing the degree to which the national competent authorities can embark on enforcement actions. Table 7 outlines the various operational issues that are hindering effective enforcement.

Table 7: Factors influencing the enforcement function within MPAs

	Albania	Cyprus	France	Greece	Malta	Portugal
Regular and structured monitoring	Х	Х	Х			
No monitoring undertaken				Х		
Monitoring is reactive and of an incidental nature					Х	
Lack of coordination	Х	Х				
Limited resources		Х			Х	Х
The non-adoption of site-specific management plans					Х	
Inadequate patrols and recording of information		Х				

Table 7 shows that SAIs Albania, Cyprus and France reported that the respective national competent authorities' monitoring regime is regular and structured in the protected sites under review. Conversely, SAI Greece reported that no monitoring of the MPAs is undertaken. SAI Malta outlined that in the sites reviewed monitoring is of an incidental and reactive manner. SAI Portugal mentioned that all MPAs should have resources to undertake an effective monitoring and recommended that a national global report on the monitoring of the MPAs should be prepared and presented.

Coordination is a core element to ascertain that the mechanisms in place work together effectively. Nonetheless, SAIs Albania and Cyprus commented that while their respective countries have monitoring mechanisms in place, coordination problems between national entities persist. Furthermore, SAIs Cyprus, Malta and Portugal reported that the monitoring and enforcement function is negatively influenced through the inadequate level of resources available to national authorities, while SAIs Malta outlined that the delay in the adoption of site-specific management plans is hindering enforcement, which ends up being incidental and reactionary.



SAI Cyprus reiterated its recommendation of a past audit, where the need to enhance cooperation between Department of Fisheries and Marine Research (DFMR) and the Port and Marine Police with respect to the monitoring of illegal fishing, especially during the night, was highlighted. Although there was agreement regarding the better utilisation of patrols of the Port and Marine Police to achieve effective control of fishing activity and improve cost savings, the situation remains unresolved.

Apart from coordination issues, the SAI also noted various further weaknesses within the monitoring function. These include inadequate patrols and incomplete recording of relevant information. The monitoring of marine protected areas by the Department of Fisheries and Marine Research is not adequately documented, as patrol data are not readily available and incomplete information is kept. There are significant weaknesses in the mechanism for enforcing restrictions and other legal provisions in marine protected areas, due to substantial limitations on the annual number of patrols and the hours during which these are carried out.

•

SAI Portugal remarked that, although surveillance is regularly conducted in several MPAs, the inspection carried out by the Institute for Nature Conservation and Forests (ICNF) in a few of the Natural Parks and Nature Reserves, lacks the means to extend this action to the marine environment. In the case of the Litoral Norte Natural Park, the monitoring teams (guards) are not equipped with the means (vessel) that allows them to carry out inspections or monitoring actions at sea. In the Nature Reserve of the Lagoons of Santo André and Sancha, which comprises the two Special Protected Areas (SPAs), the monitoring of the marine area has been non-existent. In the contradictory procedures concerning the national audit, the ICNF stated that 'The exiguity of the marine areas of the Litoral Norte Site of Community Importance (SCI) and the Nature Reserve of the Lagoons of Santo André and Sancha (marine area of the Litoral Norte Natural Park) extends to a distance of more than four kilometers from the coast.

÷

SAI Malta outlined that the national competent authority is still in the process of setting up its facilities and resources relating to monitoring and enforcement. Administrative capacity weaknesses prevail among other National Authorities involved in safeguarding the marine environment, namely the Environment and Resources Authority (ERA), the Department of Fisheries, the Armed Forces of Malta and the Civil Protection Department. This situation inhibits national authorities from ascertaining the tangible commitment of stakeholders, particularly with respect to the monitoring of national waters.

ŧ

SAI Greece remarked that the absence of site-specific approved management plans hinders the monitoring of the overall protection of Marine Protected Areas. In the absence of site specific plans, monitoring is not site-specific and is being undertaken as part of the wider institutional framework for their protection. Nevertheless, the Hellenic Court of Audit reported that competent authorities did not submit the relevant monitoring reports to confirm the execution of any type of surveillance programmes. As a result, the extent to which the national competent authorities are monitoring MPAs, as part of the wider institutional framework cannot be confirmed.

6.4. Conclusion

The various economic and recreational activities undertaken within the Mediterranean Sea, to varying degrees, threaten the habitats and species within MPAs. This cooperative audit has identified a number of good practices relating to the monitoring and enforcement of specific MPAs. However, to date, the majority of participating SAIs noted that mitigating and dealing with threats to MPAs remains problematic, for four main reasons, namely the absence of site-specific management plans or similar management measures, administrative capacity weaknesses, coordination between national authorities as well as minimal monitoring and enforcement initiatives.

In this respect, national authorities highlighted the need to strengthen their administrative capacity to enable them to implement the measures enlisted within the strategic framework. This is essential for the national competent authorities' ability to fulfill their obligations in terms of national, EU and international commitments.



Chapter 7: Conclusions and Recommendations

The Mediterranean Sea encompasses the coast of 21 countries and covers about 2.5 million km2. While the protection of coastal waters, to varying degrees, is seen as a national issue, conservation of the marine environment through mechanisms such as the designation of Marine Protected Areas (MPAs) has a cross-border dimension. MPAs aim to attain, as far as possible, an equilibrium between economic activities and the conservation of the marine eco systems. The European and International Regulatory frameworks recognise the need for conservation and encourage the sustainable use of oceans, seas and marine resources. In this respect, the 14th UN Global Goal for Sustainable Development relates to life below water and is particularly relevant.

This cooperative audit revealed that the legal framework regulating the designation and management of MPAs, as well as enforcement of measures relating to these areas, is comprehensive and largely mandates national authorities to safeguard and conserve the marine biodiversity. However, as the international legal framework has evolved over a period of 32 years, it is unavoidably very broad and in some cases is conducive to operational complexities and overlap. Moreover, the legal framework does not provide a uniform definition of what constitutes a marine protected area, but rather provides a range of interrelated definitions. This implies that countries are using the term MPA as an all-encompassing phrase relating to any type of marine protection status.

The operationalisation of the legal framework is reflected in the national strategy of each country. Supreme Audit Institutions (SAIs) participating in this cooperative audit acknowledge that there is a strategic framework in place and that it generally enables national authorities to embark on initiatives to ensure the sustainability of the marine environment. Nevertheless, weaknesses were identified within the strategic framework, mainly relating to the fragmentation of national strategies, generic references to outputs, outcomes and impact of initiatives outlined therein, the absence of action plans to support the implementation of strategies as well as the non-allocation of the appropriate level of resources. In a similar vein, participating SAIs reported that their respective countries have carried out the necessary site assessments before designating MPAs. However, resource allocation, technical limitations and diplomatic issues hindered participating countries from broadening the scope of their respective studies.

SAIs participating in this cooperative audit presented mixed results with respect to the adoption of site-specific management plans. These results ranged from technical and logistical limitations to the complete absence of management plans. Such circumstances hinder national authorities from effectively implementing site-specific measures.

On the basis of management plans, countries can develop the relative surveillance and enforcement actions. This cooperative audit identified a number of good practices relating to the monitoring and enforcement of specific MPAs. However, the majority of participating SAIs noted that to date mitigating and dealing with threats to MPAs remains problematic, for three main reasons, these being the absence of site-specific management plans or similar management measures weaknesses in administrative capacity and problems in the proper coordination between national authorities.

It is acknowledged that designating, managing and enforcing the regulatory framework concerning MPAs is a complex matter, involving many competing interests and necessitating that governmental entities allocate significant resources. Until such time that these elements are in place, the good work undertaken to designate MPAs will remain an end in itself, at the detriment of losing the equilibrium between conservation of the marine environment and blue growth.

Recommendations

In view of the findings and conclusions emanating from this cooperative audit, this Report is proposing a number of strategic recommendations. The following proposals are aimed at national authorities responsible for the designation, management and monitoring of MPAs:

- Mediterranean countries should aim to adopt a common definition of what constitutes a Marine Protected Area. This would enhance cross-jurisdiction cooperation, facilitate data collection and enable countries to better gauge their performance in the designation and management of MPAs through comparative analysis and set benchmarks.
- 2. Where circumstances permit, countries should consider establishing Specially Protected Areas of Mediterranean Importance (SPAMI) within the Mediterranean high seas. This would further extend the network of marine protected areas within the Mediterranean. As a prerequisite, countries are encouraged to strengthen the level of cooperation and coordination on a bilateral and multilateral basis.
- 3. The strategic framework relating to MPAs should be strengthened. To this effect, national strategies are to refer to the expected outputs, outcomes and impacts of the strategic objectives. Furthermore, where necessary, action plans should be drawn up to reflect the strategic vision and subsequently allocate the necessary resources. This would better enable the expedient implementation of the measures listed in the strategic framework.
- 4. National authorities are encouraged to compile site-specific management plans as a matter of priority. This will encourage national authorities to embark on proactive approaches to ascertain the sustainability of the designated MPAs.
- 5. National authorities are to consider compiling site-specific monitoring and enforcement plans, which embrace risks analysis principles. These plans are to detail the monitoring approaches to be adopted, the frequency of inspections as well as the administrative capacity requirements. Such plans will contribute to more effective and transparent enforcement.

Appendices

•

•••

• • • •

.

.....

.....



Appendix I: Abstracts of national audits

Abstract SAI Albania

Audit Name: Marine Protected Area Audit in Albania, Karaburun-Sazan National Park

Albania has only one Marine Protected Area (MPA) which is the Karaburun-Sazan National Park in the south of the country in the city of Vlora. The main public institutions that have administrative functions in this area are the Ministry of Environment, the Ministry of Defense, the National Agency of Protected Areas with its regional branch in Vlora (Vlora RA), the National Coast Agency, the National Tourism Agency, the Fisheries Inspectorate and the Regional Environmental Inspectorate. All these entities by their jurisdictional affiliation are essentially aimed at safeguarding the MPA. Although the purpose is common, these units mostly work independently, without coordination between them, and there is a lack of information sharing, thus affecting the level of efficiency of the park management process. This situation within the administration of the MPA and the overlap or lack of cooperation between the actors involved is caused by the longstanding lack of a proper regulatory framework for protected areas. Since a proper agency responsible for the protected areas (which was only established in 2015) MPAs were managed through the separate implementation of the legal framework pertaining to the respective public body. In 2015 a Management Plan (MP) was adopted for this area with clear schedules and objectives categorized according to the interest and environmental value of this area, but it was not linked to an action plan with specific measures and actions needed to be taken to achieve these objectives.

The Management Plan was drafted under the project "Improving Coverage and Effectiveness of Marine Areas Management" funded by the Global Environment Facility (GEF) and the United Nations Development Program (UNDP). The administration of this park was not a government priority. If this Management Plan was not supported by this project it's objectives could be considered too ambitious to be implemented only by the Regional Administration of Vlora. Given the very limited capacities of Vlora RA both in human and financial resources (no investments foreseen for 2015-2017) SMART criteria were not developed when drafting the objectives of this MP to analyse if they could be met with the conditions and the own resources of Vlora RA during the ongoing implementation process of this MP. Due to the limited competencies and resources that this RA has it fails to carry out an effective monitoring and control process of the area. Specifically Vlora RA does not have accurate and official data and statistics on the number of visitors and divers who access the park, fish species, fishing boats etc, because:



- there is lack of a financial mechanism which in addition to generating revenue from ticket sales would also make it possible to control user flows in the park. In this regard we also mention the fact that at the beginning of drafting the Management Plan no measures have been taken to carry out a study on the Sazan-Karaburun capacities for the users;
- the current regulatory framework doesn't acknowledge the Vlora RA as the main entity that should give official permissions for individuals or different economic operators who wish to practice any kind of activity in the park (such as restaurants, divers, and tourist operators);
- there is a lack of cooperation between the stakeholders involved in the administration of this area;
- Vlora RA has very limited financial and human resources for the proper administration of this area (this process becomes more difficult during the touristic season in spring and summer).



Abstract SAI Cyprus

Audit Name: Management of Marine Protected Areas in Cyprus

The Republic of Cyprus has defined an extensive and appropriately justified network of marine protected areas, for many of which relevant management plans have been prepared. The conservation status of habitats and marine fauna and flora species, as well as the environmental status of coastal waters, are monitored in accordance with the provisions of EU legislation and their future prospects do not display worrying trends.

However, the audit revealed several weaknesses in the adequacy and management of marine protected areas, the major of which may be summarised as follows:

- The European Commission has assessed that further "Natura 2000" areas need to be designated in order to complete the network in the country, whereas for 13 per cent of marine species and habitats, further research is needed to identify the most appropriate sites to be added to the network.
- There is no integrated national strategy for the management of marine protected areas, resulting in a fragmentation of the Republic's efforts to protect the areas and the species and habitats found therein.
- Human activities on land and in the coastal zone have not been adequately evaluated in the vulnerability and risk assessments carried out by the competent bodies.
- No management plans have been finalised for all MPAs, and, in the two cases where such plans are in place, there is no legal basis for the implementation of the measures included therein. Measures and targets included in management plans are not precise, and inadequate evaluation and follow-up mechanisms were noted.
- The monitoring of marine protected areas is not adequately documented, and there are significant weaknesses in the mechanism for enforcing the protective measures stipulated in the management plans.



In order to address the issues above, we recommended the following:

- Identification of new or extension of existing marine areas of the "Natura 2000" network in order to achieve the desired degree of representation of species and habitats of Community interest.
- Preparation of an integrated strategic document for all identified categories of marine protected areas, which will include specific, measurable targets and implementation timeframes.
- Assessment of risks from coastal development and coastal tourism activities, so as to design measures to mitigate these risks.
- Refining existing management plans and completion of the legal framework to ensure enforcement of the measures included in these.
- Implement specific actions so as to improve the monitoring and enforcement of protective measures by competent bodies.



Abstract SAI France

Audit Name: Protection of marine areas – the French experience

Protection of marine areas : the French experience

France has the second largest maritime domain in the world. French protected marine areas (PMA) and related initiatives can be found in the Mediterranean sea, the Atlantic and Pacific oceans. France was a pioneer in the protection of marine areas as the law creating Marine National Park dates back to 1960. Recent audits show that the protection of marine areas is now a complex challenge as it requires addressing new issues.

In 2006, and in link with the Rio Convention (2005) and related international initiatives, France adopted a unique model by creating the AAMP (*"Agence des aires marines protégées"*) a special agency dedicated to the overall management of protected marine areas. The original missions of the AAMP were i) to oversee the activities of the protected marines areas network and to promote French participation to the creation and management of internationally sponsored PMAs, ii) to offer technical (scientific, administrative) support to PMA managers, iii) to manage the natural marine parks (NMP). The priority given to scientific work and research (up to 66.8 per cent in 2011 and over 50 per cent on period 2010-2015) has allowed the Agency to gain international reconnaissance both among its peers and on a broader scale (*i.e. International Union for Conservation of Nature*). Although the Agency developed a sound project-based accounting and management system, the continuous extension of its mission resulted in growing challenges with regards to its limited human and financial resources. Salaries amounting up to 50 per cent of the budget strongly impacted its capacity for structural investment and developing new projects.

In 2016, the responsibility of protected marines areas was transferred to a larger entity, the *Agence Française pour la Biodiversité* (French Agency for Biodiversity), in charge of a larger portfolio of environmental issues. Doubts then emerged as to the capacity of the new AFB to retain its recognized international expertise and to give the protected marine areas a clear priority, both nationally and internationally.

The missions of the French Marine National Parks are changing.

The *Parc National des Calanques* (PNC), located in the Mediterranean off the city of Marseille, is an interesting example of the evolution of the mission of Marine National Park (MNP). The official



creation (2012) followed its listing as a protected area in 1975. The length of the process reflected its complexity as the Park is located in the immediate vincinity of the second largest French city, Marseille, making it the first French suburban MNP. It encompasses populated areas and businesses on its inland part and receives up to 2M visitors annually. The Park authorities therefore exercise a crucial role in coordinating and moderating the activity of all stakeholders in this premium touristic area. The PNC must however fulfill its more traditional mission (protection, research), a task that the diversity of its domain (islands, coastal forests) and missions renders difficult. Financed at 88 per cent by the State budget, the Park needs do develop new sources of income to deliver a wide range of services , a process that might take time.

The *Parc National of Port-Cros* (PNPC) is the oldest Marine National Park in Europe (1963). its original responsabilities were centered on research and protection of its natural patrimony (the Park manages the National Mediterranean Botanical Conservatory representing around 20 per cent of its budget), on education and public awareness and on the management of an important flow of visitors. The Parc also contributed significantly to international initiatives as PELAGOS, an international sanctuary for marine mammals. Its missions significantly evolved following reforms in 2009 and 2012 that gave him a role in the sustainable development of the area, a condition of its successful integration in the local human and economic environment. This is a good example of the recent evolution of the vocation of French marine protected areas. To deliver on its numerous missions, the PNPC follows the objectives defined in the performance contract signed with the central government. The evolution of its mission is illustrated by the increased number of priorities and reporting points (38) included in this document. The current evolution creates the risk of i) a growing gap between the missions of the Park and its human and financial resources, ii) a management focusing on micro-projects more than on its original and global mission.

	Agence des aires marines protégées	Parc national des Calanques	Parc national de Port-Cros	
	2006 (loi n° 2006-436 du 14 avril 2006 relative aux parcs nationaux, aux parcs naturels marins et aux parcs naturels régionaux)		1963 (Décret n° 63-1235 du 14 décembre 1963 création du parc national de Port-Cros (PNPC)	
Official creation	Replaced by the « Agence française pour la biodiversité (AFB) » on 1 january 2017 (LOI n° 2016-1087 du 8 août 2016 pour la reconquête de la biodiversité, de la nature et des paysages)	2012 (Décret n°2012-507 du 18 avril 2012 modifié)		
Legal status	National public administrative institution placed under the supervision of the Ministry of the Environment	idem	idem	
Budget including State funding	About 2M € of which 90 per cent of the public service charge subsidy	About 4M € of which 88 per cent of the public service charge subsidy	About 8M € of which 70 per cent of the public service charge subsidy	
Administrative headquarters	Brest	Marseille	Hyères	
Patrimony	Natural protected marine areas in the Mediterranean (Marseille), the Atlantic (Brest), Channel (Le Havre), the Pacific (Papeete, French Polynesia, Nouméa, New Caledonia) and Caribbean (Saint-Claude, Guadeloupe)	1st peri-urban park of Europe terrestrial and marine. 8 300 land hectares 43 500 marine hectares Geographic coverage on 3 municipalities located in Marseille, Cassis and La Penne-sur-Huveaune.	1st European land and marine park. 146 000 ha (1 506 km ²). Geographic coverage on 11 municipalities located in the Var and Provence- Alpes-Côte-D'azur area. Protected areas: Islands of the Bagaud and Gabinière: integral reserves. PELAGOS sanctuary, for marine mammals in the Mediterranean.	
Human resources	222 full-time equivalent (FTE)	47 FTE	86,5 FTE	

Summary Table of French Protected Areas



Abstract SAI Greece

Audit Name: Marine Protected Areas in Greece

At a national level, the responsibility for the design, implementation and monitoring of the protection of MPAs lies primarily with the Ministry for the Environment and Energy.

A main conclusion of the audit is that there are no approved management plans, albeit the Greek coastline is the largest in Europe and the protection of MPAs is covered by the general institutional framework. At the same time, more particularly, at local level, it is the Managing Bodies that mainly bear the burden of managing and protecting the areas.

Additionally, there appears to be a multiple protection status for many MPAs (e.g. Natura, Ramsar, the Barcelona Convention, individual Presidential Decrees or Joint Ministerial Decisions for each protected area). Therefore, while there is an institutional framework that could contribute to the protection of the MPAs, its effective implementation requires additional efforts at many levels, mainly through the effective cooperation of the stakeholders (Ministries, Scientific Agencies, NGOs, Local Bodies). This is also demonstrated by the fact that, according to scientific studies, prospects for the conservation habitats are considered to be inadequate or worsening.

Regarding the bodies' response to the audit questionnaire, it is noted that the replies, provided by services of the Ministry for the Environment and Energy, ranged from being extremely incomplete to non-existent. That made the course of the audit particularly difficult while it clearly demonstrated the shortcomings and weaknesses of the MPAs' protection-system as well as the urgent need to take more effective action in the future. In addition, it should be noted that, with the exception of only one, NGOs, from the ones active in the protected areas falling within the audit scope, sent no replies. Furthermore, in the field of fisheries, the responsible Ministry for Rural Development and Fisheries responded solely to the questions that fell within its competence. Finally, the Hellenic Centre for Marine Research gave specific details of its research, studies and proposals regarding the issue of MPAs.

From the specific replies of the Marine Parks of Zakynthos and Alonissos, it is clear that the particular bodies have developed a vertically integrated management organisation for the protection of their area, starting from planning and continuing with its implementation and monitoring, under adverse conditions, both financial and institutional (eg conflict of roles, etc.).

Abstract SAI Malta

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

In the Report, "The designation and effective management of protected areas within Maltese waters" the National Audit Office, acknowledged recent efforts by national authorities to designate Marine Protected Areas (MPAs) to protect habitats and seabirds in accordance with the Natura 2000 framework. Nonetheless, the risks exist that such initiatives would be ends in themselves unless supported by site-specific management plans and the appropriate level of resources to ensure their timely implementation, monitoring and enforcement.

The 14 designated MPAs constitute around 30 per cent of the Maltese Fisheries Management Zone (FMZ). These initiatives were based on the findings and conclusions of six major assessments commissioned by or through the Ministry for the Environment, Sustainable Development and Climate Change, costing around €4.6 million. As the scope of these studies extended to the 25 nautical mile zone constituting the FMZ, together with the prevailing political climate within a number of Mediterranean countries, Malta remains restricted from declaring MPAs within the high seas.

Frequently, various sources, including Non Governmental Organisations, highlight the impact of economic activities on MPAs. Examples in this regard relate to anchoring at is-Sikka I-Bajda and excessive diving at Mgarr ix-Xini. The former leads to protential risks of degradation of posedonia oceanica while the latter threatens the biodiversity of this site. This illustrates the critical need for the more expedient adoption and implementation of the national strategic framework, including site-specific management plans. The Environment and Resources Authority (ERA) contends that these plans will be adopted by 2020, which, with the exception of one plan, remain within the EU permissible deadline.

In the interim, ERA together with other national authorities, including Transport Malta, Ministry for Tourism and Department for Fisheries are implementing various other initiatives which contribute to safeguarding biodiversity within these sites, namely those related to the Programme of Measures within the Marine Strategy Framework Directive.

Nonetheless, until such time that these site-specific plans are in place, it will prove problematic for National Competent Authorities to secure the required level of resources and to adopt a common management criteria to facilitate planning and implementation. This audit concluded that unless national authorities strengthen their position to enable them to adopt, implement, monitor and enforce site-specific management plans, the risk exists that it will be difficult to establish the required equilibrium between conservation and blue growth.

The Report proposes a number of recommendations aimed at strategic, administrative capacity and operational levels.



Abstract SAI Portugal

Audit Name: Audit on Marine Protected Areas

What have we audited?

The Portuguese Court of Auditors audited the actions developed by Portuguese authorities for the protection of marine biodiversity through the creation and management of marine protected areas. The audit covered the period from 2010 to 2016.

The Portuguese government approved a National Ocean Strategy (2013-2020), which is currently under implementation. This strategy applies to the marine waters under Portuguese sovereignty or jurisdiction, aiming at increasing the economic, social and environmental value of the national maritime space. It comprises separate strategies for the mainland, for the islands of Azores, for the islands of Madeira and for the continental shelf.

The total area of marine areas already protected or designated by Portugal in the mainland and in the exclusive economic zone is close to 35 thousand km². In addition to these, there are five OSPAR protected marine areas of about 120 thousand km² on the extended continental shelf. There are processes underway to designate new sites of European Community importance and to extend one of the existing ones as well as to create new marine protected areas, covering close to additional 243 thousand km².

What have we concluded?

We have observed that, in general, the initial versions of the involved strategies were designed based on scientific work and were subject to public consultation.

The assessments conducted on the environmental status of the marine waters and on the environmental impact of human activities on them indicate that in Portugal there are no paramount risks of degradation of the sea environment. Even though, for those indicators where risks exist, monitoring was established.

The audit has found lack of coordination among the several competent authorities at different levels: as regards the processes to classify marine protected areas, concerning the management of these areas, in what relates to the authorisation of human activities in the protected areas and, also, in the performance of controlling activities. The most serious lack of coordination exists between the Directorate-General for Natural Resources, Safety and Maritime Services and the Institute for Nature Conservation and Forests.

The Court concluded that there are planning instruments for each marine protected area that include appropriate management measures to address the identified specific threats in that area. In many cases, the applicable planning instruments did not include measurable objectives, effective indicators, measurement of the baseline and information update systems. However, the future review of these plans will be in accordance to legally established provisions and time schedules.

Two other important shortcomings identified were that there is no sustainability assessment conducted for marine protected areas and that there is not a global monitoring structure for these areas. On the other hand, we observed that the public bodies currently and directly involved in the management of marine protected areas face shortage of means to effectively monitor and supervise them.

Goal 14 of the United Nations 2030 Agenda for Sustainable Development and Target 11 of Strategic Goal C of the Aichi Biodiversity Targets establish that, by 2020, 10 per cent of the coastal and marine zones should be under protection. At the time of the audit (2018), this objective was far from achieved, since only four per cent of those zones were covered by implemented protected areas. However, the processes already underway to create new marine protected areas, once concluded and formalised, will allow the achievement of those objectives, by covering a total area of 10,2 per cent.

What did we recommend?

- To the Minister of the Environment:
 - o To ensure that targets and measurable indicators are set for the revised programs
 - o To implement a scheme for the monitoring and overall evaluation of marine protected areas
- To the Minister of the Sea:
 - o To make efforts for the approval and publishing of the law that formalises the designation of the protected areas located in the exclusive economic zone
 - o To submit to the Parliament a triennial report on 'the state of the planning and management of the national maritime space' (already legally envisaged but not actually submitted until now).
- To the Directorate-General for Natural Resources, Safety and Maritime Services and to the Institute for Nature Conservation and Forestry:
 - o To improve the coordination of these entities with regards to their respective several competencies and procedures.



Abstract SAI Slovenia

Audit Name: Inefficient management of St Jernej Canal

The Court of Audit issued an audit report on the efficiency of managing St Jernej Canal situated in the Sečovlje Salina Nature Park- an area of recognised natural value and part of the Natura 2000 network of protected areas.

The audit revealed that in the period of 13 years at least EUR 14.3 million was spent for management of the Canal and disclosed several inefficiencies, such as illicit mooring of more than a hundred vessels to illegally set piers and buoys. Many of the vessels in the Canal are abandoned, damaged and fully or partially sunk, which is considered a potential danger with possible harmful effects.

Within a span of more than 12 years, the Government of the Republic of Slovenia and the Ministry of the Environment and Spatial Planning failed to carry out activities to remedy the concerned situation. It did not exercise a single supervision procedure for removing the illegally set piers, mooring buoys and vessels from the Canal, nor did it carry out a procedure in order to find out when the piers and mooring buoys were actually set and whether any legal base for their removal existed.

The company Soline as manager of the Sečovlje Salina Nature Park failed to exercise the supervision activities in full due to absence of an adequately qualified nature conservation supervisor. The Municipality of Piran was also involved in the Nature Park management, being a holder of water rights to construct a local port but was unable to find a suitable investor in six years.

When the audit report was issued, the Municipality of Piran and the company Soline commenced implementation of activities (exercising supervision and removing abandoned vessels along the shore) to bring about improvements in St Jernej Canal. The Ministry of the Environment and Spatial Planning started implementing control as well.

At the beginning of 2019, the Ministry organised removal of 19 abandoned, damaged and fully or partially sunk vessels and piers. They were taken to Austria as waste to be disposed properly. Nevertheless, in St Jernel Canal there are still illegally set piers, mooring buoys and numerous vessels. In April 2019, the Ministry started procedures to restore order regarding the described situation.

Appendix II: Audit Matrix

1. General Information

66

- 1.1 What is the total length of your country's coastline?
- 1.1.1 What are the total areas of your country's territorial waters and exclusive economic zone?
- 1.2 What are the main morphological characteristics of the seafloor of the marine area of the country's jurisdiction?
- 1.3 How many MPAs were designated in your country and what is their designation (marine parks, SPAMI, artificial reefs etc)? Please complete the attached table and, if possible, kindly also illustrate through a map.
- 1.4 What type of assessments were undertaken to designate these sites?

2. Legal framework and national strategies

- 2.1 Which directives/conventions are relevant to the MPAs in your country? Kindly complete the relevant information in the above excel table (question 1.3).
- 2.2 Are there any conflicting clauses in the relevant legal framework (eg between different Acts of Law or Conventions)?
- 2.3 Are there any overlaps of legal provisions resulting in multi-protection status for any MPAs?

3. National Strategies

- 3.1 Is there a national strategy for MPAs?
- 3.2 Where all the relevant stakeholders consulted during the development of the strategy and does this reflect their needs?
- 3.3 Is the strategy based on scientific results and research?
- 3.4 Does the strategy have specific targets (SMART)?
- 3.5 Does the strategy stipulate timeframes for specific milestones in achieving the targets set?
- 3.6 Does the strategy aim to attain the sustainability of marine protected areas as per UN Sustainable Development Goal 14 (conservation of 10 per cent of coastal and marine areas by 2020)?

4. Designation of Marine Protected Areas

- 4.1 Were assessments of risks and threats regarding significant habitats/species, or the overall environmental status of the country's marine waters carried out?
- 4.2 What were the risks and threats identified?
- 4.3 Were the main stakeholders consulted? If yes, at what stage?
- 4.4 Was the public consulted regarding the designation of these areas? If so, at which stage?

67

5. Design of Management Plans

- 5.1 Were management plans drafted? If not, how is the protection of the area ensured and its sustainability ascertained?
- 5.2 Has a specific management plan been drafted for each site?
- 5.3 Were management plans drafted by the main Government entities or were they outsourced to third parties, such as NGOs?
- 5.4 Do the plans include measurable targets?
- 5.5 Do the plans include specific measures and actions covering all risks and threats identified?
- 5.6 Are roles and responsibilities clearly defined in the management plans?
- 5.7 Were the measures included in the plan selected following a cost-benefit analysis?
- 5.8 What kind of restrictions apply to the MPA's examined? Do the measures listed in the plan include fishing restrictions (UN Sustainable Development Goal 14)?
- 5.9 Are management plans periodically reviewed and updated where deemed necessary?

6. Implementation

- 6.1 Is there an implementation timeline and is it being followed?
- 6.2 How are the measures funded? Are the necessary resources for the implementation of the measures listed in the plan made available (eg through the State Budget)? If not, are contingency plans in place?
- 6.3 Are monitoring mechanisms in place? Are these efficient and effective?
- 6.4 Is monitoring carried out on regular basis?
 - a. Are patrols carried out frequently? At what times?
 - b. How are infringement reports handled? Are sanctions prohibitive?
- 6.5 Are scientific evaluations of environmental indicators carried out? If so, how often? What are the results of these evaluations?
- 6.6 Is MPAs sustainability being monitored through other means than scientific evaluation and patrolling? (e.g. reporting by vessels in the area)
- 6.7 Is there effective coordination between the entities/authorities involved in the management of MPAs?
- 6.8 Is there overlapping or conflict in the roles and responsibilities of the entities involved?
- 6.9 Are NGOs and the scientific community involved in the implementation process?
 - a. If yes, at what level are they involved?
 - b. What are their views on the effectiveness of the implementation procedures? (eg collect them through a survey)
- 6.10 Is monitoring effective? (i.e. are targets listed in the plan being attained?)
- 6.11 Are actions implemented to increase public awareness? (e.g. education activities)



7. Monitoring and feedback

- 7.1 Which is the body responsible for monitoring the implementation of the management plans?
- 7.2 Who is assessing the progress attained?
- 7.3 Is reporting carried out on:
 - a. National level;
 - b. Supranational level.
- 7.4 Is an evaluation carried out at periodic intervals?
- 7.5 How are the various obligations emanating from the legislative framework monitored (eg obligations under Conventions)?
- 7.6 Is the plan updated following the monitoring undertaken? Who is responsible for the continuous update of the plan?
- 7.7 Are the measures that are being implemented effective in reducing the risks and mitigating the threats of the area?
- 8. Conclusion
- 8.1 Are there areas that require further work to address the requirements of the legislative framework?
- 8.2 Which are the strong areas and opportunities relating to the protection of marine biodiversity identified during the audit?
- 8.3 Are Governments being effective through the implementation of measures?
 - a. Is expenditure incurred resulting in value for money?
 - b. Is expenditure incurred leading towards the sustainability of the area?
 - c. Are supranational institutions providing positive / negative feedback regarding the progress attained?
- 8.4 What recommendations have been made, in the context of the audit, to enhance the effectiveness of managing MPAs?
- 8.5 What has the auditees' response been to the recommendations made?

Appendix III: Partners

Country / Institution	Supreme Audit Institution	Contact Person (s)
Albania	Supreme State Audit Institution	Ms. Redina Karapici
		Ms. Ermira Vojka
Cyprus	Audit Office of the Republic of Cyprus	Mr. Akis Kikas
		Ms. Markella Koukkoulli
France	Cour des comptes	Mr. Sébastien Lepers
Greece	The Hellenic Republic Court of Audit	Mr. Ioannis Vasilopoulos
Malta	National Audit Office	Mr. William Peplow
		Ms. Maria Azzopardi
Portugal	Tribunal de Contas, Portugal	Ms Helena Abreu Lopes
		Mr. José Augusto Silva
Slovenia	Court of Audit of the Republic of Slovenia	Dr. Miroslav Kranjc
		Ms. Lejla Marinko



Appendix IV: References

Causey, B. (1995). Enforcement in marine protected areas. Marine Protected Areas, pp.119-148; Openchannels.org. (2019). *Marine Protected Area Enforcement | OpenChannels: Sustainable Ocean Management and Conservation*. [online] Available at: https://www.openchannels.org/top-lists/ marine-protected-area-enforcement [Accessed 11 Feb. 2019].

Cbd.int. (2018). [online] Available at: https://www.cbd.int/aichi-targets/target/11 [Accessed 3 Oct. 2018].

Cbd.int. (2018). [online] Available at: https://www.cbd.int/doc/pa/tools/Establishing%20Marine%20 Protected%20Area%20Networks.pdf [Accessed 3 Dec. 2018].

Cbd.int. (2019). *Protected areas and the CBD*. [online] Available at: https://www.cbd.int/protected/pacbd/ [Accessed 18 Feb. 2019].

Cordis.europa.eu. (2018). CORDIS | *European Commission*. [online] Available at: https://cordis. europa.eu/news/rcn/128339_en.html [Accessed 2 Oct. 2018].

Curia.europa.eu. (2019). [online] Available at: http://curia.europa.eu/juris/celex. jsf?celex=62005CJ0388&lang1=en&lang2=BG&type=TXT&ancre= [Accessed 18 Feb. 2019].

Ec.europa.eu. (2011). *GUIDELINES ON THE IMPLEMENTATION OF THE BIRDS AND HABITATS DIRECTIVES IN ESTUARIES AND COASTAL ZONES*. [online] Available at: http://ec.europa.eu/ environment/nature/natura2000/management/docs/guidance_doc.pdf [Accessed 19 Feb. 2019].

Era.org.mt. (2019). *National Biodiversity Strategy & Action Plan*. [online] Available at: https://era. org.mt/en/Pages/NBSAP.aspx [Accessed 8 Feb. 2019].

Eur-lex.europa.eu. (2019). [online] Available at: https://eur-lex.europa.eu/LexUriServ/LexUriServ. do?uri=OJ:L:2008:164:0019:0040:EN:PDF [Accessed 18 Feb. 2019].

IUCN. (2018). *Mediterranean Marine Programme*. [online] Available at: https://www.iucn.org/ regions/mediterranean/our-work/mediterranean-marine-programme [Accessed 2 Oct. 2018].



Media.nationalgeographic.org. (2019). [online] Available at: https://media.nationalgeographic.org/ assets/file/Malta_Declaration_OOC17_6Oct17.pdf [Accessed 18 Feb. 2019].

Medpan.org. (2018). *MARINE PROTECTED AREAS – MedPAN*. [online] Available at: http://medpan. org/marine-protected-areas/ [Accessed 2 October 2018].

Medpan.org. (2018). *Mediterranean challenges* – MedPAN. [online] Available at: http://medpan. org/mediterranean-realities/ [Accessed 2 Oct. 2018].

Medpan.org. (2018). *Mediterranean MPAs – MedPAN*. [online] Available at: http://medpan.org/ marine-protected-areas/mediterranean-mpas/ [Accessed 9 Oct. 2018].

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

Rm.coe.int. (2019). [online] Available at: https://rm.coe.int/1680078aff [Accessed 18 Feb. 2019].