

REPORT ON AREA-BASED MEASURES FOR CETACEAN CONSERVATION BY THE TASK GROUP

Issue: Area-based measures for cetacean conservation

1. Action requested

The Scientific Committee is invited to:

- a. **consider** the report on area-based measures for cetacean conservation by the Task Group,
- b. **provide recommendations** to the Parties on this issue.

2. Background

During the 15th Meeting of the Scientific Committee (SC15, 10th & 11th May 2023 Tunis, Tunisia,), members recommended to the Task Group on 'Area-based measures for cetacean conservation' to review and update the work to be done for "area-based measures for cetacean conservation", also considering the recommendations from the workshop held in March 2022.

It was suggested to replace, with an appropriate terminology, the term "Cetacean Critical Habitat"

Report on area-based measures for cetacean conservation by the Task Group

BACKGROUND INFORMATION

According to the ACCOBAMS Conservation Plan (Annex 2 of the Agreement), Parties “shall co-operate to create and maintain a network of specially protected areas to conserve cetaceans” and “shall endeavour to establish and manage specially protected areas corresponding to the areas which serve as important habitat for cetaceans and/or which provide important food resources for them. Such specially protected areas should be established within the framework of the Regional Seas Conventions (OSPAR, Barcelona and Bucharest Conventions), or within the framework of other appropriate instruments”.

In 2010, the ACCOBAMS Scientific Committee started a preliminary identification of areas of special importance for cetaceans in the Agreement Area, mainly based on ‘expert opinions’ (Resolution 4.15 Annex). Thanks to the ACCOBAMS efforts, including the recent ACCOBAMS Survey Initiative (ASI), knowledge of cetacean species has since greatly improved as work in mapping pressure through the European Directive Marine Spatial Planning. As a consequence, at the MOP8 in 2022, Parties requested the revision of this Annex and of the ongoing process looking at quantifying anthropogenic pressures over cetacean habitats ‘taking into account the already existing mechanisms and tools related to area-based cetacean conservation’ (e.g. IMMAs, OECMs, MPAs, MSP, etc.).

During SC15, the Scientific Committee recommended to the Task Group on ‘Area-based measures for cetacean conservation’ to review and update the work to be done for “area-based measures for cetacean conservation”, also considering the recommendations from the workshop held in March 2022.

It was also suggested to replace the term “Cetacean Critical Habitat” with an appropriate terminology.

In this framework, a workshop regarding the redefinition of the CCH process was held in Monaco on the 18th of March 2024.

OBJECTIVES OF THE WORKSHOP

- Provide an overview of how and when existing area-based mechanisms and tools can support the Parties to achieve the objectives stated in Annex 2 of the Agreement, including MPAs, OECMs, IMO-related tools, EBSAs and IMMAs, etc..
- Review and update the originally proposed ‘CCH’ process used to identify important cetacean habitats, hot spots of human activities that may threaten cetaceans and thus identify important high-risk areas; this should include the clarification of terminology and result in an improved, practical roadmap (MOP8 report paragraph 213; SC15 conclusion 36).
- Revise (or identify a timely mechanism to do so), the map annexed to Resolution 4.15, based on the current knowledge and considering MOP8 discussions and Annex 14 of the report.

LIST OF MEMBERS OF THE SCIENTIFIC COMMITTEE PARTICIPANTS

Name	Country	Name	Country
Lea David	FRANCE	Rimel Benmessaoud	TUNISIA
Simone Panigada	ITALY	Ayaka Ozturk	TURKEY
Greg Donovan	UK	Joan Giménez Verdugo	SPAIN
Caterina Fortuna	ITALY	Pavel Gold'in	UKRAINE
Souad Lamouti	ALGERIA	Dimitar Popov	BULGARIA

POINTS ADDRESSED

1. Review existing area-based mechanisms and national and international tools relevant to cetacean conservation

The table from MOP6doc 35 has been completed with other relevant area-based mechanisms and national and international tools in order to get a global view of the ecologically-based, management-based tools already existing in the Mediterranean Sea that are relevant to cetacean conservation. This **Table 1** is presented in the annex.

2. Name of the CCH initiative

The workshop confirmed the interest in achieving the overall idea of overlapping cetacean layers and human pressures. As the term “Cetacean Critical Habitat” did not exactly reflect the process, as already stated during SC15, the following terms have been chosen explaining better the process and, moreover, keeping the acronym for visibility and traceability reasons: **CCH “Cetacean Co-occurrence with Human activities”**.

3. Recommendations

- 3.1. Taking into consideration comments from Greece and Türkiye during MOP8 about the names used in the Resolution (4.15) for some of the sites, the workshop recommends to write a disclaimer as:

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The designations employed and the presentation of the material in this document, that should be considered as a whole and not as extracts, do not imply the expression of any opinion whatsoever on the part of the Agreement concerning the legal status of any State, Territory, city or area, or of its authorities, or concerning the delimitation of their frontiers or boundaries. The opinions expressed in this document do not necessarily represent the views of the Agreement.

- 3.2. **strengthen the cooperation with Duke University** and organize a meeting in order to exchange information about their modelling framework.
- 3.3. All cetacean modelling results will be reviewed and possibly revised by the ACCOBAMS SC taking into account local knowledge and relevant aspects of Table 1.
- 3.4. It is recommended to strengthen links with MSP and experts in mapping human activities.

- 3.5. Review existing modelling and maps in the context of the ACCOBAMS / CCH objectives including MSP, and possibly revised by the ACCOBAMS SC taking into account local knowledge and relevant aspects of Table 1.
- 3.6. Look at the overlapping areas for each threat and assess the extent of potential problems (vulnerability categories, spatio-temporal intensity of the activity) in the context of previous items. It is recommended to write a guidance for the Secretariat and Parties on how and when maps may be used.

ANNEX

Table 1: Area-based initiatives within the ACCOBAMS area for the conservation of cetaceans

	IMMA	CCH	EBSA	FAO GFCM VME	IMO PSSA	Barcelona Convention SPAMI
Objectives	IMMAs are “discrete portions of habitat, important to marine mammal species, that have the potential to be delineated and managed for conservation”	Highlight co-occurrence areas, as index of risk, between cetacean species and human activities for known threat for cetacean. Resulting maps will be used as basis to propose management measures (area-based or sectoral-based) to mitigate risks	The ecologically or biologically significant areas (EBSA) are special areas in the ocean that serve important purposes, in one way or another, to support the healthy functioning of oceans and the many services that it provides. They may require enhanced conservation and management measures, and that this can be achieved through a variety of means, including marine protected areas and impact assessments.	Identification of Vulnerable Marine Ecosystems (VME) in areas beyond national jurisdiction and identification of the potential impacts of fishing activities on such ecosystems in order to facilitate the adoption and the implementation of conservation and management measures by RFMO/As and flag States (pursuant to paragraphs 83 to 86 of the Resolution) (COFI 2007).	A Particularly Sensitive Sea Area (PSSA) is an area that needs special protection through action by IMO because of its significance for recognized ecological, socio-economic, or scientific attributes where such attributes may be vulnerable to damage by international shipping activities.	Establishing a List of Specially Protected Areas of Mediterranean Importance (SPAMI's List) to promote cooperation for management and conservation of natural areas, threatened species and their habitats.
Implementing organisation	Joint IUCN SSC/WCPA Task Force on Marine Mammal Protected Areas	ACCOBAMS	CBD	FAO COFI		Barcelona Convention
Assessing organisation	External independent review panel	ACCOBAMS Scientific Committee	Regional workshops (e.g., CBD in cooperation with UNEP MAP SPA RAC).	GFCM (at ACCOBAMS level)		UNEP MAP SPA/RAC

Spatial scale	Global tool, applied to Mediterranean (2016) and Black Sea (2019) regions	Regional tool (Mediterranean Sea and Black Sea) (to be defined if sub-regional scale needed or not)	Global tool; list developed regionally.	Global (FAO); regional (GFCM)		Regional tool (Mediterranean region)
Baseline info given	Baseline info on marine mammal important areas, based on a set of criteria	Cetacean important areas based on spatial density modelling, hot-spot of human activities based on intensity, areas of co-occurrence and index of risk (quantitative)	Wide range of information on biodiversity (habitat and species).	Wide range of information on vulnerable marine ecosystems (see below).		Details on already established Marine Protected Areas that deserve to be included in the SPAMI list.
Metrics (quantitative or qualitative)	qualitative, science-driven and expert based	Semi-quantitative	Semi-quantitative	Semi-quantitative		Qualitative
Role	Identify specific areas for marine mammals (biocentric)	Identify issues in specific areas for cetaceans and propose management measures (threat-based)	Identify ecologically or biologically significant areas for biodiversity.	Identify Vulnerable Marine Ecosystems to fishing activities to facilitate the adoption and the implementation of conservation and management measures by RFMOs.		Identify sites that are of importance for conserving the components of biological diversity in the Mediterranean; <i>OR</i> contain ecosystems specific to the Mediterranean














						n area or the habitats of endangered species; <i>OR</i> are of special interest at the scientific, aesthetic, cultural or educational levels.
Species covered	All marine mammals	All cetaceans	All biodiversity	All marine biodiversity		
Criteria used to define areas (including uncertainty)	https://www.marinemammalhabitat.org/immas/imma-criteria/	Not yet defined	<p>EBSAs are identified based on the following scientific criteria (annex I, decision IX/20) referred to all elements of the marine ecosystem (biodiversity):</p> <ul style="list-style-type: none"> - Uniqueness or Rarity - Special importance for life history stages of species - Importance for threatened, endangered or declining species and/or habitats - Vulnerability, Fragility, 	<p>The following list of characteristics should be used as criteria in the identification of VMEs:</p> <p>i. Uniqueness or rarity: an area or ecosystem that is unique or that contains rare species whose loss could not be compensated for by similar areas or ecosystems (e.g., habitats that contain endemic species; habitats of rare, threatened or endangered species that occur only in discrete areas; or nurseries or discrete feeding, breeding, or spawning areas).</p> <p>ii. Functional significance of the habitat: discrete areas or habitats that</p>	<p>The criteria for the identification of particularly sensitive sea areas may be ecological, socio-economic or scientific criteria, as follows:</p> <p>ecological criteria: uniqueness or rarity, critical habitat, dependency, representativeness, diversity, productivity, spawning or breeding grounds, naturalness, integrity, fragility, bio-geographic importance;</p> <p>social, cultural and economic criteria: social or economic dependency,</p>	

			<p>Sensitivity, or Slow recovery</p> <ul style="list-style-type: none"> - Biological Productivity - Biological Diversity - Naturalness 	<p>are necessary for the survival, function, spawning/reproduction or recovery of fish stocks, particular life-history stages (e.g. nursery grounds or rearing areas), or of rare, threatened or endangered marine species.</p> <p>iii. Fragility: an ecosystem that is highly susceptible to degradation by anthropogenic activities.</p> <p>iv. Life-history traits of component species that make recovery difficult: ecosystems that are characterised by populations or assemblages of species with one or more of the following characteristics: slow growth rates; late age of maturity; low or unpredictable recruitment; or long-lived.</p> <p>v. Structural complexity: an ecosystem that is characterised by complex physical structures created by significant concentrations of</p>	<p>human dependency, cultural heritage; scientific and educational criteria: research, baseline for monitoring studies, education.</p>	
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				biotic and abiotic features.		
Last assessment	2016 Mediterranean 2019 Black Sea	2010 (only cetacean maps)	2014	Annual assessments		Depending on the first listing of each MPA.
Assessment timeframe	10 years	3 years	Variable	Variable		6 years
Link	The process of identification of CCH uses IMMAs, candidate IMMAs and Areas of Interest where they are in place (along with other baseline data on cetacean distribution, abundance). CCH can be one of the sources for consideration of IMMA identification. See recommendation 12.8		EBSAs are now regularly used in processes linked to the identification of PSSA and IMMAs. They could also be used to inform the CCH process.	VMEs should be considered in the CCH process especially when they are designated for species/prey and habitats important for cetacean species.		The SPAMI listing is an additional recognition to existing (usually) national MPAs. There are two SPAMIs relevant to ACCOBAMS: the Pelagos Sanctuary (only international SPAMI) and the Spanish whale corridor.

A Particularly Sensitive Sea Area (PSSA) is an area that needs special protection through action by IMO because of its significance for recognized ecological, socio-economic, or scientific attributes where such attributes may be vulnerable to damage by international shipping activities. The criteria for the identification of particularly sensitive sea areas may be ecological, socio-economic or scientific criteria, as follows: ecological criteria: uniqueness or rarity, critical habitat, dependency, representativeness, diversity, productivity, spawning or breeding grounds, naturalness, integrity, fragility, bio-geographic importance; social, cultural and economic criteria: social or economic dependency, human dependency, cultural heritage; scientific and educational criteria: research, baseline for monitoring studies, education.

Table 2: Known and potential threats for each species of cetacean within the ACCOBAMS area

													
<i>Balaenoptera physalus</i>	None	None	None	None	High	High	High	High	High	High	High	High	High
<i>Physeter macrocephalus</i>	High	None	None	None	High	High	High	High	High	High	High	High	High
<i>Ziphius cavirostris</i>	None	Medium	None	None	High	High	High	High	High	High	High	High	High
<i>Orcinus orca</i>	High	High	High	None	High	High	High	High	High	High	High	High	High
<i>Globicephala melas</i>	None	High	None	None	High	High	High	High	High	High	High	High	High
<i>Grampus griseus</i>	High	High	None	None	High	High	High	High	High	High	High	High	High
<i>Steno bredanensis</i>	High	High	Medium	None	High	High	High	High	High	High	High	High	High
<i>Tursiops truncatus</i>	High	High	High	None	High	High	High	High	High	High	High	High	High
<i>Stenella coeruleoalba</i>	High	High	High	None	High	High	High	High	High	High	High	High	High
<i>Delphinus delphis</i>	High	High	High	None	High	High	High	High	High	High	High	High	High
<i>Phocoena phocoena relicta</i>	High	Medium	Medium	None	High	High	High	High	High	High	High	High	High

?	High	Medium	Low	None
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	Bycatch in fishing gear (legal/illegal, ghost nets)		Overfishing and prey depletion		Depredation by cetaceans		Intentional killings
	Ship strikes		Underwater noise		Disturbance from boat traffic		Cetacean-watching (including swimming-with)
	Chemical pollutants		Marine debris (macro/micro)		Habitat loss and degradation		Climate change
	Cumulative effects						

From : DRAFT UPDATED ACTION PLAN FOR THE CONSERVATION OF CETACEANS IN THE MEDITERRANEAN SEA, ACCOBAMS-SC14/2021/Inf08, 17/11/2021