

Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area, concluded under the auspices of the Convention on the Conservation of Migratory Species of Wild Animals (CMS)

Accord sur la Conservation des Cétacés de la Mer Noire, de la Méditerranée et de la zone Atlantique adjacente, conclu sous l'égide de la Convention sur la Conservation des Espèces Migratrices appartenant à la Faune Sauvage (CMS)



# REPORT OF THE THIRTEENTH MEETING OF THE SCIENTIFIC COMMITTEE OF ACCOBAMS



Cap d'Ail, France, 26th – 28th February 2020

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1.	OPE	NING OF THE MEETING	4
2.	ADO	PTION OF THE AGENDA	4
3.	FUN	CTIONING OF THE SCIENTIFIC COMMITTEE	4
	3.1	Designation of the Chair and of the Vice-Chair of the Scientific Committee	4
	3.2	Terms of Reference and designation of Task Managers following priority topics of the 2020/2022	
	Workin	g Programme	5
4.	REPO	ORT OF EACH REGIONAL REPRESENTATIVE	6
5.	CON	SERVATION ACTIONS	7
	5.1	Improve knowledge about state of cetaceans	
	5.1.1	•	
	5.1.2		
	5.1.3		
	5.1.4		
	5.2	Reduce human pressures on cetaceans, in particular those related to bycatch, habitat loss and	
		ation (pollution)	11
	5.2.1	" ,	
	5.2.2	•	
	5.2.3		
	5.2.4	•	
	5.2.5		
	5.2.6		
	5.2.7		
	5.2.8	3	
	5.2.0	Captivity related issues	17
	5.3	Enhance effective conservation of Cetaceans Critical Habitats	17
6.	INFC	RMATION AND COMMUNICATION	. 17
	6.1	ACCOBAMS Cetacean digital platform)	
	6.2	Citizen sciences	18
7.	COLI	ABORATION AND INSTITUTIONAL ISSUES	. 18
	7.1	Improve the level of implementation and compliance with ACCOBAMS Resolutions as well as the	
	monito	ring of its progress	18
	7.2	Cooperation with international organizations	19
	7.2.1	Collaboration with Sub Regional Coordination Units	19
	7.2.2	Collaboration with ACCOBAMS Partners	21
	7.2.3	Collaboration with other Organizations	22
8.	ΔΝΥ	OTHER BUSINESS	. 22

9.	DATE AND VENUE OF THE NEXT SCIENTIFIC COMMITTEE MEETING	23
10.	ADOPTION OF THE CONCLUSIONS	23
11.	CLOSURE OF THE MEETING	23
	ANNEXES	
ANI	NEX I - LIST OF PARTICIPANTS	25
ANI	NEX II - AGENDA	<b></b> 31
ANI	NEX III - TERMS OF REFERENCE OF SCIENTIFIC COMMITTEE TASK MANAGERS	<b></b> 33
ANI	NEX IV - UPDATED 2020-2022 WORKING PROGRAMME FOR THE ACCOBAMS SCIENTIFIC COMMITTEE	<b></b> 35
	NEX V – MONITORING CETACEAN STATUS - ASSESSMENT AND REASSESSMENT OF THE IUCN CONSERVATIO ATUS OF CETACEANS_IN THE ACCOBAMS AREA IN 2020	
ANI	NEX VI – TERMS OF REFERENCE OF THE WORKING GROUP ON WHALE WATCHING (WWWG)	<b></b> 58
	NEX VII – PRESENTATION OF THE TASK MANAGER ON MARINE LITTER IMPACT AND INTERACTION WITH	<b></b> 59
	NEX VIII – TERMS OF REFERENCE FOR A WORKING GROUP ON SEMI-CAPTIVITY "CENTERS"IN THE ACCOBAN	

#### REPORT OF THE THIRTEENTH MEETING OF THE SCIENTIFIC COMMITTEE OF ACCOBAMS

#### 1. OPENING OF THE MEETING

- The Thirteenth Meeting of the Scientific Committee (SC13) of ACCOBAMS was convened in Cap d'Ail, in France, from the 26<sup>th</sup> to the 28<sup>th</sup> of February 2020. It was attended by Members of the Scientific Committee and Representatives from International Organizations and Observers, including Partners of ACCOBAMS. A few members attended the meeting via conference call.
- 2. The full list of participants appears as Annex I to this report.
- 3. Florence DESCROIX COMANDUCCI, Executive Secretary of ACCOBAMS welcomed the participants and opened the meeting at 9 am, on Wednesday 26<sup>th</sup> February 2020. She informed the Meeting that this would have been her last Scientific Committee Meeting since she would leave the ACCOBAMS Permanent Secretariat in a few weeks, after the arrival of the new Executive Secretary: Mrs Susana SALVADOR.
- 4. She thanked CIESM and IUCN for their support and indicated that this was the first meeting of the Scientific Committee for the new triennium (2020-2022). She underlined the importance of this Meeting which should nominate the Chair and Vice Chair of the Scientific Committee as well as the Task Mangers. The Meeting should also agree on concrete activities to facilitate the implementation of the Work Program, bearing in mind the Resolutions adopted by the Meetings of the Parties.
- 5. She informed the participants that for the preparation of this first Meeting of the Scientific Committee of the triennium, the Permanent Secretariat consulted with Simone PANIGADA and Léa DAVID designated by CIESM and IUCN, respectively.

#### 2. ADOPTION OF THE AGENDA

6. The provisional agenda of the Meeting contained in the Document ACCOBAMS-SC13/2020/Doc01.Rev1 was presented and the participants were invited to review and comment it.

#### Conclusion 1.

The Scientific Committee adopted the agenda and the timetable proposed by the Permanent Secretariat. The agenda appears in <u>Annex II</u> of the report.

#### 3. FUNCTIONING OF THE SCIENTIFIC COMMITTEE

#### 3.1 <u>Designation of the Chair and of the Vice-Chair of the Scientific Committee</u>

7. The Executive Secretary recalled that Resolution 7.7 adopted by the Parties asked the Scientific Committee to appoint its Chair from among the CIESM experts and its Vice Chair from among the CIESM experts.

### Conclusion 2.

The Scientific Committee nominated Simone Panigada (from the CIESM experts) as the Chair of the Scientific Committee for the 2020-2022 triennium.

#### Conclusion 3.

The Scientific Committee nominated Léa David (from the IUCN experts) as the Vice-Chair of the Scientific Committee for the 2020-2022 triennium.

# 3.2 <u>Terms of Reference and designation of Task Managers following priority topics of the 2020/2022 Working Programme</u>

8. The Chair presented the terms of reference for Scientific Committee Task Managers (ACCOBAMS-SC13/2020/Doc04), recalling that pursuant to the Resolution 7.7 related to the Scientific Committee, the Scientific Committee shall assign specific topics for each task manager taking into account the priorities set in the Work Programme for the triennium.

#### Conclusion 4.

The Scientific Committee adopted the terms of reference for the Scientific Committee Task Managers presented in Annex III.

Four Task Managers were identified according to the Work Programme priorities (ACCOBAMS-SC13/2020/Doc04).
 Other members of the Scientific Committee as well as ACCOBAMS Partners offered their support to the Task Managers.

#### Conclusion 5.

In accordance with the core priorities of the 2020-2022 Working Programme, the Scientific Committee decided to designate the following Task Managers:

- Species Conservation Management Plans:
  - Task Manager: Greg DONOVAN
  - Vice-Task Manager: Simone PANIGADA
  - Support Group: Ayaka Amaha OZTÜRK, Joan GONZALVO, Aurélie MOULINS and CMP coordinators.
- Interactions with Fisheries and aquaculture:
  - Task Manager: Joan GONZALVO
  - Vice-Task Manager: Souad LAMOUTI
  - Support Group: Members of the JBWG (Marina SEQUEIRA and Fiona READ will be added in the list of the JBWG Members)
- Marine litter & chemical and biological pollution:
  - Task Manager: Cristina FOSSI
  - Vice-Task Manager: Céline MAHFOUZ
  - Support Group: Tilen GENOV, Pine PIERANTONIO
- Protected Areas for Cetaceans:
  - Task Manager: Léa DAVID
  - Vice-Task Manager: Loriane MENDEZ
  - Support Group: Simone PANIGADA, Joan GONZALVO, Souad LAMOUTI, Tilen GENOV, Aurélie MOULINS, Vasileios PETROPOULOS, Costanza FAVILLI

Support Groups remain open. The list will be circulated to the Scientific Committee members and to the ACCOBAMS Partners.

#### 4. REPORT OF EACH REGIONAL REPRESENTATIVE

- 10. The Chair recalled that in accordance with the rules on the Scientific Committee adopted by MOP7, each regional representative should provide a report to the Meetings of the Scientific Committee on the conservation status of cetaceans and relevant activities in the region he or she represents in the Scientific Committee. He invited the regional representatives to introduce their respective reports contained in the following documents:
  - Report on the conservation status of cetaceans and relevant activities in Western Mediterranean and contiguous Atlantic area (ACCOBAMS-SC13/2020/Doc 06)
  - Report on the conservation status of cetaceans and relevant activities in Central Mediterranean (ACCOBAMS-SC13/2020/Doc 07)
  - Report on the conservation status of cetaceans and relevant activities in Eastern Mediterranean (ACCOBAMS-SC13/2020/Doc 08)
  - Report on the conservation status of cetaceans and relevant activities in Black Sea (ACCOBAMS-SC13/2020/Doc 09rev1)

#### Western Mediterranean and contiguous Atlantic area

11. Marina Sequeira presented the report of the Western Mediterranean and contiguous Atlantic area in which many cetacean's conservation activities are reported, in particular from the Northern countries of the sub region, with several projects taking place within the Pelagos Sanctuary. Reported projects and actions relate mainly to population monitoring, accidental catches and depredation events and threats attenuation (pollution, boat traffic, noise). Recommendations from this region include harmonization of practices in terms of stranding monitoring and the appropriate storage of data and biological samples, capacity-building in the southern countries on several topics, including on marine traffic noise, whale watching related issues and necropsy, and stranding network reinforcement.

#### **Central Mediterranean**

12. Tilen Genov, through a conference call, presented the Report on the conservation status of cetaceans and relevant activities in central Mediterranean. He emphasized that although a good understanding of cetacean conservation status exists in some parts of the region, large portions of the region remain poorly studied, with little or no information available. In general, the northern part of the region is much better studied than the south. The Adriatic Sea is currently probably the only area with good information on cetacean abundance. Furthermore, a substantial amount of new data is coming out of the ACCOBAMS Survey Initiative. Recent survey efforts tend to show that the list of reported species is in line with what is generally known about cetacean diversity and distribution in this region.

The issues reported in the region include marine litter and plastic pollution as well as bycatch in some areas (ex. Adriatic Sea). Seismic surveys for oil and gas exploration off the coast of Montenegro are a cause of concern and should be carefully considered. In addition, chemical pollution from legacy pollutants has been documented as a threat to some cetacean species, particularly common bottlenose dolphins.

In addition to the information compiled from the National Reports, the Regional Representative pointed out that a number of Important Marine Mammal Areas (IMMA) are located in this region. The Regional Representative also informed the Scientific Committee about a message received on the 25<sup>th</sup> of February from Alexandros Frantzis from the Pelagos Cetacean Research Institute in Greece, which noted that 9 NATO members began carrying out military training in the Ionian Sea on the 24<sup>th</sup> of February, raising concerns that military sonar may be used within or in close proximity to Cuvier's beaked whale habitat, as previous atypical mortality events of this species co-occurred with such exercises in the past.

The ACCOBAMS Permanent Secretariat informed the Meeting that NATO was contacted on this specific issue. In order to provide the ACCOBAMS Scientific Committee with all relevant information regarding this exercise, and avoid potential misunderstanding situation, NATO was requested to provide information regarding the environmental and sustainability impact statement undertaken prior this exercise. As for 28<sup>th</sup> February 2020 (Meeting closure date), the ACCOBAMS Permanent Secretariat didn't received any response from NATO.

#### **Eastern Mediterranean**

13. Celine Mahfouz presented the report for the Eastern Mediterranean. Among the activities reported in this region, all the countries were involved in the ACCOBAMS Survey Initiative and many participated to the Fourth Conference on Cetacean Conservation in south Mediterranean Countries (CSMC4). Lebanon faces difficulties in implementing the Agreement due to the security context, lack of support, capacity and public interest. Syria reported in particular on noise issues and on interactions between dolphins and fisheries along the Syrian coast, with depredation cases. Scientific research and capacity building are seen as priorities for improving conservation efforts, as well as awareness and educational campaigns, and establishment of fisheries observer schemes.

#### **Black Sea**

14. Arda Tonay summarized the activities conducted in the Black Sea based on the national reports presented to the MOP7 (Istanbul, 2019). His presentation highlighted the cetacean abundance studies (the wide-basin aerial survey (ASI and CeNoBS) and coastal boat surveys), stock identification and population structure, noise, marine pollution and conservation studies. He also presented detailed information about pilot studies on cetacean bycatch monitoring and bycatch mitigation measures in the Black Sea, referring to SC13/2020/Inf 07. He highlighted the hot topics and the issues that need to be tackled in the area.

#### 5. CONSERVATION ACTIONS

#### Conclusion 6.

For each agenda item of this section, the Scientific Committee reviewed and completed the draft Working Programme for the Triennium 2020-2022. The updated 2020-2022 Working programme is presented in Annex IV.

#### 5.1 Improve knowledge about state of cetaceans

#### 5.1.1 Cetacean population estimates and distribution

- 15. The Secretariat presented the main achievements and progresses of the ACCOBAMS Survey Initiative, including the CeNoBS Project, referring to the document ACCOBAMS-SC13/2019/inf03. The ASI allowed to conduct multispecies aerial and boat-based surveys throughout the entire ACCOBAMS Agreement area in 2018 and 2019. Described in the technical reports of Mediterranean and Black Sea surveys (ACCOBAMS-SC13/2019/inf04), those monitoring efforts led to collect an unprecedented amount of robust data on cetaceans, marine megafauna species and on the impact of human activities (marine litter, noise). An ASI data management system and data use policy was developed with an operational online access to a specific part of the ASI data on the ACCOBAMS Website.
- 16. Among the main achievements of the ASI, the capacity building component developed in collaboration with the UNEP/MAP/SPA-RAC and through the CeNoBS project allowed to train more than 100 scientists from all the ACCOBAMS area. A wide range of activities on communication and awareness were also developed. Testing of

new technologies for data collection (UAV, floating drones) are also being experimented and results will be shared with the ACCOBAMS Scientific Committee in the coming months.

- 17. 2020 being the last year of the implementation for the ASI, it will see the finalisation of the Data Analysis participative process that started late 2018. The Scientific Coordinator provided detailed information on the status of the Data analysis progression and indicated that a draft report will be circulated to the Scientific Committee before September 2020. The ASI results will serve as a basis for the development of conservation recommendations that would be brought to the attention of ACCOBAMS Parties at the 8<sup>th</sup> Meeting of the Parties to ACCOBAMS and other relevant stakeholders. The results will also be used for the update of the Cetacean Conservation Status report publication, one of the key outputs expected from the ASI project as an ACCOBAMS reference document and in the context of the (re) assessment of IUCN Red List conservation status of Mediterranean species (see 5.1.3).
- 18. In order to assess trends in population status that will inform decision makers and support relevant conservation measures, monitoring effort must be replicated systematically and regularly over time. Thus, the ASI and its achievements are paving the way for an ACCOBAMS long term monitoring program whose development will start in 2020 and be supported by a study to identify institutional, technical and financial mechanisms to be prioritized to ensure the implementation of this monitoring programme.
- 19. To complement the macroregional monitoring approach, the 2020-2022 Working Programme also includes an action dedicated to exploring opportunities for additional data collection on cetacean's distribution and abundance.
- 20. The representative of the Mediterranean Sub-regional Coordination Unit, Mrs. Lobna BEN NAKHLA, informed the meeting on the relevant activities developed by the Barcelona Convention in the context of the Ecosystem Approach process. In particular, she pointed out that the UNEP/MAP Secretariat is developing a project proposal for IMAP/s EcAp III, for which SPA/RAC is proposing to support the implementation of cetacean monitoring programmes in 7 Mediterranean contracting Parties (Algeria, Egypt, Israel, Lebanon, Libya, Morocco and Tunisia).
- 21. The ACCOBAMS Permanent Secretariat will be invited to contribute to the elaboration of the 2023 Mediterranean Quality Status Report based on the ASI results and to update the section on "Biodiversity and Ecosystems: Marine Mammals" in relation with the Common Indicators CI 3 (Species distributional range), CI 4 (Population abundance of selected species) and CI 5 (Population demographic characteristics).

#### Conclusion 7.

The Scientific Committee recommended that cooperation and coordination be increased between the national teams in charge of the development of the national monitoring scheme/program for cetaceans under the MSFD and EcAp policies.

The Scientific Committee recommended that the ACCOBAMS Permanent Secretariat liaises with the European Commission and the Secretariats of the Regional Seas Conventions (Barcelona and Bucharest Conventions) to (i) inform them about the results of the ACCOBAMS Survey Initiative, (ii) ensure coordination regarding the timing of any future relevant activities related to cetaceans monitoring to be developed, in particular within the framework of the MSFD and the IMAP and (iii) stress the importance of using a common monitoring protocol and a synoptic approach at the regional level due to the mobile characteristics of these species.

The Scientific Committee also recommended to consider other monitoring approaches (photo-ID surveys, PAM & monitoring programs using opportunity platforms such as ferries and fisheries surveys) as complementary approaches that can provide yearly and seasonal trends, as well as local abundance estimates.

#### 5.1.2 Population Structure

- 22. The Permanent Secretariat presented the Working Programme activities for this item.
- 23. The Scientific Committee proposed to add an activity to review the list of formally recognized tissue banks in the ACCOBAMS Area.

#### 5.1.3 Monitoring cetaceans' status

- a) IUCN Red List
- 24. The Chair presented the ongoing process on the assessment and reassessment of the IUCN conservation status of cetaceans in the ACCOBAMS Area, referring to the document ACCOBAMS-SC13/2019/Doc10Rev1.
- 25. Considering the now available results of the ASI project, as well as other data and observations collected in the last few years, new assessments of the conservation status of Mediterranean and Black Sea cetaceans and update of existing ones according to the IUCN Red List Categories and Criteria were launched in 2019 in the context of a dialogue/collaboration between ACCOBAMS and the IUCN Centre for Mediterranean Cooperation in Malaga.
- 26. In line with the ongoing process, the Scientific Committee reviewed the table of species assessors and additional experts were proposed for the Black Sea species assessments. All concerned species assessments would need to be finalized for early fall 2020. The assessors table and the (re) assessment process calendar are available in <a href="#">Annex</a> V.

#### Conclusion 8.

The Scientific Committee will undertake regional assessments, using the outcomes of the ASI as well as other data and observations collected in the last few years, for the following species:

- For the Mediterranean: Balaenoptera physalus, Physeter macrocephalus, Delphinus delphis, Steno bredanensis, Tursiops truncatus, Stenella coeruleoalba, Grampus griseus, Globicephala melas,
- For the Black Sea: Phocoena phocoena ssp. relicta, Delphinus delphis, Tursiops truncatus

For each species in each of the two regions, the assessment will be carried out by a group of experts designated by the SC and reviewed and adopted by the SC. These assessments will be a contribution from ACCOBAMS to the IUCN assessment process. The Chair of the Scientific Committee and the Permanent Secretariat will liaise with the IUCN-Med to investigate the possibility of organizing a joint workshop aimed at conducting the assessment of these species according to the IUCN Red Listing procedure and Criteria, including participants from the Red List Authority, to facilitate the review process and the correct use of the IUCN guidelines.

- b) CMP update
- 27. The coordinators of the Fin Whale and Risso dolphin Conservation Management Plans (CMP), respectively Simone Panigada and Léa David, presented an update on the development of those CMP, referring to the documents ACCOBAMS-SC13/2020/Doc11 and ACCOBAMS-SC13/2020/Doc12. They informed the meeting that expert workshops have been organized end of 2019 for drafting fin whales and Risso's Dolphin CMPs.

#### Conclusion 9.

Regarding the CMPs that are in the most advanced stage of development, namely the fin whale and Risso's dolphin, the Scientific Committee invited all interested scientists and experts to liaise with the CMP Contact Points (respectively Simone Panigada and Léa David) to contribute and review the draft CMPs. These drafts are expected to be finalized by May 2020 for presentation at the IWC Scientific Committee Meeting.

28. Referring to ACCOBAMS-SC13/2020/Doc14, the Chair of the Scientific Committee informed the meeting that expert drafting workshops for bottlenose and common dolphins CMP will be organized in 2020.

#### Conclusion 10.

For the common dolphin and bottlenose dolphin, the Scientific Committee invited interested scientists and experts to liaise with the Secretariat to inform about their interest to contribute to the development of the draft CMPs, taking into consideration that it won't be possible for all experts listed to attend the drafting workshop that should be organized by the Permanent Secretariat in 2020.

#### Conclusion 11.

For the CMPs that could be developed in the future (if funding is available), the Scientific Committee recommended to consider the most vulnerable species according to their IUCN conservation status, namely the sperm whale (as also suggested by the IWC SC) and the Cuvier's beaked whale.

- 29. The ASCOBANS representative reminded the Scientific Committee members that a joint ACCOBAMS/ASCOBANS workshop on common dolphin is planned for next ECS Conference in 2021, depending on Voluntary Contribution or External funds.
- 30. The regional representative for the Western Mediterranean and contiguous Atlantic area informed that considering the unfavourable conservation status of the Iberian harbour porpoise population, mainly caused by an extremely high level of bycatch, Portugal and Spain are engaged on the elaboration of an action plan to address the decrease in abundance and to develop management and mitigation measures aiming at reducing the induced human mortality.

A template similar to the one presently used for the elaboration of the Conservation and Management Plans (CMPs) will be used in order to hamonize the documentation presented to the ACCOBAMS Scientific Committee. The results will be shared with the members of the SC through the regional representative for the western Mediterranean and Atlantic adjacent area.

#### Conclusion 12.

The Scientific Committee welcomed the joint effort by Portugal and Spain to draft, following the IWC CMP template and as a matter of urgency, a conservation management plan for the Iberian harbour porpoise whose population is highly impacted by bycatch.

#### 5.1.4 Functional stranding networks and responses to emergency situation

31. Referring to ACCOBAMS-SC13/2020/Inf05 and ACCOBAMS-SC13/2020/Inf06, Mr. Sandro MAZARRIOL presented, through a conference call, the ongoing process to harmonize the best practices for necropsy of cetaceans and for the development of diagnostic frameworks in the ACCOBAMS and ASCOBANS Area.

# 5.2 Reduce human pressures on cetaceans, in particular those related to bycatch, habitat loss and degradation (pollution)

#### 5.2.1 Interactions with fisheries

- 32. The Co-Chair of the ACCOBAMS-ASCOBANS Joint Bycatch Working Group (JBWG), Mrs. Ayaka OZTURK, introduced the report of the Working Group as contained in document ACCOBAMS-SC13/2020/Doc15. She reminded that the Joint Bycatch Working Group (JBWG) was established in January 2019. Ayaka Amaha Oztürk (on behalf of ACCOBAMS) and Peter Evans (on behalf of ASCOBANS) have been acting as Co-chairs since February 2019. They have been in regular e-mail contact and have also held a Teleconference session involving the ASCOBANS and ACCOBAMS Secretariats, in order to plan for future meetings, including the first workshop for the JBWG. Either one of the co-chairs or both attended several bycatch-related meetings, namely, (i) the ICES WGBYC meeting in Faro, Portugal (April 2019), an Expert Working Group meeting at JRC in ISPRA, Italy, organized in June 2019 by the EU Scientific, Technical and Economic Committee for Fisheries (STECF), (ii) a joint OSPAR and HELCOM workshop "to examine possibilities for developing indicators for incidental bycatch of birds and marine mammals" (September 2019), (iii) a meeting of the Marine Expert Group organized by the European Commission (DG ENV) and (iv) an event organized at the European Parliament Building to update the current situation of cetacean bycatch in European waters (December 2019).
- 33. Recognizing the need for new reviews of the cost effectiveness of different monitoring methods, as well as of approaches to mitigating bycatch from specific gears, ASCOBANS commissioned two consultancies to conduct these analyses in the ASCOBANS region.
- 34. At the second World Marine Mammal Conference (WMMC, Barcelona, Spain December 2019), a poster presentation was made by ACCOBAMS and ASCOBANS and the Marine Stewardship Council organized a workshop at WMMC, entitled "Incentivising consistent data collection and transparent reporting of marine mammal bycatch in fisheries". A brief meeting was also held with the members of JBWG attending the WMMC to discuss the Terms of Reference for the first JBWG meeting.
- 35. The Regional Representative for the Black Sea, Mr. Arda TONAY, presented information on the pilot studies implemented in the Black Sea on cetacean bycatch monitoring and bycatch mitigation measures, as part of the CeNoBS project and Green Balkans NGO projects (document ACCOBAMS-SC13/2020/Inf07). He highlighted in particular the high bycatch rates caused by turbot gillnet fishery in 2019.
- 36. The representative of the WWF Mediterranean Programme Office, Mrs Théa JACOB, presented the draft Guidelines for the safe and humane handling and release of bycaught small cetaceans from fishing gears (document ACCOBAMS-SC13/2020/Inf10). She explained that this document is intended for fisheries managers, policy makers, trainers or any bodies supporting sustainable fisheries. It provides the scientific justification and rationale for detailed safe handling and release practices in a range of fisheries. She highlighted that even if these guidelines assist in the release and survival of only a relatively small proportion of animals, they would create awareness of cetaceans as sentient beings and help to provide further incentive for fisheries to mitigate bycatch or reduce entanglements. She pointed out that these guidelines are not intended to serve as an alternative for mitigation of interactions between cetaceans and fisheries, which must always be fisheries' first and foremost priority.

The first draft of these guidelines was completed in July 2019 and circulated to a range of experts consulted by the International Whaling Commission (including their bycatch, stranding and large whale entanglement response experts), the Convention on Migratory Species (CMS, including its agreements ASCOBANS and ACCOBAMS, and their joint bycatch working group), and a few individuals from the IUCN Cetacean Specialist Group. Over 20 cetacean, bycatch and stranding experts provided detailed feedback and comments on the first draft that were

incorporated into the draft document presented. She added that consultation with FAO is ongoing with a view toward joint publication of these guidelines under the CMS Technical Series. This document will be also presented to the Scientific Committee of the International Whaling Commission for review and possible endorsement by the Commission in October 2020.

- 37. Referring to documents ACCOBAMS-SC13/2020/Inf08 and Inf09, the ACCOBAMS Permanent Secretariat presented an update of the different ongoing MAVA-funded projects on interactions with fisheries.
  - Regarding the MedBycatch project "Understanding Mediterranean multi-taxa bycatch of vulnerable species
    and testing mitigation a collaborative approach", it was highlighted that the first results of the bycatch
    monitoring programmes implemented in Morocco, Tunisia and Turkey since March/April 2019 combining onboard observations and fishers interviews are to be reviewed by the project Scientific Committee and will be
    used to start identifying the mitigation measures that should be tested in the next years. The main outcomes
    of the project were also presented (GFCM data collection protocol, Regional review on incidental catch of
    vulnerable species, Identification guides of vulnerable species).

#### Conclusion 13.

Regarding bycatch, the Scientific Committee recommended to follow the GFCM data collection Protocol (http://www.fao.org/documents/card/en/c/ca4991en) developed within the framework of the joint Medbycatch Project to ensure that bycatch monitoring be implemented in a standardized way in the ACCOBAMS Area

- Regarding the Depredation project "Towards solutions to interactions between fisheries and cetaceans in Moroccan and Tunisian waters", the activities to be implemented in Tunisia and Morocco were presented, highlighting the different mitigation approaches that will be tested in each country (acoustic devices in Tunisia and strengthened nets in Morocco).
- The Permanent Secretariat also informed the Meeting about the perspectives to extend the scope of the project to South of Spain, Sicily and Malta based on the results of pilot studies on depredation in small scale fisheries carried out by another MAVA Partner (LIFE Low Impact Fishers of Europe). This is pending approval of the MAVA Foundation regarding the funds to be allocated until the closure of the Foundation in 2022.
- 38. The Regional Representative for the Western Mediterranean and contiguous Atlantic area, Mrs. Marina SEQUEIRA, informed the Meeting about a similar problem of depredation caused by bottlenose dolphins in trammel and gillnets fisheries in South of Portugal. She highlighted the need to ensure exchange of experience between the different teams working on depredation caused by bottlenose dolphins in the ACCOBAMS Area.

#### Conclusion 14.

Regarding depredation, the Scientific Committee recommended that a workshop be organized with the different teams/experts working on depredation to promote exchange of information and experience and establish a baseline of knowledge.

#### Conclusion 15.

The Scientific Committee also recommended that a review of available information on depredation by cetaceans in fishing gears is prepared, based on published literature and also by contacting relevant experts working on the field who have information on depredation.

#### 5.2.2 Anthropogenic noise

39. The Chair of the Scientific Committee invited Alessio Maglio, member of the Joint CMS/ACCOBAMS/ASCOBANS Noise Working Group (JNWG) to present:

- The progress report of the JNWG (ACCOBAMS-SC13/2020/Doc16)
- Updates on the QUIETMED and QUIETMED2 projects (ACCOBAMS-SC13/2020/Inf11 and Inf12)
- The revised detailed Guidelines to address the impacts of anthropogenic noise on cetaceans in the ACCOBAMS, adopted by Parties during MOP7 (ACCOBAMS-MOP7/2019/Doc38/Annex15/Res.7.13)
- 40. The IOGP representative requested to be included on the roster of industry-affiliated experts willing to serve in an advisory capacity to the JNWG, and available for consultation by the co-chairs of the JNWG. She added that IOGP can provide expertise on a number of relevant topics including the technical feasibility of proposed measures, as well as advice on alternative measures or solutions, and latest published scientific research on sound and marine life from the E&P Sound and Marine Life Joint Industry Programme (JIP) administered by IOGP on behalf of a consortium of industry members. Finally, she reiterated that IOGP was fully available to discuss on both what is being done in terms of research on underwater noise and to provide information on what can be implemented and feedback on challenges we may encounter from an operational viewpoint on implementation of the current version of the Guidelines to address the impact of anthropogenic noise on cetaceans in the ACCOBAMS Area.
- 41. The representative of SPA/RAC informed the meeting that SPA/RAC joined the consortium of the QUIETMED II project in 2019 and is contributing to the implementation of its planned activities in close collaboration with ACCOBAMS secretariat. A working Document on "the Role and contribution of the Barcelona Convention and its components in the processes related to underwater noise monitoring and assessment in the Mediterranean Sea" has been prepared within this project and shared with the MAP components. SPA/RAC proposes to organise a specific workshop/event to promote awareness of the anthropogenic noise impacts on cetaceans, targeting in particular decision makers, key players in the industry organizations and the stockholders in the shipping sectors, during the next biennial conference planned by the end of 2020.
- 42. OceanCare, providing comments by email, and the ASCOBANS Representative informed the Meeting that CMS Decisions adopted at COP13 included a request for the CMS/ACCOBAMS/ASCOBANS Joint Noise Working Group to review the report on Best Available Technology (BAT) and Best Environmental Practice (BEP) for three Noise Sources: Shipping, Seismic Airgun Surveys, and Pile Driving published as UNEP/CMS/COP13/Inf.9 and publish the resulting version as a Technical Series to make the information easily accessible to Parties

#### Conclusion 16.

The Scientific Committee welcomed the CMS request for the involvement of the JNWG in the review of the report on Best Available Technology (BAT) and Best Environmental Practice (BEP) for Three Noise Sources: Shipping, Seismic Airgun Surveys, and Pile Driving published as UNEP/CMS/COP13/Inf.9 and publish the resulting version as a Technical Series to make the information easily accessible to Parties

43. The Meeting was also informed on the action plan issued form the workshop organized in October 2019 on "sonars and cetaceans' interactions" which aimed to improve dialogue and cooperation of national navies with ACCOBAMS, especially regarding military activities of navies.

#### Conclusion 17.

The Scientific Committee stressed the importance of the action plan resulting from the ACCOBAMS workshop on military sonars and cetacean interactions (Annex 1 of the Resolution 7.13) and encouraged the follow up of this collaboration between scientists and Navies, in particular through the organisation of workshops

44. The Chair of the MMOs Working Group presented the progress in the implementation of an ACCOBAMS certification for highly qualified MMOs/PAM (ACCOBAMS-SC13/2020/Inf17).

45. The IOGP representative said that IOGP was very glad to be part of the MMO/PAM Working Group and believes that it is important that we can provide lessons learned from seismic programs during which the ACCOBAMS guidelines were implemented. She added that IOGP would like to offer to review the OG Seismic section of the training to complement it if need be. IOGP has also gathered feedback from recent seismic programmes in the Mediterranean which it will share with MMO/PAM WG chair.

#### Conclusion 18.

The Scientific Committee commended the activities undertaken for the training of MMO/PAM and recommended to reinforce the practical component of the training for "ACCOBAMS Highly Qualified MMOs/PAM" operators.

#### 5.2.3 Ship strikes

- 46. The Chair of the Scientific Committee informed the meeting about the IWC/IUCN/ACCOBAMS Workshop on ship strikes which was held in 2019 just before the ICMMPA5 Conference.
- 47. The representative of the WWF Mediterranean Programme Office, Mrs Théa JACOB, presented a study on the Evaluation of the REPCET anti-collision system efficiency (ACCOBAMS-SC13/2020/Inf14).
  - This evaluation was conducted in 2019, using AIS data from January to August 2018. The study demonstrated that 519 risk areas were generated by the REPCET system in summer 2018, thanks to the observations reported by the crew. It was observed that no vessel, even equipped with REPCET, reduced their speed or rerouted the ship when entering a risk area (i.e. when a cetacean was sighted in the area they were crossing). In conclusion, REPCET represents a good raising awareness tool as it allows engaging with maritime companies on the ship strikes issues, but it has not led to any change of behaviour from shipping crew so far. It is therefore necessary to elaborate and implement other mitigation measures regarding ship strikes, including the establishment of a PSSA in the North Western Mediterranean. She added that another more in-depth evaluation of the REPCET system is currently being finalised by Quiet Ocean, in the framework of the Pelagos International project lead by the Tethys Research Institute.
- 48. OceanCare, providing comments by email, informed the meeting about the SAVE Whale project (System for the Avoidance of ship-strikes with Endangered Whales) in the Hellenic Trench in order to protect the sperm whale population in that region from ship strikes and to develop a prototype for toothed whale localisation that might be of usage later on also for other areas.

#### Conclusion 19.

The Scientific Committee recommended to reactivate the Working Group on Ship Strike and to revise the corresponding Terms of Reference in order to include elements of special importance such as the development of a "whale safe" certificate.

#### 5.2.4 Cetacean watching

- 49. The Chair of the Whale Watching Working Group, Mrs. Marina SEQUEIRA, reminded the background of this working group and the activities undertaken previously, in particular the development of the data collection system for whale watching vessels adopted under Resolution 6.20.
- 50. She also introduced the draft Terms of Reference of the Working Group on Whale Watching (document ACCOBAMS-SC13/2020/Doc17), highlighting the main activities to be implemented during the 2020-2022 triennium. The list of members of the working group was also updated during the discussions.

51. The representative of the CIMA Foundation, Mrs. Aurélie MOULINS, informed the Meeting about the EcoSTRIM project that contributes to support the implementation of the High Quality Whale-Watching® Certificate in Italy in collaboration with ACCOBAMS and to test some indicators for assessing the impact of whale watching on cetaceans. She also explained that a mobile application was developed for whale watching operators to implement the data collection system in accordance with Resolution 6.20 and to test the procedure in the Ligurian Sea.

#### Conclusion 20.

The Scientific Committee approved the Terms of Reference of the Working Group on Whale Watching (WWWG) presented by the Chair of the Working Group (Annex VI).

The Scientific Committee welcomed the preparation of the study on the hotspots of WW activities in the ACCOBAMS Area and recommended to take into account relevant information and reports developed for some areas.

- 52. The ACCOBAMS Permanent Secretariat, the representatives of Souffleurs d'Ecume and of the CIMA Foundation provided an update on the implementation of the High Quality Whale-Watching® Certificate in France, Italy and Monaco.
- 53. The Secretariat informed the Meeting regarding the contact and discussion with the organisation "Friend of the Sea" which was seeking information regarding the High Quality Whale-Watching® Certificate. In fact, the "Friend of the Sea" organization has developed a certificate for whale watching operators similar to the High Quality Whale-Watching® Certificate and thus was looking for cooperation with ACCOBAMS on this matter.

  The Permanent Secretariat and the "Friend of the Sea" organization remain in contact for further discussion and ways to cooperate in the implementation of their respective certificates without duplicating efforts.
- 54. The Meeting discussed the need to undertake anonymous evaluation of the certified whale watching operators in order to ensure they comply with the Certificate requirements.

#### Conclusion 21.

In relation to the "High Quality Whale-Watching" Certificate, the Scientific Committee recommended (i) to undertake a review of existing regulation and assess the possibility for harmonization of the national legislations to comply more with the ACCOBAMS standards, and (ii) to the Permanent Secretariat, to develop a communication strategy to promote the HQWW Certificate and to (iii) liaise with other relevant entities implementing Whale Watching certificates.

- 5.2.5 Marine litter &
- 5.2.6 Chemical and biological pollution

### Conclusion 22.

The Scientific Committee agreed to address these two agenda items together, stressing the close link between chemical pollution and ingested plastic and the need to follow an integrated approach.

55. The Task Manager on Marine litter & chemical pollution, Mrs. Cristina FOSSI, gave a detailed presentation on marine litter impact and interaction with cetaceans. Underlining that the Mediterranean Sea is one of the most affected areas by debris in the world, she presented the importance of both the scientific evidences and the emerging gaps concerning the interaction between the charismatic megafauna (e.g. filter feeder baleen whales and deep divers) and micro- and macroplastics and recommended studying their impact and their related potential toxicological and noxious effects.

- 56. She also presented some of the recommendations of the IWC Marine Litter Workshop held in La Garriga, Spain, in December 2019, in particular to consider cetacean species as candidate indicators for microplastics (fin whale, *Balaenoptera physalus*) and macro-litter pollution (sperm Whale, *Physeter macrocephalus*) at global scale, respectively. In the Mediterranean, sperm whales were recently proposed as a candidate indicator to monitor the presence of marine debris (MSFD, Descriptor 10 and IMAP Ecological Objective 10, candidate indicator 24).
- 57. The connection between the ACCOBAMS Work Programme (2020-2022) and the EU Plastic Busters MPAs activities was also discussed.
- 58. Plastic Busters MPAs (https://plasticbustersmpas.interreg-med.eu/) is an Interreg Med funded project aiming to maintain biodiversity and preserve natural ecosystems in coastal and marine protected areas by consolidating Mediterranean efforts against marine litter. The project entails actions addressing the whole management cycle of marine litter, from monitoring and assessment, to prevention and mitigation. One of the aims of this project is to realize a harmonized monitoring methodology to detect the impact of marine litter on Mediterranean ecosystems and particularly on marine biodiversity, including endangered species inhabiting pelagic and coastal MPAs (cetaceans, sea turtles, birds, endangered sharks, etc.).
  - Given the multiple potential physical and ecotoxicological effects of marine litter ingestion (including microplastics), the impact of litter on marine mammals should be assessed using a threefold approach as proposed by the Plastic Busters MPAs Project: i) analysis of gastrointestinal content: ii) analysis of the levels of plastic additives, as a proxy for ingestion; iii) analysis of biomarker responses.
- 59. Lastly, the Task Manager provided insights on the use of predictive model to identify macro/microplastics hot spots and the potential overlap between debris accumulation areas and endangered species' feeding grounds.
- 60. The summary of her presentation is included in **Annex VII**.
- 61. The representative of the Mediterranean Sub-regional Coordination Unit, Mrs. Lobna BEN NAKHLA, provided information on the EU-funded Marine Litter MED Project that supported since 2016 the implementation of key reduction and prevention measures of the Regional Plan for marine Litter management in the Mediterranean, in seven Mediterranean Countries (Algeria, Egypt, Israel, Lebanon, Libya, Morocco and Tunisia), mainly in relation with the implementation of "Adopt-a-Beach" and "Fishing-for-Litter" measures and "Phasing out of single-use plastic bags in the Mediterranean".
  - She informed the meeting that this project also supported the development of the IMAP Candidate Indicator 24 related to ingested or entangled marine litter by endangered species with a particular focus on marine turtles, including the development of an integrated operational monitoring strategy and monitoring protocol. The IMAP Candidate Indicator 24 will be submitted for adoption during the relevant UNEP/MAP meetings to be organized in 2020 and 2021.
- 62. The representative of the Black Sea Sub-regional Coordination Unit, Mrs Irina MAKARENKO, informed the Meeting that the Regional Action Plan on management of the Marine Litter in the Black Sea was adopted in October, 2018 and currently implementation of activities foreseen in its Annexes, and, therefore, closer coordination regarding the joint actions on cetaceans with the ACCOBAMS Permanent Secretariat are on the agenda.
- 63. OceanCare, providing comments by email, informed the Meeting that it will contribute to the activities of the 2020-2022 ACCOBAMS Program of Work related to marine litter, underlining that the impacts of marine litter are already apparent and documented and that focus needs to be given on waste avoidance.

#### Conclusion 23.

While recognizing the importance of putting effort in the reduction of marine litter, the Scientific Committee stressed the importance to monitor the impacts of marine litter on cetaceans and welcomed the work presented by the Task Manager on that aspect.

It stressed also the importance of providing decision-makers with scientific elements supporting the use of cetacean species, such as sperm whales and fin whales, as bioindicator species for the MSFD Descriptor on Marine Litter and the corresponding IMAP Candidate Indicator. In this context, the Permanent Secretariat will liaise with the Secretariat of the Barcelona Convention to propose for the next Meeting of the CORMONs on Marine Litter and Biodiversity an information document on the subject to be prepared with the support of the Task Manager and Vice-Task Manager.

#### 5.2.7 Climate change

64. The Permanent Secretariat presented the Work Programme activities for this item.

#### 5.2.8 Captivity related issues

65. The Permanent Secretariat presented the Working Programme activities for this item, especially the request to draft a Reference document on a scientific point of view about "potential marine semi-enclosed facilities" in the ACCOBAMS area.

#### Conclusion 24.

The Scientific Committee decided to establish a Working Group to support the development of a reference document on marine semi-enclosed facilities.

66. Terms of Reference of this Working Group appear in Annex VIII.

### **5.3 Enhance effective conservation of Cetaceans Critical Habitats**

- 67. The 2017-2019 Task Manager on Marine Protected Areas, Mrs Léa DAVID, was invited to present the progress in revising the Cetacean Critical Habitats (ACCOBAMS-SC13/2020/Doc18).
- 68. The Scientific Committee welcomed the ongoing process engaged in the identification of new Cetacean Critical Habitats and invited the Task Manager to pursue the process.
- 69. The Permanent Secretariat presented the provisional Terms of Reference for a workshop "Toward the identification of important areas for marine species at regional scale" to be organized during the 2020 IUCN World Conservation Congress.

#### 6. INFORMATION AND COMMUNICATION

#### 6.1 ACCOBAMS Cetacean digital platform

70. The Permanent Secretariat recalled the Meeting that thanks to the 2018 Italian Voluntary Contribution, the ACCOBAMS Permanent Secretariat is implementing a "cetacean big data platform" with SINAY. Three "use case

applications" were defined with the Secretariat, in accordance with the priorities proposed by the Italian Focal Point: water temperature, marine litters and underwater noise.

A workshop with the 2017-2019 Chair of the Scientific Committee and with the Task Manager on Marine Protected Areas was organized the day before the Meeting of the Scientific Committee. The objective was to determine the next steps for the development of the three applications in order to have a better use of best available technologies for cetaceans' conservation in the ACCOBAMS Area.

71. The SINAY representative presented the online platform with the preliminary applications for the three use cases (water temperature, marine litters and underwater noise).

#### Conclusion 25.

The ACCOBAMS Scientific Committee Members stressed that the ACCOBAMS Digital Platform was an opportunity with a lot of potential.

72. He explained that all ACCOBAMS Scientific Committee members will be invited to try and test this platform in order to provide the ACCOBAMS Permanent Secretariat with their feedback.

#### Conclusion 26.

The Scientific Committee acknowledged the conclusions of the workshop of the previous day and recommended to organize a dedicated workshop aimed at providing further elements to the company in charge of the development of the platform, providing advices on additional information to be collected and additional features to be added

#### 6.2 Citizen sciences

73. The Permanent Secretariat presented a preliminary overview of opportunity platforms and citizens observations (ACCOBAMS-SC13/2020/Inf19) as well as the Working Programme activities for this item.

#### 7. COLLABORATION AND INSTITUTIONAL ISSUES

- 7.1 <u>Improve the level of implementation and compliance with ACCOBAMS Resolutions as well as the monitoring of its progress</u>
- 74. The Executive Secretary informed the Scientific Committee about the main recommendations issued from the Second Meeting of the ACCOBAMS Follow-up Committee that was convened on 5-6 March 2018 in Monaco, at which four submissions, by one ACCOBAMS Partner, were presented
  - Submission by OceanCare on the assessment and control by Greece of military activities around South-East Crete;
  - Submission by OceanCare on the assessment and control by Spain of petroleum exploration activities around the Balearic Islands;
  - Submission by OceanCare on the assessment and control by Portugal of petroleum exploration activities in the Algarve and Alentejo basins;
  - Submission by OceanCare on the failure by Albania, Algeria, Croatia, Cyprus, Egypt, France, Greece, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syria and Tunisia to implement the ACCOBAMS Conservation Plan for Mediterranean common dolphins.
- 75. She explained that the next Meeting of the Follow-up Committee will consider the new information transmitted by Parties for some of the above submissions.

- 76. She also informed the meeting about the reviews that the Follow-up Committee was requested to undertake by MOP6 on the legal and technical issues of implementation and follow-up of existing obligations and commitments related to seismic and military activities producing underwater noise and relating to interactions between humans and dolphins addressed by Resolution 3.13 Dolphin interaction programme.
- 77. Finally, she informed the Meeting about the new members of the ACCOBAMS Follow-up Committee nominated by Parties and by Partners during MOP7, in accordance with the Rules on the ACCOBAMS Follow-up Procedure adopted through Resolutions 5.4 and 6.8.

#### 7.2 Cooperation with international organizations

#### 7.2.1 Collaboration with Sub Regional Coordination Units

#### Mediterranean and Atlantic contiguous area SRCU

- 78. The representative of the Mediterranean Sub-regional Coordination Unit, Mrs. Lobna BEN NAKHLA, presented the preliminary proposals for the joint ACCOBAMS-SPA/RAC work programme for 2020-2022, based on relevant activities and decisions adopted by the Barcelona Convention COP 21 and by ACCOBAMS MOP7:
  - Share ASI data and experiences in order to support the implementation of cetacean monitoring programmes
    in the South Mediterranean countries as part of the IMAP/EcApMED III project and collaborate in the
    preparation of the 2023 Quality Status report and ensure their dissemination in relevant regional fora;
  - Support the organization of the training on the set up and reinforcement of national stranding networks (with all national institutions concerned);
  - Provide assistance to the Mediterranean countries in mitigating the impacts of the interactions between cetaceans and fisheries;
  - Promote awareness on the anthropogenic noise impacts on cetaceans through the implementation of the EUfunded QUIETMED 2 project;
  - Organize the Fifth session of the Conference for the Conservation of Cetacean in the Southern Mediterranean countries (2020). For this session, a focus on anthropogenic noise was requested by Mediterranean Countries in 2019.
  - Contribute to the revision of Cetacean Critical Habitats, especially by continuing the ongoing threat-based management approach;
  - Contribute to the implementation and update of the Mediterranean Action Plan for the conservation of cetaceans (2021);
  - Take part to the Ad hoc Group of Experts on Marine Protected Areas in the Mediterranean (AGEM) and to the Advisory Committee of the SAP/BIO post-2020.

#### **Black Sea SRCU**

- 79. Mrs. Irina Makarenko, from the Black Sea Commission' Permanent Secretariat (BSC PS), representing the ACCOBAMS Black Sea Sub Regional Coordination Unit, informed the Meeting that BSC PS is taking steps to promote regional cooperation on conservation of cetaceans by establishing partnerships and joint initiatives with ACCOBAMS and other relevant partners (GFCM, CBD Convention, EC etc.).
- 80. She informed the participants that BSC PS appreciated the level of cooperation and assistance of ACCOBAMS and other relevant partners, and was moving forward to continue this important collaboration (i.e. sustainability and

dissemination of Black Sea Cetaceans Survey results, Project on cetacean by-catch; Cetacean conservation modules in Black Sea universities; marine litter; underwater noise etc.). BSC welcomed the successful organization of ACCOBAMS MOP in Istanbul, Republic of Turkey.

- 81. She informed the participants that on 20th March, 2019 BSC PS helped ACCOBAMS to carry out Public Awareness event on ACCOBAMS Master Course in cetacean conservation in Mediterranean and Black Sea. The purpose of this public event, back to back with the ACCOBAMS Master course, was to raise awareness on the urgent need to address the conservation of cetaceans in the Black Sea, to provide deeper knowledge on the relevant ACCOBAMS and BSC PS activities, in particular the unprecedent large scale ASI implemented in summer 2019, as well as to present the structure and modalities of the ACCOBAMS Master Course in cetacean conservation being held at Istanbul University from 18 to 21 March 2019. She also stated that BSC PS assisted the ACCOBAMS Secretariat in preparation of the MOP of ACCOBAMS Parties in Istanbul (5-8th November, 2019).
- 82. Regarding the Black Sea cetaceans survey held in summer 2019, she appreciated and thanked the ACCOBAMS Secretariat for developing collaboration with Russian scientific organizations in order to simultaneously conduct the cetacean survey in the Russian waters during the summer 2019, as well as to liaise with UNDP/EC project EMBLAS+ and ANEMONE Project in order to coordinate all the efforts.
- 83. Regarding future activities, the representative of the BSC PS explained that support and expertise for drafting and improving the relevant documents were needed (in particular the Conservation Plan for Cetaceans, BSIMAP 2017-2022, short format of BSC annual reporting, dedicated Chapter on Cetaceans in the next State of Environment Report 2015-2022). BSC Permanent Secretariat also plans to organize a Workshop on Cetaceans during the upcoming meeting of CBD and FOMLR AGs (whenever the meetings are scheduled by the Black Sea Commission).
- 84. To conclude, the representative of the BSC PS emphasized that BSCPS was ready to contribute to other relevant ACCOBAMS activities, in particular in implementation of the project for MSFD implementation for cetaceans, in assisting dissemination and sustainability of ACCOBAMS survey results and preparation of data on cetaceans for Black Sea Red Data Book.
- 85. The ACCOBAMS Executive Secretary warmly thanked the representatives of the two Sub-regional Coordination Unit for their excellent collaboration over the years that allowed great achievements in both regions during the last years.

#### Conclusion 27.

The Scientific Committee commended the collaboration with the two Sub Regional Coordination Units and confirmed its support towards achieving common objectives.

#### Conclusion 28.

The Scientific Committee recommended that the Mediterranean members of the JNWG be involved in the preparation of the Quality Status Report 2023 under the Barcelona Convention for the section related to anthropogenic noise Candidate Indicators.

86. The representative of the Mediterranean Sub-regional Coordination Unit, Mrs Lobna BEN NAKHLA, presented information on the MAVA-funded project "Support mechanism for Filling key knowledge gaps for vulnerable and highly mobile species impacted by fisheries in the Mediterranean" (MAVA Species project) and the projects that were selected for funding in this framework. In particular, she provided information on the project "From Small Cetaceans to Great Whales of the East" coordinated by DMAD – Marine Mammals Research Association.

#### Conclusion 29.

Regarding the MAVA Species project coordinated by SPA/RAC, the Scientific Committee proposed that the Task Manager on Protected Areas and Chair of the Working Group on MMOs/PAM be the Scientific Committee contact person to support the Permanent Secretariat in the monitoring of the project activities.

#### 7.2.2 Collaboration with ACCOBAMS Partners

- 87. The ACCOBAMS Partners attending the meeting were invited to present their activities in line with ACCOBAMS objectives.
- 88. Mrs Aurélie MOULINS, the representative of the CIMA Foundation, welcomed the collaboration with ACCOBAMS, in particular for the activities implemented in the framework of the three EU cross-border Interreg Italy-France Maritime projects:
  - SICOMARplus (<a href="http://interreg-maritime.eu/it/web/sicomarplus/progetto">http://interreg-maritime.eu/it/web/sicomarplus/progetto</a> ),
  - EcoSTRIM (http://interreg-maritime.eu/it/web/ecostrim/progetto ) and

development of training mechanisms on this thematic for MPA managers.

GIAS (http://interreg-maritime.eu/it/web/gias/progetto).

These projects contribute and support the implementation of several activities of the 2020-2022 ACCOBAMS Program of Work, in particular for the topics related to Cetacean population estimates and distribution, Population structure, Ship strikes, Cetacean watching and Spatial measures for cetacean conservation.

89. Mrs Susan GALLON, MedPAN representative, reminded that ACCOBAMS has been a long-term partner of

- MedPAN. Following MedPAN's new 2019-2023 & beyond Strategy, mobile species have been identified as a key thematic and thus ACCOBAMS expertise will be particularly welcome in the coming years. This strong partnership was highlighted during the 2019 MedPAN annual experience sharing workshop on mobile species for which ACCOBAMS was invited to the steering committee and co-organised several sessions.

  In 2020, ACCOBAMS and MedPAN will co-organise a session on the 'Identification of areas important for highly mobile marine species' at the IUCN Congress. ACCOBAMS has also joined the steering committee of the 2020 Mediterranean MPA Forum that is organized every 4 years by SPA/RAC and MedPAN. The results of the 2020 status of Mediterranean MPA that is being prepared by MedPAN and SPA/RAC will provide an overview of the existence and implementation of conservation measures in Mediterranean MPA for marine mammals. Those results may contribute to the ongoing CCH work within ACCOBAMS. ACCOBAMS is also an associated partner of the new Interreg project 'MPANetwork' (2019-2022) for which there are pilot actions regarding marine mammals and MPA management. In addition, a working group dedicated to mobile species and with a focus on marine mammals is being set-up for which ACCOBAMS will be invited to join to share its expertise and contribute to the
- 90. Mrs Théa JACOB, representative of the WWF Mediterranean Programme Office, informed the meeting about the WWF ongoing activities in the Mediterranean. Regarding ship strikes, WWF pursues its assessment of the efficiency of the REPCET system and collaborates with the Pelagos Sanctuary to organize a workshop on ship strikes. Efforts are also implemented to support the development of Particularly Sensitive Sea Areas (PSSA) proposal in North Western Mediterranean Sea. In particular, WWF is involved in the organization of a workshop on PSSA to be organized during the IUCN World Congress in Marseilles. Regarding bycatch, WWF is one of the partners of the MedBycatch project and contributes to the activities in Turkey. Activities are also implemented in France and Italy to assess small cetaceans bycatch. Two reports, a bycatch legislation review, and a review of the use of Remote Electronic Monitoring to monitor and manage cetacean bycatch will be finalized by September.
- 91. The Secretariat commended the collaboration established with a number of ACCOBAMS partners and renewed its commitment to maintain and promote it.

#### 7.2.3 Collaboration with other Organizations

- 92. Mrs Jenny RENELL, ASCOBANS Coordinator, informed the Scientific Committee about the ASCOBANS upcoming meetings of interest to ACCOBAMS, in particular the workshop on Management of MPAs for Small Cetaceans, indicating that ACCOBAMS will be invited to share its experience. She added that the ASCOBANS and ACCOBAMS Secretariats collaborate for the organization of the First Meeting of the Joint Bycatch Working Group. She concluded mentioning that the next Meeting of the Parties to ASCOBANS will be organized in September 2020 in Brussels, Belgium.
  - Referring to document ACCOBAMS-SC13/2020/Inf 21, she presented the outcomes of the Thirteenth Meeting of the Conference of the Parties to the CMS (Gandhinagar, India, 17-22 February 2020) relevant to ACCOBAMS. She provided in particular an overview of the decisions related to Important Marine Mammal Areas (IMMAs), Marine Noise, Bycatch, Marine Wildlife Watching and to the Global Program of Work for Cetaceans.
- 93. The Permanent Secretariat informed the Scientific Committee Members about the request for advice received from the RAMOGE Secretariat regarding the actions that could be undertaken in case of marine pollution events in order to keep cetaceans away from the polluted area.

#### Conclusion 30.

The Scientific Committee recognized the relevance of the request from the RAMOGE Secretariat seeking advice from the ACCOBAMS Scientific Committee about the use of acoustic methods to make the cetaceans leave an area affected by oil and/or chemical spill events.

The Scientific Committee invited the JNWG to address this issue, in consultation with the Task Manager on Marine Litter and Chemical pollution. Contacts with relevant experts, such as US experts, could be also useful in order to get their experiences / feedbacks, in particular in relation to the Gulf of Mexico oil spill in 2010.

94. The Permanent Secretariat reminded the Meeting about the ongoing collaboration with GFCM for addressing the issues related to interactions between cetaceans and fisheries, in particular through the joint projects on bycatch and depredation. In 2020, the collaboration between ACCOBAMS and GFCM will also include the development of a policy brief on bycatch/depredation that will serve as input to the GFCM mid-term Strategy updating process.

#### Conclusion 31.

The Scientific Committee stressed the importance of pursuing collaboration with GFCM in particular regarding the bycatch and depredation issues.

95. Mr. Greg DONOVAN, IWC representative, welcomed the intensive collaboration with ACCOBAMS experts, in particular on the issue of ship strikes, the harmonization of best practices for cetacean necropsy and tissue sampling and marine debris. Regarding whale watching, he informed the meeting about the publication in October 2018 of the Whale Watching Handbook developed in partnership with CMS (<a href="https://www.int/en/">https://www.int/en/</a>).

#### Conclusion 32.

The Scientific Committee stressed the value of the IWC/ACCOBAMS cooperation on many topics of common interest and recommended that this cooperation be continued and enhanced.

#### 8. ANY OTHER BUSINESS

96. There were no additional issues raised by the participants under this agenda item

#### 9. DATE AND VENUE OF THE NEXT SCIENTIFIC COMMITTEE MEETING

97. The Chair informed the Meeting that the Fourteen Scientific Committee Meeting will be held in 2021.

#### 10. ADOPTION OF THE CONCLUSIONS

#### Conclusion 33.

The Scientific Committee reviewed and adopted the conclusions and recommendations prepared by the Permanent Secretariat and presented under this agenda item.

#### Conclusion 34.

The Scientific Committee approved the Work Programme 2020-2022 as modified/completed during the Meeting with the SC Members responsibility and tasks (Annex IV).

#### 11. CLOSURE OF THE MEETING

- 98. The Chair, on behalf of the Scientific Committee members, warmly thanked the Executive Secretary, Mrs. Florence Descroix-Comanducci, for her commitment and spirit of collaboration and commended the very good cooperation atmosphere between the Permanent Secretariat and the Scientific Committee since his start as Chair of the Scientific Committee in 2014. He particularly appreciated the rigorous, firm and committed approach of the Executive Secretary in addressing every issue, with a positive reaction and a fast response to emergency situations. Over the last few years, there has been great communication with the SC members and the Executive Secretary, with relaxed feelings and strong agreement and mutual appreciation. His acknowledgments went also to the other members of the ACCOBAMS Secretariat, stressing that a good captain always needs a great crew to run a ship in calm and rough seas.
- 99. After the customary exchange of courtesies, the Chair closed the Meeting at 12:45 p.m. on Friday 28<sup>th</sup> February 2020.

# **ANNEXES**

Annex 1 - List of participants

Annex 2 – Agenda

Annex 3 - Terms of reference for the Scientific Committee Task Managers

Annex 4- Updated 2020-2022 Working programme for the ACCOBAMS Scientific Committee

<u>Annex 5</u> - Monitoring Cetacean status - assessment and reassessment of the IUCN conservation status of Cetaceans in the ACCOBAMS Area in 2020

Annex 6 - Terms of Reference of the Working Group on Whale Watching (WWWG)

<u>Annex 7</u> - Presentation of the Task Manager on "Marine litter & chemical pollution" regarding marine litter impact and interaction with cetaceans

<u>Annex 8</u> - Terms of Reference of the Working Group to support the development of a reference document on marine semi-enclosed facilities

#### **ANNEX I - LIST OF PARTICIPANTS**

#### MEMBERS OF THE SCIENTIFIC COMMITTEE

#### **CIESM**

#### **MENDEZ Loriane**

Mediterranean Science Commission Research Assistant 16 boulevard de Suisse 98000 Monaco

Tel: +33629414208 Imendez@ciesm.org

#### **OZTURK Ayaka Amaha**

Turkish Marine Research Foundation Advisor Fistikli Yali Sok. N°34/5 Beykoz, 34820 Istanbul – TURKEY Tel: +90-533 7475915 ayakamaha@hotmail.co.jp

#### **PANIGADA Simone**

Tethys Research Institute President Viale G.B. Gadio 2 - 20 121 Milan – ITALY Tel: (+39) 02 7200 1947 – (+39) 02 6694 114

panigada69@gmail.com

#### **IUCN**

#### **DAVID Léa**

EcoOcéan Institut Dr écologie marine cétologie/ornithologie 18 Rue des Hospices - 34090 Montpellier - FRANCE Tel: +33 4 67 84 28 87 - Mob: +33 6 09 49 68 39 lea.david2@wanadoo.fr

#### **FOSSI Maria Cristina Fossi (Skype)**

Dipartimento di Scienze Fisiche, della Terra e dell'Ambiente Università di Siena Via P.A. Mattioli, 4 53100 Siena - Italy fossi@unisi.it

#### **LAMOUTI Souad**

Chercheuse

Centre National de Recherche en Pêche et Aquaculture - CNRDPA 11 boulevard Colonel Amirouche, Bou-Ismail

w. de Tipaza – Algérie Tel: +213-24-32-64-10 souad.lamouti@gmail.com

#### **REGIONAL REPRESENTATIVES**

### Black Sea region

#### **TONAY Arda**

İstanbul Üniversitesi Su Bilimleri Fakültesi Ordu Cad. No:8 Laleli, 34480 İstanbul ardatonay@yahoo.com

#### Central region

#### Tilen GENOV (Skype)

tilen.genov@gmail.com

MORIGENOS, Slovenian Marine Mammal Society Kidričevo nabrežje 4 6330 Piran Slovenia Tel: +38631771077

# Eastern region MAHFOUZ Céline

Researcher National Centre for Marine Sciences 189 Jounieh Jounieh - LIBAN Tel: +961 349 6680

celine.mahfouz@gmail.com

#### Western region and contiguous Atlantic area SEQUEIRA Marina

Institute for Nature Conservation and Forestry Biologist Nature Conservation and Biodiversity Av. da República, 16 – 16B 1050-191 Lisboa

Tel: +351 213 507 900 marina.sequeira@icnf.pt

**ECS** 

#### **GONZALVO** Joan

Tethys Research Institute Viale G.B.Gadio 2 20121 Milano – ITALY Tel: +34 650434808

Joan.gonzalvo@gmail.com

**IWC** 

# **DONOVAN Greg (Skype)**

International Whaling Commission 135 Station Road, Impington CB24-9NP - Cambridge – UK Tel: (+44) 1223 233971 greg.donovan@iwc.int

#### **OBSERVERS**

#### **ACCOBAMS SUB REGIONAL CCORDINATION UNITS**

# Black Sea Commission Permanent Secretariat

#### **MAKARENKO Iryna**

Pollution Monitoring and Assessment Officer

Su Isleri Bakanligi, Maslak Mh Buyukdere Cd 265 Sariyer 34398 Istanbul - Turkey

Tel: +905333936225

Iryna.makarenko79@gmail.com

# UNEP/MAP Regional Activity Centre for Specially Protected Areas (SPA-RAC) BEN NAKHLA Lobna

**Programme Officer** 

Bd. Du Leader Yasser Arafat B.P. 337 1080 Tunis cedex. Tunisia

Tel: +216 71 206485- Fax: +216 71 206490

lobna.bennakhla@spa-rac.org

#### INTERGOVERNMENTAL ORGANISATIONS

# UN Environment/CMS/ASCOBANS

#### **RENELL Jenny**

ASCOBANS Coordinator Platz der Vereinten Nationen 1 53115 Bonn GERMANY

Tel: +49 228 815 2418 jenny.renell@un.org

#### **Pelagos Agreement**

#### **FAVILLI Costanza**

Executive Secretary
Tour Odéon B1 - 36 avenue de l'Annonciade
98000 Monaco

Tel: +377 9216 1155

costanzafavilli@pelagos.org

secretariat@pelagos-sanctuary.org

### **Pelagos Agreement**

#### **TRAPANI Maxime**

Assistant to the Permanent Secretariat of the Pelagos Agreement Tour Odéon B1 - 36 avenue de l'Annonciade 98000 Monaco

Tel: +377 9216 1155

maximetrapani@pelagos-sanctuary.org

#### **ACCOBAMS PARTNERS AND OTHER ENTITIES**

# CIMA Research Foundation

# **MOULINS Aurélie**

Senior Researcher Via Magliotto, 2 -17100 Savona - Italy

Tel: +39 019 230 271 - Fax: +39 019 230 27240

aurelie.moulins@cimafoundation.org

#### **GECEM**

#### **JOURDAN Julie**

Chargée de mission 94 allée Jean Giono, Domaine d'Amhosis F3 06110 Le Cannet - France

Tel: +33 679955970 julie.jourdan@gecem.org

# INTERNATIONAL ASSOCIATION OF OIL AND GAS PRODUCERS (IOGP) BROWN Wendy

City Tower, 40 Basinghall Street London EC2V 5DE - United Kingdom

Tel: +44 2037639707

wb@iogp.org

#### **MedPAN**

#### **GALLON Susan**

Scientific Officer 58 quai du port 13002 Marseille - France Tel: +33699010617

161. +33033010017

susan.gallon@medpan.org

#### **SINAY**

#### **MAGLIO Alessio**

Chargé d'étude 117 Cours Caffarelli - 14000 Caen - France

Tel: +33 7 86 17 92 85 alessio.maglio@sinay.fr

# **SOUFFLEURS D'ECUME**

### **RATEL Morgane (Skype)**

Coordinatrice Projets
724 avenue des Berges
83170 Brignoles – France

Tel: +33 4 94 69 44 93

morgane.ratel@souffleursdecume.com

# UNIVERSITÀ DEGLI STUDI DI PADOVA MAZZARIOL Sandro (Skype)

Dipartimento di Biomedicina Comparata e Alimentazione (BCA)

AGRIPOLIS

Viale dell'Università, 16 35020 - Legnaro - Italy

Tel: +39 049 827 2063

sandro.mazzariol@unipd.it

# WHALE AND DOLPHIN CONSERVATION

#### **READ Fiona**

Brookfield House 38 St Paul Street, Chippenham Wiltshire SN15 1LJ - UNITED KINGDOM

Tel: +44 (0)791 869 3023 fiona.read@whales.org

# WWF - Mediterranean Programme Office JACOB Théa (Skype)

Marine Species and Fisheries Officer 6 rue des Fabres 13001 Marseille – France

Tel: +33 6 15 39 19 81 tjacob@wwf.fr

#### **ACCOBAMS PERMANENT SECRETARIAT**

#### Florence DESCROIX-COMANDUCCI

**Executive Secretary** Les Terrasses de Fontvieille, Jardin de l'UNESCO MC-98000 Monaco

Tel: +377 98 98 80 10 / 20 78 - Fax: +377 98 98 42 08

fcdescroix@accobams.net

#### Julie BELMONT

**ASI Project Officer** Les Terrasses de Fontvieille, Jardin de l'UNESCO MC-98000 Monaco Tel: +377 98 98 93 13 - Fax: +377 98 98 42 08

#### Célia LE RAVALLEC

ibelmont@accobams.net

Programme & Project Officer Les Terrasses de Fontvieille, Jardin de l'UNESCO MC-98000 Monaco Tel: +377 98 98 40 74 - Fax: +377 98 98 42 08 cleravallec@accobams.net

#### **Camille MONTIGLIO**

Assistant to the Executive Secretary Les Terrasses de Fontvieille, Jardin de l'UNESCO MC-98000 Monaco Tel: +377 98 98 20 78 - Fax: +377 98 98 42 08

cmontiglio@accobams.net

#### **Chedly RAIS**

Consultant Menzah VIII, Tunis - TUNISIE Tel: +216 98444629 chedly.rais@okianos.org

msalivas@accobams.net

#### Maÿlis SALIVAS

Programme & Programme Officer Les Terrasses de Fontvieille, Jardin de l'UNESCO MC-98000 Monaco Tel: +377 98 98 42 75 - Fax: +377 98 98 42 08

#### **ANNEX II - AGENDA**

#### 1. OPENING OF THE MEETING

#### 2. ADOPTION OF THE AGENDA

#### 3. FUNCTIONING OF THE SCIENTIFIC COMMITTEE

- 3.1 Designation of the Chair and of the Vice-Chair of the Scientific Committee
- **3.2** Terms of Reference and designation of Task Managers following priority topics of the 2020/2022 Working Programme

#### 4. REPORT OF EACH REGIONAL REPRESENTATIVE

#### 5. CONSERVATION ACTIONS

- **5.1** Improve knowledge about state of cetaceans
  - 5.1.1 Cetacean population estimates and distribution
  - 5.1.2 Population Structure
  - 5.1.3 Monitoring cetacean's status
    - a) IUCN Red List
    - b) CMP update
  - 5.1.4 Functional stranding networks and responses to emergency situation
- **5.2** Reduce human pressures on cetaceans, in particular those related to bycatch, habitat loss and degradation (pollution)
  - 5.2.1 Interaction with fisheries
  - 5.2.2 Anthropogenic noise
  - 5.2.3 Ship strikes
  - 5.2.4 Cetacean watching
  - 5.2.5 Marine litter
  - 5.2.6 Chemical and biological pollution
  - 5.2.7 Climate change
  - 5.2.8 Captivity related issues
- 5.3 Enhance effective conservation of Cetaceans Critical Habitats

#### 6. INFORMATION AND COMMUNICATION

- 6.1 ACCOBAMS Cetacean digital platform
- 6.2 Citizen sciences

#### 7. COLLABORATION AND INSTITUTIONAL ISSUES

- **7.1** Improve the level of implementation of and compliance with ACCOBAMS Resolutions, as well as the monitoring of its progress
- **7.2** Cooperation with international organizations
  - 7.2.1 Collaboration with Sub Regional Coordination Units
  - 7.2.2 Collaboration with ACCOBAMS Partners
  - 7.2.3 Collaboration with other Organizations
- 8. ANY OTHER BUSINESS
- 9. DATE AND VENUE OF THE NEXT SCIENTIFIC COMMITTEE MEETING
- **10.ADOPTION OF THE CONCLUSIONS**
- 11.CLOSURE OF THE MEETING

#### ANNEX III - TERMS OF REFERENCE OF SCIENTIFIC COMMITTEE TASK MANAGERS

#### I- General considerations

#### 1. Which members of the Scientific Committee can be designated as Task Manager?

Pursuant to the Resolution 7.7 relative to the Scientific Committee, at its first Meeting, the Scientific Committee shall designate four "task managers" among the following experts:

- experts appointed by CIESM,
- experts appointed by IUCN,
- regional representatives,
- representative form ECS,
- representative form IWC,
- representative from CMS.

Additional members of the Scientific Committee, designated by the Parties on a voluntary basis, cannot be designated as Task Manager.

#### 2. Which topics will be assigned to the Task Managers?

Pursuant to the Resolution 7.7 relative to the Scientific Committee, it is asked that at its first meeting after the Meeting of Parties, the Scientific Committee shall discuss, select and assign specific topics for each task manager, taking into account the priorities set in the Work Programme for the triennium.

In the 2020/2022 ACCOBAMS Work Programme (Resolution 7.6), Actions are divided in 3 levels of priority:

- Core
- High
- Medium

All this information is included in the document ACCOBAMS-SC13/2020/Doc05 (Work programme 2020-2022 with priorities identified by Parties at MOP7).

The priority issues of the Work Program will be shared between four task managers according to their respective fields of expertise and the conservation action priority levels. The assignment of topics will be adopted by the Scientific Committee.

As far as necessary, these appointments can be modified during the triennium upon decision of the Chair of the Scientific Committee, in consultation with the Vice-Chair and in concertation with the Executive Secretary.

Taking into account experience from the previous triennium, it is also proposed:

- to identify "vice task managers" to assist each task manager in their tasks,
- to create a supporting group for each task manager.

# II- Terms of reference for the task managers

- 1. The task managers, in addition to their role as members of the Scientific Committee, will coordinate, in consultation with the Chair and Vice-Chair, the work of the Scientific Committee concerning the topics that has been assigned by the Scientific Committee.
- 2. The task managers, together with other members of the Scientific Committee, the Permanent Secretariat and Bureau, the Sub-Regional Coordinating Units, ACCOBAMS Partners and international and national non-governmental Organizations, will contribute to promoting the actions necessary to facilitate implementation of the Work Program, bearing in mind the Resolutions adopted by the Meetings of the Parties.
- 3. The task managers, together with other members of the Scientific Committee, will further contribute to promote cooperation with scientific Institutions in the ACCOBAMS area.
- 4. The task managers will conduct their work in close collaboration with the Chair of the Scientific Committee, with the Secretariat of the agreement and, when actions are interconnected, with the other task managers or with relevant ACCOBAMS working groups as appropriate.
- 5. The task managers will mainly work by email; they will try to meet other relevant experts possibly when other meetings are already scheduled (e.g. ECS, IWC, etc.).
- 6. The task managers may be asked to attend meetings on behalf of the ACCOBAMS Permanent Secretariat, pertinent to their field of expertise.
- 7. Each task manager shall provide a report to the meetings of the Scientific Committee on the topics he or she is in charge of.
- 8. During the Scientific Committee meeting, each task manager will assist the Secretariat by providing a summary of relevant discussions and conclusions for inclusion in the Meeting report.

# ANNEX IV - UPDATED 2020-2022 WORKING PROGRAMME FOR THE ACCOBAMS SCIENTIFIC COMMITTEE

CONSERVATION ACTIONS (CA)	36
• •	
CA1 - IMPROVE KNOWLEDGE ABOUT THE STATUS OF CETACEANS	36
CA 1 a - Cetacean population estimates and distribution	36
CA 1 b - Population Structure	
CA 1 c - Monitoring cetacean's status	
CA 1 d - Functional stranding networks and responses to emergency situation	
CA2 - REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO	ВҮСАТСН, НАВІТАТ
LOSS AND DEGRADATION (POLLUTION)	
CA 2 a - Interactions with fisheries / aquaculture	43
CA 2 b - Anthropogenic underwater noise	
CA 2 c - Ship strikes	47
CA 2 d - Cetacean watching	
CA 2 e - Marine litter	49
CA 2 f - Chemical & biological pollution	50
CA 2 g - Climate change	51
CA 2 h - Captivity related issues	
CA3 - ENHANCE EFFECTIVE CONSERVATION OF CETACEANS CRITICAL HABITATS	53
CA 3 a - Area-based measures for cetacean conservation	53
CA4 - ENHANCE PUBLIC AWARENESS ABOUT CETACEANS	54
CA 4 a - Information /Communication / Awareness about cetaceans	5.4
CA 4 a - IIIOIIIIauoii / Collilliuliicauoii / Awai chess about cetacediis	

# **CONSERVATION ACTIONS (CA)**

CA1	IMPROVE KNOWLEDGE ABOUT THE STATUS OF CETACEANS

	CA 1 a	Cetacean population estimates and distribution
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Expected outcomes	Improved knowledge of cetacean populations in the ACCOBAMS Area
	Global distribution and abundance of cetaceans in the Mediterranean Sea and Black Seas established, based on results of surveys

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
Interpret and disseminate results / subsequent recommendations of the ASI in the Mediterranean and Black Seas	Core	Scientific Committee Secretariat Parties, Non-Party Range States Partners, SRCUs	<ul> <li>Organizing workshops dedicated to ASI data analysis/interpretation (CB)</li> <li>Publishing a report on the ASI results</li> <li>Disseminating the ASI results and experience in relevant regional/international fora</li> </ul>	<ul> <li>Review the final report of the Mediterranean and Black Sea ASI/CeNoBS surveys</li> <li>Consider the results of the workshop on the development of conservation recommendations using the ASI results</li> </ul>	All SC members
Support long-term monitoring in the ACCOBAMS Area using the ASI framework (methodology, network, funding mechanism)	High	Secretariat, Parties, Non-Party Range States, Scientific Committee Partners, SRCUs	<ul> <li>Organizing coordination meetings at the sub-regional level</li> <li>Developing a strategy to fund ASI on the long-term</li> <li>Supporting the development of specific collaborations among scientific entities</li> <li>Supporting implementation of sub regional surveys</li> </ul>	Advise on the long-term     Programme of Monitoring for the     ACCOBAMS area	Chair and vice Chair of the SC
Promote the use of multidisciplinary surveys (such as fisheries / acoustic surveys), innovative technologies (UAV, satellite) and of platforms of opportunity (ferries, whale watching vessels, navy vessels,	Core	Scientific Committee Secretariat Parties, Non-Party Range States Partners,	Developing guidelines / best practices on the implementation of multidisciplinary surveys and on the use of platform of opportunity and innovative technologies to collect data on cetacean's distribution and abundance	Consider the results of the experimentations and studies related to the use of UAV and floating drones currently being conducted (ASI UAV project and Sphyrna Odyssey project)	Vice Chair of the SC

etc) to collect data on cetacean's distribution and abundance		SRCUs	<ul> <li>Reviewing the existing surveys/scientific efforts at the national/regional scale that could be used to collect data on distribution and abundance of cetaceans</li> <li>Collaborating with relevant Organisations, such as ICCAT, to collect data on distribution and abundance of cetaceans</li> </ul>	<ul> <li>Contribute to a study on the use of multidisciplinary surveys and platforms of opportunity to collect data on distribution and/or abundance of cetaceans in the ACCOBAMS area</li> <li>Contribute to the development of Methods &amp; protocols / guidelines to collect data on cetacean's distribution and/or abundance using existing multidisciplinary surveys and platforms of opportunity, focusing in priority on ferries and fisheries surveys, and photo id in some specific cases</li> </ul>	<ul> <li>Vice Chair of the SC</li> <li>Vice Chair of the SC</li> </ul>
Initiate the establishment of a regional repository for data on cetacean's distribution and abundance based on the conclusion of the ASI preparatory study for an information management system for cetacean survey data	High	Scientific Committee Secretariat SRCUs Parties, Non-Party Range States, Partners	Developing proposal(s) for a data repository system	Advise on the proposals	Chair of the SC (refer to the ACCOBAMS data platform)

CA 1 b	Population Structure
Expected outcomes	Improved knowledge on population structure in the ACCOBAMS Area
Expected outcomes	Exchanges of samples facilitated for joint analysis
	Data exchanges facilitated for basin wide analysis

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
Improve data collection on cetacean populations genetic in the ACCOBAMS Area	Medium	Secretariat Scientific Committee Parties, Non-Party Range States Partners, SRCUs	<ul> <li>Organizing regional trainings on data collection and analysis (CB)</li> <li>Establishing Guidelines / Best Practices</li> </ul>	<ul> <li>Contribute to regional trainings on data collection and analysis // require additional funds</li> <li>Guidelines or Best practices on data collection for genetic studies // require additional funds</li> </ul>	CMP Points of contacts +     (Tilen Genov + Cristina     Fossi + experts in     methodology)      National Stranding     Networks + tissue banks
Encourage better collaboration between tissue banks to facilitate exchanges of samples for joint analysis	High	Scientific Committee Secretariat Parties, Non-Party Range States Partners, SRCUs	<ul> <li>Identifying and contacting reference laboratories in the ACCOBAMS Area</li> <li>Supporting the development of specific collaborations among scientific entities</li> </ul>	Contribute to the identification of genetic laboratories no cost     Review the list of formally recognized tissue banks in the ACCOBAMS Area	Chair of the SC (to review tissue banks + identify genetic laboratories )
Improve photo ID data collection	High	Partners, Parties, Non-Party Range States Scientific Committee Secretariat, SRCUs	<ul> <li>Entering data in photo ID Catalogues</li> <li>Using Web based databases</li> <li>Organizing regional trainings on photo ID Catalogues (CB)</li> </ul>	Guidance document on how entering data in photo ID Catalogues and preparation of matrix for future analyses	Vice Chair, IWC representative, Aurelie Moulins

CA 1 c	Monitoring cetacean's status
Expected outcomes	IUCN threat status of cetaceans in the ACCOBAMS area is assessed ACCOBAMS Status report on the State of Conservation of Cetaceans is updated and made available on IUCN and ACCOBAMS websites Regional conservation plan for cetaceans in the Black Sea is revised and implemented at the national level Conservation management plans for cetacean species are developed and implemented National Action Plans for cetaceans are developed and implemented

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
Contribute to IUCN threat status assessment of cetaceans in the ACCOBAMS area and update it as relevant	Core	Scientific Committee Secretariat, Parties, Non-Party Range States, Partners, SRCUs	<ul> <li>Undertaking species assessments</li> <li>Organising joint ACCOBAMS—IUCN experts' workshop</li> </ul>	Contribute to IUCN threat status assessment / reassessment ongoing process	• Chair of the SC
Update ACCOBAMS Status report on the State of Conservation of Cetaceans, using ASI results	High	Scientific Committee Secretariat, Parties, Non-Party Range States, Partners, SRCUs	Preparing and publishing an updated     ACCOBAMS Status report on the State of     Conservation of Cetaceans	Review the updated ACCOBAMS Status report on the State of Conservation of Cetaceans	• All the SC members
Revise the Regional Conservation Plan for cetacean in Black Sea	Core	Secretariat, SRCUs Parties Non-Party Range States Scientific Committee, Partners,	Undertaking the revision of the Regional Conservation Plan for cetacean in Black Sea, in collaboration with the BSC, taking into consideration the IWC Conservation Management Plan.	Contribute to the revision of the Regional Conservation Plan for cetacean in Black Sea	Black Sea Regional     Representative, Ayaka     Ozturk and Constantin
Develop/ revise/ implement relevant Conservation	Core	Scientific Committee Secretariat,	Organizing ACCOBAMS-IWC-IUCN Experts Workshop(s) to develop/ revise/ conservation Management Plans for	Contribute to the finalization of Fin Whales, Grampus, Bottlenose and common dolphin's CMP	CMP Task Managers (+ all experts involved in CMPs)

Management Plans for cetacean species		Parties Non-Party Range States, Partners, SRCUs	•	cetacean species, taking into account all national conservation plans Supporting the implementation of relevant actions of the approved Conservation Management Plans for cetacean species with emphasize of coordination actions and organization with stakeholders' workshop Organize a joint workshop on common dolphin with ASCOBANS during ECS 2021, (depending on Voluntary Contribution or Ext funds)	<ul> <li>Participation in steering committees and in the identification of relevant coordinators</li> <li>Identification of relevant other species for CMP/ recommendation at the SC14</li> </ul>	
Facilitate the Development/ revision/ implementation of National or Regional Action Plans for cetaceans	High	Parties Non-Party Range States, Secretariat, SRCUs Scientific Committee, Partners	•	Supporting the revision / development of two National Action Plans for cetaceans in collaboration with SRCUs and national authorities (Algeria already identified)	• Support of SC in the preparation of the NAP in Algeria	Vice Chair of the SC and Souad Lamouti

CA 1 d	Functional stranding networks and responses to emergency situation
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Expected outcomes	Official National Stranding networks are established and operating
	Information on stranding events regularly exchanged among national networks

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
Set up /Reinforce official national stranding networks (with all national institutions concerned) as appropriate, and encourage collaborations among national networks of Parties	Core	Parties, Scientific Committee, Secretariat, Non-Party Range States,	<ul> <li>Preparing a study on legal/institutional status of National stranding networks in order to assist experts in the establishment of official national stranding network when relevant</li> <li>Organizing trainings on necropsies, live strandings and response to emergency situation in the ACCOBAMS area following the best practices on causes of death including marine litters, and on the use of relevant databases (CB)</li> </ul>	<ul> <li>Contribute to the organization of trainings on necropsies, live strandings and response to emergency situation in the ACCOBAMS area following the best practices on causes of death including marine litters, and on the use of relevant databases</li> <li>Contribute to the creation of a permanent expert panel on strandings to assist on emergencies and unusual mortality</li> <li>Report of the permanent expert panel on strandings</li> </ul>	Sandro Mazzariol      Vice-Task Manager on Marine litter & chemical and biological pollution and Sandro Mazzariol      Vice-Task Manager on Marine litter & chemical
		Partners, SRCUs	<ul> <li>Entering relevant national data into relevant databases, such as MEDACES</li> <li>Promoting the use of a database of experts/stranding authorities</li> <li>Encouraging the creation of a permanent expert panel on strandings to assist on emergencies and unusual mortality</li> </ul>	Advise the project coordinator of the project funded under the ACCOBAMS Supplementary Conservation Funds in Algeria to support the establishment of a new operational stranding network	<ul><li>and biological pollution and Sandro Mazzariol</li><li>Sandro Mazzariol and Julie Jourdan (GECEM)</li></ul>
				<ul> <li>Advise the project coordinator of the project funded under the ACCOBAMS Supplementary Conservation Funds in Ukraine to</li> </ul>	• Sandro Mazzariol

	support the establishment of the	
	bank of tissue samples in Ukraine	

CA2	REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO BYCATCH, HABITAT LOSS AND DEGRADATION (POLLUTION)					
CA 2 a	Interactions with fisheries / aquaculture					
Expected outcomes	Impacts of cetaceans' bycatch and depredation are assessed and mitigation measures are tested					
Regional bycatch/depredation strategy is developed						
	Ecotourism activities (whale watching and pescatourism) are promoted as an alternative income source to fishermen impacted by depredation					

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
Assess / Monitor the impacts of interactions with fisheries/ aquaculture (bycatch, depredation and prey depletion) and propose alternative best practices measures and / or technics	Core	Parties Scientific Committee, through the JBWG Secretariat, Non-Party Range States, Partners, SRCUs	<ul> <li>Replicating projects on interactions with fisheries</li> <li>Implementing on-board observers programme and port questionnaires, and testing mitigation measures in the countries supported by the MAVA funded projects</li> <li>Assessing /updating the extent of interactions with fisheries/ aquaculture in other countries, including through the use of stranding data</li> <li>Collaborating with relevant entities, in particular with GFCM and IWC BMI</li> </ul>	Progress report of the JBWG to be presented at SC14  Follow and advise the implementation of the Medbycatch project, participate in the project Scientific Committee and consider the results of the project that will be presented at SC14  Follow and advise the implementation of the MAVA Depredation project, participate in relevant meetings and consider the results of the project that will be presented at SC14  Report on the data from the stranding networks on stranded cetaceans presenting bycatch evidences	Co -chair of the JBWB      TM on Interactions with Fisheries and aquaculture + vice TM + support Group      TM on Interactions with Fisheries and aquaculture + vice TM + support Group      Sandro Mazzariol and Julie Jourdan (GECEM)
				<ul> <li>Advise the project coordinator of the project funded under the</li> </ul>	TM on Interactions with     Fisheries and aquaculture

				ACCOBAMS Supplementary Conservation Funds in Bulgaria to monitor and mitigate cetacean bycatch and consider the results of the project that will be presented at SC14	
Develop a regional strategy on cetaceans' bycatch and depredation	High	Scientific Committee, through the JBWG Parties Secretariat, Non-Party Range States, Partners, SRCUs	<ul> <li>Integration of Cetaceans' bycatch and depredation issues in the strategy document to be prepared in the MedBycatch project</li> <li>Collaborating with relevant entities, in particular with GFCM and IWC BMI</li> </ul>	Review the policy brief coordinated by GFCM on bycatch/depredation (whom the main elements will be included in the new GFCM mid-term Strategy)	• All the SC Members
Provide support to Parties to promote the development of ecotourism activities as an alternative income to fishermen	High	Scientific Committee, [through the WWWG] Parties Secretariat, Non-Party Range States, Partners, SRCUs	<ul> <li>Developing a Guidance policy document for the development of sustainable ecotourism and whale watching activities</li> <li>Supporting the identification of areas for the development of ecotourism activities as an alternative income to fishermen</li> </ul>	Review the Guidance policy document for the development of sustainable ecotourism and whale watching activities (if available)	• All the SC Members

CA 2 b	Anthropogenic underwater noise
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Expected outcomes

Core anthropogenic activities generating underwater noise are monitored in the ACCOBAMS Area

Mitigation measures for anthropogenic activities generating underwater noise are used

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
Encourage the monitoring of anthropogenic activities generating underwater noise	Core	Scientific Committee including through the JNWG Secretariat, Parties Non-Party Range States, Partners, SRCUs QM2 partners	<ul> <li>Organizing trainings for national entities on noise monitoring (CB), including analyses of PAM collected data in some identified priority areas</li> <li>Taking into consideration work achieved and advices provided by the JNWG</li> <li>Revising/completing impulsive noise hotspots maps of the ACCOBAMS area using Big Data Platform</li> <li>Supporting monitoring programmes of impulsive noise impact indicator in particular by managing the regional impulsive noise register, proposing methodology to establish threshold values and implementing pilot studies</li> <li>Disseminating deliverables of the QuietMed and QuietMed2 projects on guidance for underwater noise monitoring and assessment,</li> <li>Supporting the development of projects to monitor continuous noise'.</li> <li>Revising and updating the ACCOBAMS Guidelines on underwater noise</li> <li>Developing cooperation on underwater noise issue with other international Organizations</li> </ul>	<ul> <li>Involvement of JNWG in the organization of trainings for national entities on noise monitoring (CB), including analyses of PAM collected data in some identified priority areas // required additional funds</li> <li>Progress report of the JNWG</li> <li>Use the report on noise hotspots in the ACCOBAMS area when relevant</li> <li>Use progress reports on the ongoing projects on noise including QuietMed2 on impulsive noise where the JNWG is involved</li> </ul>	<ul> <li>Co Chairs of the JNWG + Alessio Maglio</li> <li>Co Chairs of the JNWG + Alessio Maglio</li> <li>All SC Members</li> </ul>
Encourage the use of mitigation measures for anthropogenic activities generating underwater noise	Core	Scientific Committee including through the JNWG Secretariat,	<ul> <li>Promoting the ACCOBAMS Highly qualified MMO/PAM operators' certificate</li> <li>Granting the status of ACCOBAMS HQMMO Partners to entities for the</li> </ul>	• Use progress report of the MMO WG	Vice Chair of the SC

Parties	implementation of the Highly qualified	
Non-Party Range	MMO/PAM operators' certificate	
States,	<ul> <li>Revising and updating the ACCOBAMS</li> </ul>	
Partners,	"Guide for Parties to use mitigation	
SRCUs	measures "	
	Developing cooperation on underwater	
	noise issues with other International	
	Organizations	

CA 2 c	Ship strikes
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Expected outcomes Occurrence of ship strikes in high risk areas is reduced

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
Monitor / assess high-risk areas for ship strikes (CCH) in the Mediterranean Sea	High	Scientific Committee Secretariat, Parties, Non-Party Range States, Partners, SRCUs	<ul> <li>Encouraging the entry of ship strikes data in relevant databases</li> <li>Developing a protocol for investigating and documenting ship strikes injuries and mortalities</li> <li>Identifying high risk areas for ship strikes (CCH)</li> <li>Developing cooperation on ships strike issue with other International Organizations, such IWC, EMSA (EU) / REMPEC / IMO and contributing in any other relevant initiatives, projects and workshops in the ACCOBAMS Area</li> </ul>	<ul> <li>Reactivate the WG (ToR, members)</li> <li>Contribute to the development of a protocol for investigating and documenting ship strikes injuries and mortalities based on the Resolution 7.14 // Task of the WG on ship strikes</li> <li>Report on the identification of high-risk areas for ship strikes (CCH)</li> <li>Report about relevant projects such as SICOMAR</li> </ul>	<ul> <li>Chair of the SC</li> <li>Chair of the WG on ship strikes</li> <li>TM on Protected Areas for Cetaceans</li> <li>Projects coordinators (Aurelie)</li> </ul>
Promote the use of mitigation measures	High	Secretariat, Scientific Committee Parties, Non-Party Range States, Partners, SRCUs	<ul> <li>Following up on mitigation measures implemented</li> <li>Promoting the use of relevant mitigation tools/measures (CB)</li> <li>Pursue the development of a "whale safe" certificate</li> </ul>	<ul> <li>Study on the follow-up of mitigation measures already implemented // Task of the WG on ship strikes</li> <li>Contribute to the promotion of the use of relevant mitigation tools/measures</li> <li>Document on the development of a "whale safe" certificate // No cost</li> <li>Report on any relevant trainings (CIMA, Souffleurs d'Ecume,)</li> </ul>	<ul> <li>Chair of the WG on ship strikes</li> <li>Chair of the WG on ship strikes</li> <li>Chair of the WG on ship strikes</li> <li>Projects coordinators (Aurelie Moulins, Morgane Ratel)</li> </ul>

CA 2 d Cetacean watching
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**Expected outcomes**Cetacean watching activities are properly conducted in the ACCOBAMS Area

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
Maximize the chance of detecting potential adverse impacts of whale watching activities on individual cetaceans and on populations	High	Scientific Committee through the WWWG Secretariat, Parties Non-Party Range States, Partners, SRCUs	<ul> <li>Gathering information on cetacean watching activities and identifying potential issues in order to identify the hotspots of WW activities in the ACCOBAMS area</li> <li>Testing the proposed common procedure (data collection system) for whale watching vessels in pilot areas and a variety of operation types (e.g. the Liguro-Provençal Basin, Gibraltar Strait, and south Portugal), in collaboration with relevant projects such as EcoStrim</li> <li>Revising the Guidelines for commercial cetacean-watching in the ACCOBAMS Area (in accordance, if relevant, with the guidance document to be prepared on the development of ecotourism activities as an alternative income to fishermen)</li> <li>Working in close cooperation with IWC and other relevant International Organizations</li> </ul>	<ul> <li>Progress report of the WWWG to be presented at SC14</li> <li>Study on the identification of WW activities in the ACCOBAMS Area to be presented at SC14</li> <li>Results of the test of the common procedure to be presented at SC14</li> <li>Updated Guidelines for commercial cetacean-watching in the ACCOBAMS Area for SC14</li> </ul>	<ul> <li>Chair of the WWWG</li> <li>Chair of the WWWG</li> <li>Chair of the WWWG</li> </ul>
Support the implementation of the HQWW certificate in the ACCOBAMS area	High	Parties Partners Secretariat, Non-Party Range States, Scientific Committee SRCUs	<ul> <li>Promoting the implementation of the HQWW certificate by Parties and in areas -based management measures in collaboration with relevant projects such as EcoStrim</li> <li>Organizing Trainings on HQWW (CB Parties)</li> <li>Liaising with relevant tourism Organisations</li> </ul>	Contribute promoting the implementation of the HQWW certificate	• All SC members

CA 2 e	Marine litter
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**Expected outcomes**The monitoring of marine litter in relation with cetaceans is improved

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
Monitor the impacts of marine litter (ingested marine litter / microplastics / entanglements in ghost nets) on cetaceans	Core	Scientific Committee Secretariat, Parties Non-Party Range States, Partners, SRCUs	<ul> <li>Supporting the implementation of the standardized necropsy protocol including the assessment of ingested marine litter and entanglement in ghost nets</li> <li>Supporting pilot monitoring activities at the sub regional level through the implementation of the standardized necropsy protocol including the assessment of ingested marine litter and entanglement in ghost nets</li> <li>Encouraging the report in stranding databases of marine litters data collected during necropsies</li> <li>Identifying potential hotspot areas for cetacean entanglement and ingestion of marine litter, including through the assessment of entanglements/ingested marine litters during necropsies</li> <li>Promoting/ supporting/ liaising with projects, research activities in order to evaluate and assess impact of microplastic on cetaceans using big data platform</li> <li>Collaborating with relevant Organizations (MEDPOL) and projects, in particular Plastic Busters MPAs, Healthy Seas and Black Sea projects</li> </ul>	<ul> <li>Results of the pilot monitoring activities implemented in the Adriatic area to be presented at SC14</li> <li>Report on the identification of hotspot areas of interactions between cetaceans and marine litter (entanglement and ingestion)</li> </ul>	Sandro Mazzariol      TM and vice TM on_Marine litter & chemical and biological pollution

CA 2 f	Chemical & biological pollution
Expected outcomes	ACCOBAMS collaborates with relevant Organizations on this issue

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
Liaise with relevant other Organizations, such as IWC, to assess the impact of chemical & biological pollution (such as pathogens, invasive species) on cetaceans	Medium	Scientific Committee Secretariat, Parties Non-Party Range States, Partners, SRCUs	<ul> <li>Developing a bibliographic review on the impact of chemical pollution on cetaceans</li> <li>Developing Guidelines on the best practices to assess the impact of chemical pollution on cetaceans with a focus on emerging contaminants</li> <li>Developing specific collaboration</li> <li>Participating in relevant Meetings and Side events</li> </ul>	<ul> <li>Report of the bibliographic review on the impacts of chemical pollution on cetaceans to be presented at SC14</li> <li>Guidelines on the best practices to assess the impact of chemical pollution on cetaceans with a focus on emerging contaminants to be presented at SC14</li> </ul>	<ul> <li>TM and vice TM on Marine litter &amp; chemical and biological pollution</li> <li>TM and vice TM on Marine litter &amp; chemical and biological pollution</li> </ul>

CA 2 g	Climate change
Expected outcomes	ACCOBAMS cooperates with regional initiatives on climate change, taking into account cetacean conservation

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
Contribute to regional initiatives on climate change	Medium	Scientific Committee Secretariat, Parties Non-Party Range States, Partners, SRCUs	<ul> <li>Liaising with relevant CMS Working Group</li> <li>Participating in Meetings and side events</li> </ul>	Reports on the activity funded by an Italian Voluntary Contribution on the evolution of some cetacean's population with environmental changes over 25 years in the North-Western Mediterranean Sea and propose monitoring system, using the ACCOBAMS Big Data analytics tools constructed:  • Review the available bibliography on the impact of climate change on cetaceans.  • Cross over the information regarding evolution of some cetacean's populations with environmental changes over 25 years in the North-Western Mediterranean Sea.  • Development of recommendations on monitoring system in the framework of climate change impacts assessment.	TM and Vice TM on Protected Areas for Cetaceans, IWC representative and Alessio Maglio

CA 2 h	Captivity related issues
Expected outcomes	All specimens held in captivity in the ACCOBAMS area are listed
	The identification of origin of <i>Tursiops truncatus ponticus</i> bred or kept in captivity is undertaken

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge		
Identify specimens held in captivity in the ACCOBAMS area, including the case of reintroduction in accordance with the provision of the Resolution 3.20	High	Scientific Committee Parties Non-Party Range States, Secretariat Partners, SRCUs	<ul> <li>Updating and completing the overview of specimens held in captivity in the ACCOBAMS area, including the case of reintroduction in accordance with the provision of the Resolution 3.20</li> <li>Legal and scientific analysis // Evaluating the situation of semi-captivity in ACCOBAMS area and providing Guidelines or reference document</li> </ul>	Reference document on a scientific point of view of potential semi-captivity "centers" in the ACCOBAMS area	WG on semi-captivity     "centers" in the     ACCOBAMS Area		
Identify origin of cetaceans bred or kept in captivity / Genetic passport for dolphins in captivity / in order to support the implementation of the CITES decisions 17.299 to 17.301 on bottlenose dolphin (Tursiops truncatus ponticus)	Medium	Secretariat Scientific Committee Parties Non-Party Range States, Partners, SRCUs	<ul> <li>Support the development of genetic passport in view of disseminate protocol or methodology for such cases</li> <li>Support the development of a genetic registry for Black Sea bottlenose dolphins by CITES</li> </ul>	<ul> <li>Contribute to the development of genetic passport (additional funds required)</li> <li>Support in the development genetic registry for Black Sea bottlenose dolphins by CITES (additional funds required)</li> </ul>	• IWC representative (protocol) +SC members+ WDC representative (Cathy Williamson)		

ENHANCE EFFECTIVE CONSERVATION OF CETACEANS CRITICAL HABITATS
Area-based measures for cetacean conservation
an Critical Habitats are updated
nentation of relevant measures are initiated in some pilot Cetacean Critical Habitats

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
Regularly update Cetacean Critical Habitats (CCH) including by identifying priority areas for action to mitigate the known threats (bycatch) / area-based management measures	Core	Scientific Committee, Secretariat, Parties, Partners, Non-Party Range States, SRCUs	Gathering data, in particular through the organization of regional workshops to update CCH, considering the IMMAs and EBSAs process	Report on CCH updated     recommendations on area-based management measures	TM and Vice TM on Protected Areas for Cetaceans  TM Vice TM on Protected Areas for Cetaceans
Support implementation of relevant measures for adequate management in CCH	Core	Scientific Committee, Secretariat, Parties, Non-Party Range States, Partners, SRCUs	<ul> <li>Identifying and promoting relevant management measures in pilot CCH, in collaboration with all stakeholders (CB)</li> <li>Collaborating with other Organizations, such as UNEP-MAP/RAC-SPA, BSC, IMO, IWC, and GFCM, in particular through the Strategical Alliance</li> </ul>	<ul> <li>Contribute to a training workshop in pilot CCH, in collaboration with all stakeholders</li> <li>Report on management measures implemented in pilot CCH</li> </ul>	<ul> <li>TM and Vice TM on Protected Areas for Cetaceans + support group+ Ayaka Ozturk + MedPAN representative</li> <li>TM and Vice TM on Protected Areas for Cetaceans + support group+ Ayaka Ozturk + MedPAN representative</li> </ul>

CA4	ENHANCE PUBLIC AWARENESS ABOUT CETACEANS
CA 4 a	Information / Communication / Awareness about cetaceans
Expected outcomes	All ACCOBAMS Bodies, national focal/contact points, Partners and other relevant national institutions, Organizations and experts are familiar with activities implemented by or relevant for ACCOBAMS and share information accurately
	General public and other relevant stakeholders are aware about cetaceans and need for their conservation through activities supported by or linked to ACCOBAMS

Proposed Action(s)	Priority	Action lead by and in cooperation with	Means of implementation	Expected from the SC by SC14	SC Member in charge
			<ul> <li>Developing an information/ communication strategy</li> </ul>		
Maintain regular information/			Organizing a Conference on cetacean conservation in South Mediterranean Countries - CSMC (CB)		
Maintain regular information/ communication about ongoing activities, cooperation and funding possibilities, cetacean conservation scientists and experts operating in the region and other relevant information; facilitate communication among cetacean conservation actors of the ACCOBAMS area, in particular in Southern Mediterranean countries	Core	Secretariat, Scientific Committee, Partners, SRCUs, Parties, Non-Party Range States	<ul> <li>Reviewing the current citizen sciences initiatives in the ACCOBAMS area and produce basic guidelines on the use and how to gather information</li> <li>Evaluating the relevance of "Citizen Science" input of cetaceans' sightings in expert-supervised databases</li> <li>Organizing Public awareness events</li> <li>Developing Information material and tools</li> <li>Promoting cetacean conservation actions during national and international events</li> <li>Producing annual newsletter (FINS)</li> <li>Posting on ACCOBAMS Website and social media</li> <li>Posting on NETCCOBAMS</li> <li>Supporting the functioning of MEDACES</li> </ul>	Report on the current citizen sciences initiatives in the ACCOBAMS area  Report on the relevance of "Citizen Science" input of cetaceans' sightings in expert-supervised databases  recommendations on the use and how to gather information	<ul> <li>Ayaka Amaha Oztürk and Helene Labach</li> <li>Ayaka Amaha Oztürk and Helene Labach</li> <li>Ayaka Amaha Oztürk and Helene Labach</li> </ul>

Introduce in a new Country / Disseminate the ACCOBAMS Teaching Module courses	High		<ul> <li>Introducing the Teaching Module in a new country and supporting its dissemination where the module has already been introduced (CB)</li> <li>Collaborating in relevant projects such as the realization of the Master of first level in " Conservation Medicine of Aquatic Animals" and the project "Human Oceans Professional Experts" (HOPE)</li> </ul>	
Enhance public awareness about cetacean's conservation in the ACCOBAMS area	Core	Secretariat, Parties SRCUs Non-Party Range States Scientific Committee, Partners	<ul> <li>Implementing the ACCOBAMS Cetacean Day</li> <li>Delivering a conservation Awards (ECS, Partners)</li> <li>Producing Press releases</li> <li>Posting on social media</li> </ul>	

# ANNEX V – MONITORING CETACEAN STATUS - ASSESSMENT AND REASSESSMENT OF THE IUCN CONSERVATION STATUS OF CETACEANS IN THE ACCOBAMS AREA IN 2020

### **Tableau 1.Table of Assessors**

						2019-2020 Assessment						
Scope	Assessment	Species	year of last assessment	Current Category	Criteria	Point of Contact	Working group	Genetic data	country/ topic contributors			
Mediterranean	Mediterranean subpopulation	Delphinus delphis Mediterranean subpopulation	2003	EN	A2abc	G. Bearzi	Ada Natoli Tilen Genov	Ada Natoli				
Mediterranean	Mediterranean subpopulation	Physeter macrocephalus Mediterranean subpopulation	2010	EN	C2a(ii)	E.Pirotta	Caterina Lanfredi tbc, Renaud de Stephanis, Pauline Gauffier, Alexandros Frantzis	Ada Natoli	Massimiliano Rosso, Eva Carpinelli, Luke Rendell+Jose María Brotons+Enrico Pirotta			
Mediterranean	Mediterranean subpopulation	Balaenoptera physalus Mediterranean subpopulation  VU  C2a(ii)  S.Panigada,  Notarbartolo di Sciara, G., Pauline Gauffier		Ada Natoli	Aurélie Moulins, Eduard Degollada							
Mediterranean	Mediterranean subpopulation	Stenella coeruleoalba Mediterranean subpopulation	2010	VU	A2bcde	G.Lauriano	Panigada, S., Aurélie Moulins, Giovanni Bearzi,	Ada Natoli	Clara Monaco, Sabina Airoldi			
Mediterranean	Mediterranean subpopulation	Tursiops truncatus Mediterranean subpopulation	2008	VU	VU A2cde A. Natoli, Stephanis, J. Gonzalvo,		Giovanni Bearzi, Renaud de Stephanis, J. Gonzalvo, Dani Kerem, Tilen Genov	Ada Natoli	(Randall Reeves), Philipe Verborgh, Ayaka			
Mediterranean	Global assessment	Steno bredanenesis	2018	LC		D.Kerem	Alexandros Frantzis, Aviad Scheinin, Oz Goffman	Ada Natoli	Michael Scott Randall Wells			
Mediterranean	Mediterranean subpopulation	Globicephala melas Mediterranean subpopulation	2010	DD		Philippe Verborgh	Renaud de Stephanis, Pauline Gauffier	Ada Natoli	Massimiliano Rosso			
Mediterranean	Mediterranean subpopulation	Grampus griseus Mediterranean subpopulation	2010	DD		Caterina Lanfredi  Lea David, Ada Natoli, Massimiliano Rosso, Antonella Arcangeli, Drasko Holcer		Ada Natoli	Clara Monaco, Giovanni Bearzi, Philippe Verborgh			
Black sea	subspecies	Phocoena phocoena ssp. relicta	2008	EN	A1d+4cde	Ayaka Amaha Ozturk	Alexandros Frantzis, , Arda M Tonay, Marian Paiu, Pavel Goldin, Dimitar Popov, Natia Kopaliani, Olga Spak, Dmitry Glazov	Rasit Bilgin, Arda M Tonay and Ada Natoli				

Black sea	subspecies	Tursiops truncatus ssp. ponticus	2008	EN	A2cde	Pavel Goldin,	Ayaka Amaha Ozturk, Arda M Tonay, Marian Paiu, Dimitar Popov, Natia Kopaliani, Olga Spak, Dmitry Glazov	Ada Natoli, Rasit Bilgin and Arda M Tonay	
Black sea	subspecies	Delphinus delphis ssp. ponticus	2008	VU	A2cde	Ayaka Amaha Ozturk	Arda M Tonay, Marian Paiu, Pavel Goldin, Dimitar Popov, Natia Kopaliani, Olga Spak, Dmitry Glazov	Ada Natoli, Rasit Bilgin and Arda M Tonay	

Tableau 2. Calendar of work for (re) assessment process

ableau 2. Caleflual of work for (1e) assessing		2020							2021				
	March	April	May	June	July	August	September	October	November	December	January	February	March
Working groups confirmed													
Data collection, consultation with other experts		draft ASI data shared with PoC		30 june deadline to submit final draft version									
Assessment updated and validated with other experts													
Assessments updated in SIS database													
Validation and review workshop													
Edition and consistency check													
Submission to the RL Unit													
Data analysis, report, communication materials													
Publication in IUCN RL													

### ANNEX VI – TERMS OF REFERENCE OF THE WORKING GROUP ON WHALE WATCHING (WWWG)

### **Background**

A Working Group for the assessment, monitoring and data collection of cetacean watching activities in the ACCOBAMS area was established in 2014 during the Ninth Meeting of the Scientific Committee.

Considering the Programme of Work for the triennium 2020-2022 adopted by the 7<sup>th</sup> Meeting of the Parties to ACCOBAMS (Resolution 7.6), in particular the activities planned regarding cetaceans watching, the Whale Watching Working Group needs to be reactivated.

These draft Terms of Reference were prepared by the Chair of the Working Group, with the support of the Permanent Secretariat.

### **Mandate**

With a view of assessing cetacean watching activities in the Agreement area and their potential adverse impacts on cetacean individuals and populations, the Whale Watching Working Group (WWWG) in cooperation with other experts and partners will:

- Support the update of the inventory of operators currently conducting these activities in the ACCOBAMS area and
  identify experts within the ACCOBAMS Parties or active in the Agreement area who could provide valuable
  information on cetacean watching activities in the Area;
- Support the work of the expert that will be tasked to prepare a regional study on the hotspots of WW activities in the ACCOBAMS Area (advising on the methodology to be applied, gathering information on cetacean watching activities, identifying potential issues and formulating recommendations) the report of the study will be presented at SC14;
- Coordinate the test of the proposed common procedure (data collection system developed in 2015) for whale
  watching vessels in pilot areas and a variety of operation types (e.g. the Liguro-Provençal Basin, Gibraltar Strait,
  and south Portugal) and report back to SC14 in 2021;
- Revise the Guidelines for commercial cetacean-watching in the ACCOBAMS Area, in view of their presentation at SC14 in 2021.

### **Composition (as updated during SC13)**

Marina Sequeira (Chair)
Hélène Labach
Tilen Genov
Renaud de Stephanis
Costanza Favilli
Léa David
Aurélie Moulins
Caterina Fortuna

## ANNEX VII – PRESENTATION OF THE TASK MANAGER ON MARINE LITTER IMPACT AND INTERACTION WITH CETACEANS

Monitoring of the impact of marine litter on cetacean species should include an understanding of likely exposure to marine litter in the area concerned. The Mediterranean Sea is one of most affected areas by debris in the world: 115,000–1,050,000 particles/km2 are estimated to float in the Mediterranean Sea (Fossi et al., 2012; UNEP/MAP, 2015). Plastics and other polymer materials are the most common types of marine debris, representing some 80% of debris found on sea surface (Fossi et al., 2017). As larger pieces of plastic debris fragment into smaller pieces, the abundance of microplastics in marine habitats increases. Despite the recent advances made within the framework of the Barcelona Convention Regional Plan for Marine Litter Management in the Mediterranean and the EUMarine Strategy Framework Directive (Descriptor 10), there is still a long way ahead to tackle debris in the Mediterranean and reduce the risks posed to Mediterranean marine wildlife.

The SC group recognized the importance of both the scientific evidences and the emerging gaps concerning the interaction between the charismatic megafauna (e.g. filter feeder baleen whales and deep divers) and micro- and macroplastics and recommend studying their impact and their related potential toxicological and noxious effects. Moreover, the IWC Marine Litter Workshop group (La Garriga, Spain December 2019) also support the idea to propose these species as candidate indicators for microplastics (Fin whale, Balaenoptera physalus) and macro-litter pollution (Sperm Whale, Physeter macrocephalus) at global scale, respectively. Filter-feeding megafauna (e.g. whale sharks and baleen whales) are prone to high levels of microplastics ingestion and exposure to associated toxic compounds due to their feeding strategies and for habitat overlap with microplastic hot spots (such as the Mediterranean Sea). While the skim feeders, like right and bowhead whales, should be monitored for their possible greater susceptibility, the group recognized that species with a wider distribution, may be better candidates as global indicators. For these reasons the IWC Workshop group suggests that fin whales would be the best candidates for this type of monitoring. Fin whale are believed to be more far roaming in their foraging, except for some unique, segregated populations (e.g. Mediterranean and Gulf of California). For these reasons, these whale species could be proposed as candidate indicators of microplastics pollution in confined Seas. On the other hand, deep divers such as the Sperm whale and the Cuvier's beaked whale, are exposed to the ingestion of marine debris, including large plastic fragments, due to their feeding in marine canyons. Marine debris has been reported in 75% of examined stranded Mediterranean sperm whales. This species was recently proposed as a candidate indicator the presence of marine debris in the Mediterranean (MSFD, Descriptor 10 and IMAP Ecological Objective 10, candidate indicator 24). The group also support research and investigations of new plastic tracers in the tissues of the organisms and the identification (through also omics techniques) of the potential ecotoxicological effects caused by plastic debris ingestion in these species.

The interaction between **ACCOBAMS Work Programme (2020-2022)** and EU project, such as **Plastic Busters MPAs** activities were discuss during the presentation.

Plastic Busters MPAs is an Interreg Med funded project aiming to maintain biodiversity and preserve natural ecosystems in coastal and marine protected areas by consolidating Mediterranean efforts against marine litter. The project entails actions addressing the whole management cycle of marine litter, from monitoring and assessment, to prevention and mitigation. The project deploys the multidisciplinary strategy and common framework of action developed within the Plastic Busters initiative, led by the University of Siena and the Sustainable Development Solutions Network. This initiative frames the priority actions needed to tackle marine litter in the Mediterranean and was labelled under the Union for the Mediterranean in 2016, gathering the political support of 43 Euro Mediterranean countries. Plastic Busters MPAs bring together 15 implementing partners and 17 associate partners from 8 Mediterranean countries, namely Albania, Cyprus, Croatia, France, Italy, Greece, Slovenia and Spain. PlasticBusters MPAs consolidates Mediterranean efforts against marine litter by:

Assessing the impacts of marine litter on biodiversity in MPAs and identifying marine litter 'hotspot' areas;

- Defining and testing tailor-made marine litter surveillance, prevention and mitigation measures in MPAs;
- Developing a common framework of marine litter actions for Interreg Mediterranean regions towards the conservation of biodiversity in Med MPAs.

One of the aim of this project is to realize a harmonized monitoring methodology to detect the impact of marine litter on Mediterranean ecosystems and particularly on marine biodiversity, including endangered species inhabiting pelagic and coastal MPAs (cetaceans, sea turtles, birds, endangered sharks, etc.). The final aim of the application of this approach will be to support MPA managers in their efforts to achieve the conservation goals set in their MPAs. Furthermore, these results will facilitate effective policymaking at local, national and regional levels with regards to the prevention, reduction and removal of marine litter in Mediterranean MPAs, within the framework of the EU MSFD and the Barcelona Convention Regional Plan for Marine Litter Management in the Mediterranean.

Given the multiple potential physical and ecotoxicologic effects of marine litter ingestion (including microplastics), the impact of litter on marine mammals should be assessed using a threefold approach as proposed by the Plastic Busters MPAs Project (<a href="https://plasticbustersmpas.interreg-med.eu/">https://plasticbustersmpas.interreg-med.eu/</a>). The application of the threefold approach can elucidate not only the rate of ingestion in cetaceans, but also the multiple sublethal stresses that marine litter ingestion can cause in the short and long term. Each of the three investigation tools that make up the threefold approach can be applied independently or simultaneously using different methods according to the species and whether the animal is stranded or free ranging. The threefold approach (Fossi et al 2018) comprises the following elements:

- i) Analysis of gastrointestinal content: For stranded cetaceans, it is possible to detect the occurrence and rate of marine litter ingestion and any associated pathology through analysis of the gastrointestinal content, with a particular focus on plastics and microplastics.
- ii) Analysis of the levels of plastic additives, as a proxy for ingestion: An indirect approach can be used for free-ranging as well as stranded animals. The levels of plastic additives and associated PBT compounds can be measured to evaluate the exposure to marine plastic pollution.
- iii) Analysis of biomarker responses: Biomarker responses can be used to detect the potential toxicological effect related to PBT and plastic additives related to plastic ingestion in free-ranging individuals (skin biopsy) or in stranded organisms up to a few hours after death.

Several proposed actions in the **ACCOBAMS** Work Programme 2020-2022 are and will be implemented in the EU project **Plastic Busters MPAs**.

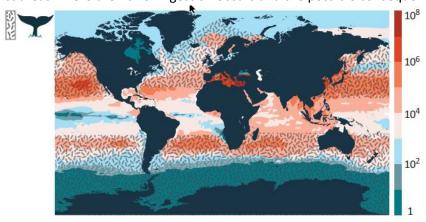
Concerning the evidence-based diagnostic assessment framework for cetacean necropsies on marine debris ingestion and common data collection the *IWC Marine Litter Workshop* group recommend the adoption of the evidence-based diagnostic assessment framework (Doc info 5) by veterinary/biologists working in stranding networks during post-mortem examination of cetaceans in order to study the impact of marine debris ingestion on marine mammals. Considering the concern about the effects of ingested marine debris and the existing knowledge gaps on the effects that marine debris ingestion could have on the health of cetaceans, the workshop encouraged collaborative and comparative studies on this, also noting potential links to human health studies. In particular, noting the potential role of marine debris in carrying pathogens and toxins, the workshop strongly welcomed further studies on the effect of marine litter on the animals' microbiota and associated metabolic disorders, and the development of diagnostic approaches aimed at evaluating these effects.

#### **Cetaceans and Macro- Microplastics hot spots**

Recent studies suggest that debris, including micro-plastics and chemical additives (e.g., phthalates), tend to accumulate in pelagic areas in the Mediterranean (Panti et al., 2015; Pedrotti et al., 2016), indicating a potential overlap between debris accumulation areas and endangered species' feeding grounds (Fossi et al., 2016, Fossi et al., 2017). This fact highlights the potential risks posed to endangered, threatened and endemic species of Mediterranean biodiversity. In one of the most biodiverse area of the Medterranean Sea, the Pelagos Sanctuary, cetaceans coexist with high human pressure and are subject to a considerable amount of plastic debris, including microplastics (Fossi et al. 2012, Collignon et al., 2014).

Fossi and collaborators (Fossi et al. 2017) investigated the possible overlap between micro-debris, meso-debris (from 5 to 25mm) and macro-debris (>25mm) accumulation areas and the fin whale feeding grounds in the pelagic Specially Protected Area of Mediterranean Importance, the Pelagos Sanctuary. Models of ocean circulation and potential fin whale habitat were merged to compare debris accumulation with the presence of whales. Field data on the abundance of micro-, meso-, and macro-debris, and on the presence of cetaceans were collected simultaneously. The resulting data were compared, as a multi-layer, with the simulated distribution of plastic concentration and the whale habitat model.

Field and model observations on marine debris distribution and accumulation areas overlapped the fin whale feeding habitat, paving the way for a risk assessment of fin whale exposure to microplastics at global level. (Germanov et al. 2018). The approaches used in this paper, and by Darmon et al. (2017) for sea turtles predict where species will be the most affected by plastic debris, enabling the identification of sensitive areas for species specific ingestion to be defined, and providing a basis for the mapping of areas to be protected. Based on data or outputs from models on both macro- or micro-plastics, and species distribution, from plankton to large vertebrates, the same approach could be largely used to predict areas where the risk of ingestion occurs and the possible consequences on biodiversity.



**Figure 1.** Key Buoyant Microplastic Hot spots Overlap with Habitat Ranges of Filter-Feeding Marine Megafauna. Balaenoptera physalus, overlap with regions containing high levels of buoyant microplastic pollution. Germanov, Elitza S., Marshall, Andrea D., Bejder, Lars, Fossi, Maria Cristina, Loneragan, Neil R. (2018). Microplastics: No Small Problem for Filter-Feeding Megafauna. TRENDS IN ECOLOGY & EVOLUTION, ISSN: 0169-5347, doi: 10.1016/j.tree.2018.01.005

Trends in Ecology & Evolution

**By M. Cristina Fossi** University of Siena 27/02/20202

## ANNEX VIII – TERMS OF REFERENCE FOR A WORKING GROUP ON SEMI-CAPTIVITY "CENTERS" IN THE ACCOBAMS AREA

#### **Background**

During the Seventh Meeting of the Parties to ACCOBAMS (November 2019, Istanbul, turkey), Parties adopted a Work Programme with activities for 2020-2022. Among these activities, the Scientific Committee was requested to draft a reference document on a scientific point of view about "potential marine semi-enclosed facilities" in the ACCOBAMS area.

In order to support this task as well as other matters related to the creation of marine semi-enclosed facilities in the ACCOBAMS Area, the Thirteen Meeting of the Scientific Committee decided to create a specific Working Group.

### **Tentative list of WG members:**

Joan Gonzalvo (Chair of the WG)
Tullio Scovazzi
Giuseppe Notarbartolo di Sciara
Sandro Mazzariol
Cathy Williamson
Loriane Mendez
Simone Panigada
Marina Sequeira

The Working Group will be considering the following matters related to the creation of marine semi-enclosed facilities in the ACCOBAMS area:

- Legal issues
- Ecology and behaviour of odontocetes; their ecological and ethological requirements, e.g., in terms of space, depth, seasonal temperature range, water quality (salinity, purity), ambient noise, social structure, activity patterns;
- odontocete husbandry (e.g., food, medical care, handling, transportation);
- veterinary medicine focused on marine mammals;
- structural, functional and logistic aspects of the prospective hosting facility;
- ecological impact assessment of concerned marine environments;
- economic assessment of the sustainability of the proposed project and the operational costs of the centre, once established;
- development of educational, awareness and research potential offered by the facility;
- relationships with the main stakeholders: public administration, enforcement, human health issues, environmental issues, legal issues.