

SIXTEENTH MEETING OF THE SCIENTIFIC COMMITTEE 2-5 December 2024 - Barcelona, Spain



# REPORT OF THE SIXTEENTH MEETING OF THE ACCOBAMS SCIENTIFIC COMMITTEE



Barcelona, Spain, 2-5 December 2024

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# REPORT OF THE SIXTEENTH MEETING OF THE ACCOBAMS SCIENTIFIC COMMITTEE

# 1. OPENING OF THE MEETING

- The Sixteenth Meeting of the Scientific Committee (SC16) of ACCOBAMS was convened at Hotel Balmoral in Barcelona, Spain, from the 2<sup>nd</sup> to the 5<sup>th</sup> of December 2024. It was attended by Members of the Scientific Committee, Representatives from ACCOBAMS Sub Regional Coordination Units, Experts, Representatives of International Organizations and ACCOBAMS Partners.
- 2. The full list of participants is shown in <u>Annex I</u> to this report.
- 3. Susana Salvador, Executive Secretary of ACCOBAMS, welcomed the participants and opened the meeting at 8:30 on Monday 2<sup>nd</sup> December 2024. She provided logistic details and indicated relevant documentation for the Meeting, underlining that this meeting would be her last Meeting as Executive Secretary of ACCOBAMS.
- 4. Simone Panigada, Chair of the Scientific Committee, and Ayaka Amaha Oztürk, Vice-Chair, also welcomed the participants, recalling that this was the last meeting of the Scientific Committee for the current triennium. In particular, its results and recommendations will be used for the preparation of draft Resolutions to be submitted for adoption at the Ninth Meeting of Parties in November 2025.

# 2. ADOPTION OF THE AGENDA

5. The provisional agenda of the Meeting, reflected in Document ACCOBAMS-SC16/2024/Doc01, was presented, and participants were invited to review and comment it.

**Conclusion 1.** The Scientific Committee agreed to include a new item 5 "Working methods of the scientific Committee" and to establish a Working Group to develop a discussion document (handbook). The SC adopted the meeting agenda as amended (<u>Annex II</u>) and the timetable.

# 3. CONSERVATION ACTIONS

# 3.1 Report by Regional Representatives

- 6. The Chair recalled that, in accordance with the rules of procedures of the Scientific Committee adopted by MOP8, Regional Representatives of each region should provide a report to the Meetings of the Scientific Committee on the conservation status of cetaceans and on the relevant activities in regard to the regions they represent in the Scientific Committee. He invited Regional Representatives to introduce their respective reports, which are reflected in the following documents:
  - Report on the conservation status of cetaceans and relevant activities in Western Mediterranean and contiguous Atlantic area (ACCOBAMS-SC16/2024/Doc04)
  - Report on the conservation status of cetaceans and relevant activities in Central Mediterranean (ACCOBAMS-SC16/2024/Doc05)
  - Report on the conservation status of cetaceans and relevant activities in Eastern Mediterranean (ACCOBAMS-SC16/2024/Doc06)

 Report on the conservation status of cetaceans and relevant activities in Black Sea (ACCOBAMS-SC16/2024/Doc7)

## Western Mediterranean and contiguous Atlantic area

7. Souad Lamouti, Giancarlo Lauriano and Mohamed Naoufal Tamsouri presented the Report on the conservation status of cetaceans and relevant activities in Western Mediterranean and contiguous Atlantic area in which many cetacean's conservation activities are reported. They pointed out that during the period, key challenges for cetacean conservation emerged, including a lack of scientific data, publications, and dedicated funding in some regions, alongside the need for better management of biological resources, such as tissue banks. Rising water temperatures and marine heatwaves are increasingly affecting cetacean habitats, while collisions with sperm whales in areas like the Strait of Gibraltar and Balearic Islands highlight the risks of human activity. Additionally, overlapping fishing zones with cetacean habitats disrupt populations, reduce prey availability, and increase bycatch incidents, creating both ecological and economic concerns. To address these issues, strengthening capacity-building efforts, enhancing national stranding networks, and supporting surveys for observation and research are vital steps. Identifying funding sources, promoting citizen science, and fostering regional cooperation between Mediterranean research centers can further advance conservation efforts. The identification of key habitats, such as Important Marine Mammal Areas (IMMA), remains essential, alongside aligning national programs under frameworks like the Habitats Directive and MSFD to ensure consistent methodologies and data analysis. Despite these challenges, significant progress has been made, with over 50 scientific publications in 2023-2024 contributing valuable insights to cetacean conservation within and beyond the ACCOBAMS region.

## Central Mediterranean

- 8. Tilen Genov presented the regional report for the Central Mediterranean, that he jointly prepared with Caterina Fortuna and Draško Holcer. A number of research activities are carried out in most countries within the region, including boat-based surveys, photo-identification, acoustic monitoring and citizen science, among others. Capacity building has been pointed out as a necessity by several countries, particularly with respect to stranding networks, stranding responses and necropsy procedures. A better integration of cetaceans and their conservation into existing biodiversity conservation mechanisms, including marine protected areas, was also highlighted. The regional report also provided a list of papers published after SC15 relevant to the Central Mediterranean.
- 9. Regarding the recommendation in the Central Mediterranean report on the need for particular attention to be paid to the issuance of authorizations for telemetry and biopsy studies, SC members pointed out that the same recommendation was made in the past.

**Conclusion 2.** The Scientific Committee proposed the organization at the next ECS Conference (May 2025, Azores) of a workshop on best practices and guidelines related to invasive research within the ACCOBAMS region, including *inter alia* satellite telemetry, in collaboration with the IWC.

## Eastern Mediterranean

10. Yianna Samuel, in collaboration with Céline Mahfouz and Anastasia Komnenou, presented the Eastern Mediterranean regional report highlighting significant activities since SC15. These include cetacean surveys, stranding data collection, marine conservation initiatives, and training programs. Acoustic and visual surveys addressed data gaps, with rough-toothed dolphins recorded for the first time in Turkey's eastern Mediterranean waters. Lebanon conducted marine mammal surveys under the EcAp MEDIII project, while Cyprus plans similar efforts in 2025 to monitor underwater noise and cetaceans. Greece established National Action Plans for key cetacean species and two new marine national parks, aiming to protect 30% of its waters by 2030. Key threats

include military exercises, sonar testing, hydrocarbon exploration, fisheries, vessel collisions, and pollution, compounded by insufficient data on underwater noise and genomic diversity concerns. Recommendations stress capacity building for stranding networks, improved infrastructure, continued acoustic monitoring, habitat mapping using non-invasive methods, and urging military and oil industries to follow ACCOBAMS guidelines with measures like Marine Mammal Observers (MMOs) and Passive Acoustic Monitoring (PAM).

# **Black Sea**

- 11. Pavel Gol'din presented the regional report for Black Sea, which was prepared in collaboration with Dimitar Popov and Arda M. Tonay, summarizing activities in the Black Sea for the last three years. Since the previous report (2020-2022) for the Black Sea Region, significant updates on cetacean density, abundance, and seasonal patterns of harbour porpoise activity have been published, along with a comprehensive bycatch assessment showing unsustainable levels of harbour porpoise bycatch. The efficiency of porpoise alerting devices (PALs) was tested and deemed promising for mitigating bycatch. Continuous efforts included monitoring cetacean populations, habitat use, bycatch, toxicology, microplastics contamination, and stranding events, while threats from Russia's war against Ukraine—such as underwater noise, marine pollution, and sea mines—pose severe risks to marine biota. A new Important Area was recognized for Eastern Anatolian waters, and updates on the IUCN Red List status of Black Sea cetaceans are under review. Recommendations include refining porpoise abundance and mortality assessments, improving bycatch monitoring, continuing PALs testing, and mitigating impacts from war and fisheries. Establishing new marine protected areas, including transboundary reserves, is crucial, alongside addressing underwater noise, illegal captures, and demining activities to ensure long-term cetacean conservation in the region.
- 12. He added that the war in Black Sea puts the entire Black Sea basin under a huge threat. Military activities in the marine and coastal areas may affect the marine biota in the region, including cetaceans, in multiple ways including but not limited to underwater noise, marine pollution, and sea mines.

**Conclusion 3.** The Scientific Committee adopted **Recommendation 16.1** "Post-war plan for the Black Sea cetaceans" as shown in <u>Annex III</u> to this report.

# **Revision of Recommendation 12.1 on Regional Reports**

- 13. The Chair recalled that in relation to this reporting by the Regional Representatives (RRs), during the previous meeting of the Scientific Committee (SC 15, May 2023), some members highlighted the need to review and update procedures and guidelines for the preparation of their reports, including the associated template, which would be considered by the SC16 meeting. An intersessional Correspondence Group (CG) on Revision of Recommendation 12.1 on Regional Reports was created with this objective.
- 14. Caterina Fortuna was invited to present a summary of the work carried out by Correspondence Group on Revision of Recommendation 12.1 (ACCOBAMS-SC16/2024/Inf03). She explained that the CG reconsidered the two existing objectives of such reports, namely to "provide a report to the SC on" (i) "the conservation status of cetaceans" and (ii) "relevant activities".
- 15. It was considered if whether the RRs should and could engage into the activity of providing a periodic report (e.g., triennial) to the Scientific Committee "on the conservation status of cetaceans" rather than just compile a list of "relevant activities" twice per triennium (which is an activity more in line with the role of Sub-regional Coordination Units). It was noted that RRs would need to receive some instructions from the National Focal Points

(NFPs) of the Contracting Parties (CP) on their "conservation targets" which are needed to be able to assess the "status of cetaceans" should be defined in the ACCOBAMS context (e.g., follow EcAp/IMAP or EU MSFD definitions).

- 16. The CG concluded that such reports would represent a challenging task to be achieved but, in principle, this would be an appropriate challenge for members of the ACCOBAMS SC. The CG also felt that simpler reports, such as ones listing ongoing activities, had little utility and high risk of duplicating National Reports submitted by Contracting Parties or ACCOBAMS Partners to the MOP.
- 17. The CG considered if some sort of "indices" could be identified and used as "proxies" of conservation status, in order to at least highlight whether the status of a population and/or species was improving, stagnating or deteriorating, based on the most recent IUCN Mediterranean Red List Assessment for each species or sub-population. For example, using semi-quantitative information on abundance, mortality, reproduction, health status, newly identified threats or cessation of those, and improvement of legal status following the IUCN Red listing category.
- 18. It was also noted that the role of Regional Representatives should be reconsidered in the SC Rules of procedure, as the Agreement Article V on the role of the two sub-regional Co-ordination Units states that they "1. [...] c) to service meetings of the Scientific Committee and to prepare a report for communication to the Meeting of the Parties through the Agreement secretariat. 2. Each Co-ordination unit, in consultation with the Scientific Committee and the Agreement secretariat, shall facilitate the preparation of a series of international reviews or publications, to be updated regularly, including: a) reports on the status and trends of populations, as well as gaps in scientific knowledge; b) a sub-regional directory of important areas for cetaceans; and c) a sub-regional directory of national authorities, research and rescue centres, scientists and non-governmental organizations concerned with cetaceans." This Agreement article essentially indicates that SC Regional Representatives should have an assisting/consulting role (on behalf of the SC) in the compilation of reports/documents prepared by the sub-regional Co-ordination Units, which are the actual leading bodies.

**Conclusion 4.** Template of regional report: the SC commended the work done by the Correspondence Group on the Revision of Recommendation 12.1 on Regional Reports and adopted the template (<u>Annex IV</u>), noting that minor refinements to finalize the draft could be needed.

# 3.2 Improve knowledge about state of cetaceans

# 3.2.1 Mediterranean modelling results

19. Ana Cañadas presented a summary of the analysis of more than two decades of survey data (including ASI data) in the Black Sea and the Mediterranean Sea (ACCOBAMS-SC16/2024/Inf04). This was the result of an enormous collaborative effort where 12 organizations from the Black Sea shared their data totalling more than 42,000 km of survey effort yielding more than 8,000 observations of cetaceans, and 43 organizations from the Mediterranean Sea shared their data totalling more than 1,600,000 km of survey effort yielding more than 40,000 observations of cetaceans. All these data were analysed by Ana Cañadas at Duke University to produce abundance estimates and distribution maps through density surface modelling and applying correction factors for availability and perception biases to all surveys, as well as other methods like winsorizing to avoid unrealistic extrapolations and a statistical approach to assign unidentified species to particular species. Challenges encountered during the analysis were discussed as well as cautions in the interpretation of results, and opportunities that these

approaches present for the future.

20. The Committee welcomed the presentation by Ana Cañadas that reflected an enormous and comprehensive effort to try to integrate a vast amount of data from a wide variety of data sources over some two decades to examine cetacean abundance and distribution. Participants agreed that this vast dataset provides an excellent opportunity to examine the implications of many assumptions involved in such an integration process and especially in terms of examining the costs and benefits of such an approach in terms of the effects on uncertainty on abundance estimates and distribution in terms of their use in conservation and management contexts.

**Conclusion 5.** The Scientific Committee adopted the **Recommendation 16.2** "Abundance and distribution" as shown in <u>Annex III</u> to this report

# 3.2.2 Cetacean population estimates and distribution

- 21. The Secretariat presented a Summary on ASI 1 data requests and respective use (ACCOBAMS-SC16/2024/Inf07) and the Chair of the SC informed the Meeting about scientific articles published on Frontiers Marine Science based on ASI collected data (ACCOBAMS-SC16/2024/Inf06): <u>The ACCOBAMS Survey Initiative (ASI)</u>: <u>Implementing Large Scale Surveys for Marine Megafauna in the Mediterranean and Black Seas</u>".
- 22. Regarding the list of requests for ASI 1 data and related scientific production, Giancarlo Lauriano stated that he, on behalf of Italy, requested the ASI data. This data, along with national official data and information from public repositories, has been analysed to investigate cetacean habitat suitability and the impact of climate change. A paper on this research has recently been published.

**Conclusion 6.** The SC appreciated the efforts done in disseminating the ASI results through a special issue on Frontiers in Marine Sciences and recommended that the Secretariat makes available in the ACCOBAMS website the list of all published papers that used ASI datasets.

**Conclusion 7.** The SC welcomed the proposal of the INFO/RAC representative to amend the ASI data policy (ACCOBAMS-MOP7/2019/Inf 13) by adding a new paragraph on data license as follows: *"Recalling the license definition, the ASI data policy is based on the concept of open sharing, and considers relevant policies and guidelines used by geospatial communities to ensure use and re-use of data and products. The licenses, taken into consideration, were those provided by the Creative Commons Licenses (CCL – http://creativecommons.org) which are the most common and used licenses available for digital material. In this framework the main license for ASI data is the CC-BY 4.0."* 

- 23. The Executive Secretary informed the Meeting that following the last LTMP Contact Group meeting, due to the lack of visibility on funds that are, may, or will be, allocated to the ASI2 project, **the progression** of the project preparatory activities, as planned for the second half of 2024, **was interrupted**. She added that, in this context, the Bureau of ACCOBAMS concluded:
  - Noting the current circumstances, the initial timeline of the project needs to be updated, notably for the ASI2 fieldwork.
  - To start the project as soon as possible in order to plan ASI2 first fieldwork in 2026, and meanwhile allow time to:
    - pursue the efforts of Countries and the Secretariat in seeking the necessary funding for launching the project;

- have the necessary funds to recruit the coordination personnel at the Secretariat and the Scientific coordinator, in accordance with point VI of the project (Project Governance): "full-time Project manager, full-time administrative assistant and the Scientific coordinator";
- use the momentum of the political context of the 2025 UNOC to increase visibility of ASI2 project.
- Subject to bilateral agreements with donor countries, seek the possibility to use funds from any contributions
  received in 2024 for engaging a scientific team to adapt the project methodologies, considering appropriate
  environmentally-friendly technologies, and survey design in consultation with the Scientific Committee.
  Regarding this point, Giancarlo Lauriano confirms Italy's in-kind contribution through the planned MSFD
  activities, which have consequently been postponed to 2026.

**Conclusion 8.** The Scientific Committee adopted the **Recommendation 16.3** "ASI2 and LTMP" as shown in <u>Annex III</u> to this report.

**Conclusion 9.** The Scientific Committee recommended that the Chair submits the ASI estimates to the IWC SC for review as part of the ongoing efforts to develop internationally recognized and consistent list of approved abundance estimates.

24. Giancarlo Lauriano, the co-chair of the MSFD/ECAP Working Group outlined the activities and goals of the MSFD/EcAP Working Group (ACCOBAMS-SC16/2024/**Doc09**), focusing on achieving ecological and administrative coherence for marine mammal monitoring. He highlighted the importance of transnational collaboration and the use of representative data sets from various surveys conducted between 2009 and 2023. Additionally, he emphasized the need for a coordinated approach to reporting abundance in the context of the MSFD and similar frameworks.

**Conclusion 10.** The Scientific Committee commended the work undertaken by the ECAP/MSFD working group, welcomed the offer of Joan GIMENEZ to be a new co-chair of the working group, and appreciated the offer by SPA/RAC to invite the co-chairs to the next Biodiversity CORMON Meeting in 2025.

25. SC participants were also informed about ICES Workshop on Cetacean Abundance Estimation Through Distance Sampling Methods (WKCETAB) 2024 (ACCOBAMS-SC16/2024/Inf05) and an upcoming meeting in June 2025, which aims to synchronize large-scale ecological surveys and ensure effective data handling.

**Conclusion 11.** The meeting appreciated the report of the ICES Workshop on cetacean abundance estimation through distance sampling methods and recommended to pursue the collaboration with ICES on this topic.

26. In order to assist ACCOBAMS Parties in integrating conservation actions within their national programs to achieve a good environmental status under the MSFD and relevant EcAp Processes, SC members proposed a sub-regional list of cetacean species for monitoring purposes.

**Conclusion 12.** The Scientific Committee adopted the **Recommendation 16.4** "Species list for monitoring purposes" as shown in <u>Annex III</u> to this report.

# 3.2.3 Population structure

27. Pauline Gauffier presented an update on the ACCOBAMS Best Practices on Cetacean Population Genetics. These best practices were collectively compiled in 2022 and updated in November 2023. A webinar for regional training on genetic data collection, backed by the Italian Ministry of the Environment, was held in November 2023 with 47

participants. Additionally, a poster was presented at the 35<sup>th</sup> ECS Conference in April 2024. The Best Practices are considered living documents, continuously updated by the ACCOBAMS Scientific Committee.

**Conclusion 13.** The Scientific Committee recommended that Pauline Gauffier updates the Best Practices with a dedicated paragraph about the ownership of samples collected in the framework of publicly funded projects that might become the property of the funding agency administration after a fixed period. Information will also be added to the section regarding the Material Transfer Agreement (MTA) defining the terms of use and properties of the tissue samples exchanged between the institutions.

**Conclusion 14.** The Scientific Committee adopted the **Recommendation 16.5** "Population structure" as shown in <u>Annex III</u> to this report.

# 3.2.4 Monitoring cetaceans' status

- 28. Simone Panigada informed the Meeting about the IUCN publication "<u>Conservation status of cetaceans in the</u> <u>Mediterranean Sea - Trends and changes after a decade of conservation efforts</u>" which is based *inter alia* on ASI results.
- 29. Black Sea experts have indicated that the three cetacean species of the Black Sea have been submitted to the IUCN for a status update on their conservation status.

# 3.2.5 Conservation Management Plans

30. Simone Panigada presented "Draft Terms of Reference for CMP stakeholder workshop" (ACCOBAMS-SC16/2024/**Doc10**). He recalled that during the 15<sup>th</sup> Meeting of the Scientific Committee, the four CMP leaders -Simone Panigada, for fin whales, Léa David, for Risso's dolphins, Joan Gonzalvo, for common dolphins and Guido Gnone, for bottlenose dolphins - were requested to identify relevant stakeholders to organize a dedicated workshop(s). He explained that small workshop steering groups should be established as soon as possible in order to: (a) finalise the specific agenda(s) by CMP, (b) identify key stakeholders needed, based upon identified priority threats, (c) selecting a suitable venue (including breakout groups, time and budget required), (d) prepare background documentation and introductory presentations for each item.

**Conclusion 15.** The SC will establish small CMP workshop steering groups as soon as possible in order to (a) finalise the specific agenda(s) by CMP, (b) identify key stakeholders needed, based upon identified priority threats, (c) select a suitable venue (including breakout groups, time and budget required), (d) prepare background documentation and introductory presentations for each item.

Its members should include at least:

- 1) 1 SC member who led the draft CMP development work
- 2) 1 member of the ACCOBAMS Scientific Committee Steering Group on CMPs
- 3) 2 relevant Regional and/or National Representatives with knowledge of stakeholders
- 4) 1 member of the ACCOBAMS Secretariat
- 31. Aurelie Moulins and Caterina Lanfredi presented next steps towards Ziphius and Sperm Whale CMPs (ACCOBAMS-SC16/2024/Doc11 and ACCOBAMS-SC16/2024/Doc12). They recalled that Resolution 8.14 recommended drafting a Conservation Management Plans (CMPs) for two endangered species: Mediterranean sperm whale and Mediterranean Cuvier's beaked whale, listed as "Endangered" and "Vulnerable" on the IUCN Red List, respectively. These species face threats such as vessel strikes, noise pollution, bycatch, and marine litter. The CMP development

process is the same than the 4 ongoing CMPs: drafting, expert inputs, stakeholder engagements, and implementation. Caterina Lanfredi and Aurelie Moulins will lead this effort, starting with drafting sections on biology and conservation threats. Recent IUCN assessments and relevant papers will be incorporated with the help of selected experts.

**Conclusion 16.** The Scientific Committee welcomed the CMP documents and updates, and suggested the Chair prepares a draft resolution, adapting the existing one, based on the new available information.

32. Ayaka Amaha Oztürk explained that in 2014 a Regional Conservation Plan for Black Sea Cetaceans was prepared and that it could be updated based on CeNoBS results.

**Conclusion 17.** Black Sea experts will revise the Black Sea Conservation Plan based on CeNoBS results and will consider drafting a multi-species CMP to be presented to the next Scientific Committee Meeting.

# 3.2.6 Functional stranding networks and response to emergency situations

- 33. Pavel Gold'in, the Task Manager on "Functional stranding networks and responses to emergency situations" presented an update on activities related to functional stranding networks and responses to emergency situations (ACCOBAMS-SC16/2024/**Doc14**). He highlighted various workshops and training sessions organized to enhance expertise in marine mammal necropsy, tele-necropsy, and ingested marine litter monitoring. He also mentioned the active involvement of national stranding networks in several countries and the need for maintaining an updated list of stranding networks and relevant contacts.
- 34. Sandro Mazzariol and Thierry Jauniaux, co-chairs of the ACCOBAMS Emergency Task Force for Strandings (AETFS), reported on the activities of the Task Force (ACCOBAMS-SC16/2024/**Doc13**). They explained that since the creation of the AETFS, three unusual mortality events occurred in the ACCOBAMS area. In February 2023, an atypical mass stranding of Cuvier's beaked whales happened in Cyprus, likely linked to navy exercises. In January 2024, five unusual whale strandings were reported in Morocco, with partial necropsies revealing signs of gastritis and severe kidney congestion. In May 2024, a mass stranding of Cuvier's beaked whales was reported in Corsica, potentially caused by human noise from military exercises.
- 35. The OceanCare representative stressed that National Focal Points shall provide the appropriate support to allow in-depth identification of causes of death, especially when it comes to strandings resulting from acoustic trauma and/or noise-generating activities. Information about all activities correlating in space and time in context to the stranding would be helpful to consider all potential causes.
- 36. Progress report on the ongoing tele-necropsy initiative (ACCOBAMS-SC16/2024/Inf10) was also presented. This initiative is based on ACCOBAMS Scientific Committee's recommendation to use new technologies for remote training, support, and advice in cetacean strandings. Morocco is leading this pilot project, which involves training in scientific imaging to standardize stranding intervention methods and developing a regional photography protocol. The initiative includes both theoretical and practical training phases, with workshops held in various locations and the use of advanced tools like Discord and NAS for communication and data storage.

**Conclusion 18.** The Scientific Committee adopted the **Recommendation 16.6** "Strandings issues (AETFS, functioning stranding networks)" as shown in <u>Annex III</u> to this report.

## 3.3 Reduce human pressures on cetaceans

## 3.3.1 Interactions with fisheries/aquaculture

- 37. Dimitar Popov, the Task Manager on "Interactions with fisheries/aquaculture" highlighted key activities and collaborations (ACCOBAMS-SC16/2024/Doc16). He explained that ACCOBAMS had been actively involved in several key projects in collaboration with FAO/GFCM and other organizations to implement mitigation measures. He also informed that a working group was established in Portugal to minimize incidental captures of marine mammals, birds, and reptiles.
- 38. The OceanCare representative recalled the necessity of close collaboration between ACCOBAMS and GFCM to address the impacts of fisheries on cetaceans. Support is provided towards the call for a clear recommendation urging mitigation measures imposed by Countries addressing bycatch, as reported in the Black Sea, but also in Morocco. Furthermore, OceanCare recommended that the Secretariat approaches GFCM and ICCAT again to collaborate in addressing the continued usage of driftnets, e.g., in the Western Mediterranean Sea, as documented in SC15 and that such an action be reflected in the recommendations.
- 39. Ayaka Amaha Oztürk, co-chair of the ACCOBAMS-ASCOBANS Joint Bycatch Working Group, presented the report of the Joint Working Group (ACCOBAMS-SC16/2024/**Doc15**) and explained that the second official meeting, originally planned in October 2024, was re-scheduled for February 2025. The main issues to be addressed are development in mitigation measures, Updates on projects related with bycatch, review of some other fisheries which have not been evaluated before (e.g., recreational fishing), and, most importantly, revision of the program of work (POW) and appointment of relevant experts who can take tasks in the POW. She added that co-chairs encouraged all the members to participate in the second meeting and also invited all interested experts to join.
- 40. A report "Bottom trawling: direct and indirect impacts on cetaceans, with a focus on the Mediterranean Sea" received by the Secretariat from OceaCare (ACCOBAMS-SC16/2024/Inf16) was presented. It explained that bottom trawling was a fishing method that involves towing nets along the seabed, causing significant damage to marine ecosystems. The report highlighted the physical and chemical alterations of the seabed, the resuspension of contaminants, and the impact on seabed organisms. It also emphasized the need for further exploration of activities contributing to climate change and their impact on cetaceans.
- 41. Iryna Makarenko, representing the ACCOBAMS Black Sea Sub Regional Coordination Unit, informed the meeting that the Secretariats of ACCOBAMS and of the Black Sea Commission have jointly organized a meeting to take stock of common subjects in relation to the Black. It took place on 6-7 March 2024 in the office of the Permanent Secretariat of the Black Sea Commission in Istanbul (Türkiye). She introduced the meeting report (ACCOBAMS-SC16/2024/Inf11) and explained that the meeting discussed various issues of interest, including fisheries-related matters. In the conclusions, it was stated that participants agreed to consider the creation of a collaborative network between the EU/DGMARE, GFCM, ACCOBAMS, and the Black Sea Commission. This network aims to facilitate a joint response to the critical high rates of harbour porpoise bycatch in the Black Sea region. The general aim of this collaborative network is to address the issue of high-rate harbour porpoise bycatch in the Black Sea region through coordinated efforts, data sharing, research, and policy implementation, with the ultimate goal of reducing and mitigating by-catches during fishing activities.
- 42. Joan Gonzalvo informed the Meeting that the ACCOBAMS Secretariat was acting as coordinator/advisor in three projects funded by the General Fisheries Commission for the Mediterranean (GFCM) of the Food and Agriculture

Organization of the United Nations (FAO), which are carried out in consortium with a local entity:

- The Monitoring Activities and Mitigation Measures for the Reduction of Dolphin Depredation in Small-Scale Fisheries - Western Ionian Sea (GSA 19)" project, also referred to as the "Depredation-3" is done in consortium with Marecamp Association;
- Reduction and mitigation of the catch of elasmobranchs, sea turtles, and any other vulnerable species incidentally captured by trawlers along Turkish coast (GSA 24 – Northern Levant Sea) in consortium with the Cukurova University (Adana, Türkiye);
- Monitoring activities and mitigation measures for the reduction of the elasmobranchs incidentally captured by trawlers and for the reduction of dolphin depredation in purse seiners (GSA 3 – Southern Alboran Sea), with the National Institute of Fisheries Research (Morocco).

**Conclusion 19.** The Scientific Committee commended the collaboration with GFCM about interactions between fisheries and cetaceans.

43. The ACCOBAMS Scientific Committee was informed that ICES convened a series of workshops on appropriate sampling schemes for protected, endangered and threatened cetacean species bycatch (WKPETSAMPs). The WKPETSAMP3 (2024) that was tasked with providing concrete inputs for appropriate bycatch monitoring and assessment and for the promotion of regional cooperation. This workshop ran new simulations on multiple, ground-truthed scenarios, in addition to considering the "0.5% scenario", which is indicated as the minimum appropriate level for "on board" observations by the FAO/GFCM guidelines on monitoring incidental catch in the Mediterranean and Black Seas (FAO 2019). These guidelines were adopted by the relevant Data Collection Framework Regional Coordination Groups (DCF RCGs) within the Agreement Area and used to build national monitoring programmes.

**Conclusion 20.** The Scientific Committee adopted the **Recommendation 16.7** "Bycatch and bottom trawling" and **Recommendation 16.8** "Revision of the FAO GFCM guidelines on monitoring incidental catch of vulnerable species in the Mediterranean and Black Seas (FAO 2019)" as shown in <u>Annex III</u> to this report.

# 3.3.2 Anthropogenic underwater noise

- 44. Sigrid Lüber, the co-chair of the Joint Noise Working Group (JNWG) of CMS, ACCOBAMS and ASCOBANS, informed the meeting about the progress in the works of the JNWG, based on its Work Plan (version: February 2023, JNWG WP 202302 final.pdf). She informed the Meeting about a foreseeable increase of workload in the next future following the adoption of last TG-Noise guidance, as well as the acceleration of the implementation of noise-related monitoring and assessment programs under the scope of the Barcelona Convention.
- 45. Alessio Maglio provided an update on the Secretariat's work in relation to anthropogenic underwater noise since the last SC meeting, referring to document ACCOBAMS-SC16/2024/**Doc17**, in particular:
  - the ACCOBAMS Mediterranean technical assessment on anthropogenic underwater noise as part of the 2023 Quality Status Report of the Barcelona Convention (IG.26 taken at COP23 of UNEP/MAP);
  - the collaboration with the TG-Noise for the development of new EU guidelines on underwater noise monitoring and assessment;
  - the participation to the SeaSounds project;
  - engagement in the Joint ACCOBAMS-ASCOBANS Workshop with Navies on Underwater Noise and Cetaceans held on 26-27 November 2024 which focused on mitigating the impact of underwater noise—particularly from sonar and unexploded ordnance (UXO) blasts—on cetaceans.

- 46. Regarding the presentation of maps within the input of ACCOBAMS to the State of the Mediterranean Environment Report on anthropogenic noise, OceanCare reiterated the need for countries and partners to provide data, in particular on impulsive noise generating activities, to allow the scientists to come up with the best available scientific assessment of noise emissions within the Agreement Area.
- 47. The representative of SPA/RAC proposed that ACCOBAMS continue to collaborate with UNEP/MAP on EO11 of EcAP during the next triennium.
- 48. Mark Simmonds noted that CMS had held its CoP in February in Samarkand in 2024 and that various noise related matters were committed either for parties or for the joint noise working group to action. In the last meeting these included *inter alia* encouragement to Parties to disseminate the *CMS Family Guidelines on Environmental Impact Assessment for Marine Noise-generating Activities* to all national departments involved in deciding on noise-generating activities. They also encourage their application, through the Secretariat, inform the Scientific Council at the 7<sup>th</sup> meeting of the Sessional Committee about experiences and lessons learned in the application of these Guidelines, and the need for additional guidance on assessment and mitigation of marine noise. He added that the MOP also issued several instructions to the joint working group that should be addressed subject to external resources. He encouraged an in-person meeting, if possible, of the JNWG to determine how to best take its work forward, including that prescribed by the last CMS CoP.
- 49. Léa David, the Chair of the MMO/PAM operators WG, informed that since 2018, 11 trainings have been realized, leading to the certification of around 150 ACCOBAMS MMO/PAM of 17 nationalities, mainly from the ACCOBAMS area and Atlantic bordering countries. She added that there was a need to update the course content in order to reflect the evolution of this work and maybe adapt the training tools. She encouraged the creation of a LinkedIn profile for the ACCOBAMS certification to strengthen its visibility and promote links among stakeholders, as ACCOBAMS MMO/PAM, trainers and industrials.
- 50. Carlos Bravo from OceanCare reported that within the framework of the work of the Mediterranean Strategy for the Prevention of, Preparedness, and Response to Marine Pollution from Ships (2022-2031) of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), an Intersessional Working Group on underwater noise (IWG-Noise) was created and it was decided that OceanCare would chair it. Among the aims of this IWG-Noise there is a better understanding of the EU's underwater noise thresholds values (TV) and their operational mechanisms as a crucial tool for leveraging the positive experiences associated with these EU's TVs to support the process of adopting Common Indicators on noise within the framework of UNEP/MAP. In this regard, ACCOBAMS SC and ACCOBAMS Secretariat were requested to join the IWG-Noise and take into account that ACCOBAMS participation in this group could also promote the use of NETCCOBAMS to provide data for the work of this group.

**Conclusion 21.** The Scientific Committee adopted the **Recommendation 16.9** "Anthropogenic underwater noise" as shown in <u>Annex III</u> to this report.

# 3.3.3 Ship strikes

51. Simone Panigada presented a progress report on vessel strikes issues, including a whale safe certificate (ACCOBAMS-SC16/2024/**Doc19**). He highlighted the collaborative efforts of ACCOBAMS and the

International Whaling Commission (IWC) to understand and mitigate these strikes recalled that a Working Group (WG) was established under the auspices of the ACCOBAMS Scientific Committee to ensure that the recommendations of the workshops and the resolutions from the Meeting of the Parties are acted upon. He gave information regarding the Shiprint project, funded by "Pelagos Initiative," which aims to support the implementation of Associated Protective Measures (APMs) within the Northwestern Mediterranean Sea Particularly Sensitive Sea Area (NW Med PSSA). This project includes tracking AIS-equipped vessels, organizing workshops, raising awareness, and developing guidelines for a whale-safe certificate. Future efforts (2026-2028) would focus on continuing collaboration with the IWC, liaising with the Pelagos Agreement, participating in ongoing mitigation efforts, developing a whale-safe certificate, and enhancing place-based conservation efforts.

- 52. Mark Simmonds drew attention to UNEP/CMS Resolution 14.5 on "Reducing the risk of vessel strikes for marine megafauna" agreed at the last CMS CoP. Amongst other things the CMS parties agreed to encourage themselves to:
  - "...adopt measures to reduce the risk of vessel strikes on marine megafauna, including marine mammals... applying most effective practices and technologies, ensuring that mitigation measures are based on the best available scientific data to achieve positive conservation outcomes
  - "...to propose core aggregation zones and known migration corridors of vulnerable marine megafauna, where there is a significant risk of vessel strikes, for the implementation of appropriate IMO measures to avoid that risk.
  - "...consider integrating such areas into broader Marine Protected Area (MPA) designations, also with a view to implementing Target 3 of the Kunming-Montreal Global Biodiversity Framework".
  - And they agreed "to promote and support the development and implementation of best practices for reducing the risk of vessel strikes to marine megafauna, including but not limited to: a. Speed restrictions in areas with high marine megafauna activity; b. Use of technology such as acoustic detection systems to detect and avoid marine megafauna; and c. Education and training of vessel crew on marine megafauna conservation and vessel strike prevention."
- 53. Carlos Bravo from OceanCare presented the results of the "Analysis of maritime traffic speed in 2023 in the NW Mediterranean PSSA: Establishing a baseline to monitor progress in complying with IMO recommendations for speed in the PSSA" (ACCOBAMS-SC16/2024/**Doc18**). He recalled that all the Associated Protected Measures (APMs) of this PSSA –speed reduction, safety distance, broadcasting the position of medium and large cetaceans observed and reporting of collisions– were only recommended and did not have a mandatory character. IMO has preferred a bottom-up approach, based on voluntary involvement, rather than a top-down one, based on a binding regime. The results of the choice depend on whether the environmental awareness of ship owners will prevail over self-interest and desire to overcome competitors through faster services. In this context, the quantitative monitoring of compliance with the PSSA's APMs, in particular the reduction of speed to between 10 and 13 knots, by each vessel operating within the boundaries of the PSSA in the North-Western Mediterranean, will make it possible to assess their effectiveness and whether the objective for which the PSSA was declared is being achieved. In 2023, data revealed high risks of ship collisions with fin and sperm whales due to excessive speeds. Of the nearly 48 million kilometers travelled by ships, 57% exceeded the safe limit of 10 knots. Merchant ships contributed to this significantly, with 80% of their travel above the threshold. These findings highlight the need for significant efforts to comply with IMO speed reduction recommendations to protect endangered whales.
- 54. OceanCare stressed that the vessel speed analysis is going to be repeated frequently to allow to assess whether there is a significant change in speed performance by individual vessels and/or by sector within the PSSA. It was

reiterated that it is of significant importance that States engage in making use of NETCCOBAMS to have a good understanding in whether vessel speed is going to change in response to the recommendation to engage in risk reduction measures, such as vessel speed slow down to 10 to 13 knots.

- 55. Alexandros Xydias from Ocean Care, presented Update on reducing the risk of ship strikes of endangered sperm whales in the Hellenic Trench (ACCOBAMS-SC16/2024/Inf18). This document provides an update on efforts to mitigate the threat of ship strikes on endangered sperm whales in the Hellenic Trench, an Important Marine Mammal Area (IMMA). A coalition of NGOs, including IFAW, OceanCare, Pelagos Cetacean Research Institute, and WWF Greece, has been working to reroute shipping traffic and raise awareness among shipping companies. These efforts have led to a significant reduction in the risk of ship strikes by at least 30%. Additionally, the Greek government has committed to expanding Marine Protected Areas and implementing the SAvE Whales system to further protect these whales.
- 56. OceanCare referred to the importance of vessel speed reduction as an effective measure with multi-environmental benefits which has already been accepted, endorsed and adopted as effective measure to be implemented. In particular, vessel slowdown contributes to reducing underwater noise and greenhouse gas emissions as well as the risk of collisions. The vessel speed analysis undertaken for vessel traffic within the PSSA will allow future comparison with vessel speed performance of the various sectors in that region.
- 57. It was noted that the shipping industry continues to progress and engage in collision risk reduction measures. OceanCare noted that the second version of the Whale Chart has just been published by the World Shipping Council mapping of all mandatory and voluntary governmental measures to reduce harm to whales from vessels. (World Shipping Council Publishes Second Edition of the WSC Whale Chart: An Essential Guide for Marine Conservation — World Shipping Council).
- 58. Léa David updated on data from Life Conceptu Maris regarding the Closest Point of Approach (CPA) and Near Miss Events (NME) involving animals. In the past three years, at least 15 NMEs have been recorded in the north-western Mediterranean Sea, mostly with fin whales, sperm whales, and occasionally pilot whales and Cuvier's beaked whales. The PSSA applies to both large and medium species as observed at sea. No vessel strikes have been recorded, though monitoring is limited to daylight and good weather conditions, suggesting strikes may go unreported/unnoticed during nighttime or bad weather.

**Conclusion 22.** The Scientific Committee adopted the **Recommendation 16.10** "Ship strikes" as shown in <u>Annex III</u> to this report.

# 3.3.4 Cetacean watching

59. Marina Sequeira, Chair of the Working Group on Whale Watching (WWWG), was invited to present the relevant progress report (ACCOBAMS-SC16/2024/**Doc20**). She explained that the WWWG focuses on assessing, monitoring, and collecting data on cetacean watching activities in the ACCOBAMS area. She explained that the WWWG updated its Terms of Reference (Annex V) in line with the ACCOBAMS Program of Work. Key activities include defining carrying capacities for commercial dolphin watching, developing data collection apps, and promoting sustainable whale-watching practices. She added that the WWWG collaborated with various stakeholders to enhance cetacean conservation and improve data reporting from whale-watching operators. Finally, she presented draft Terms of Reference for an ECS Whale Watching Workshop which appear in <u>Annex VI</u>.

- 60. Ricardo Mendes presented studies for the "re"-establishment of the dolphin watching Carrying Capacity in Setúbal Bay, Portugal<sup>1</sup>". He explained that in the Sado estuary, Portugal, a resident population of bottlenose dolphins is declining due to ecological and environmental factors. Excessive boat operations for dolphin watching necessitate re-evaluation under conservation laws. A research project identified key factors for dolphin conservation, suggesting new regulations including:
  - Assign licenses based on operators and limit daily trips.
  - Use real-time web-GIS and increase surveillance.
  - Establish non-observation/exclusion zones at the estuary mouth and deep within.
- 61. Laurene Trudelle, from Miraceti, explained that the HQWW collective brand has reached its 10<sup>th</sup> anniversary in 2024 and has been renewed with law office by ACCOBAMS. This certificate aligns with Resolution 6.20, which addresses "Commercial Cetacean Watching Activities in the ACCOBAMS Area." However, the Regulations Governing Use associated with this certificate still require updates which are expected to be registered with the Monegasque and EU trademark offices in the coming months. She suggested that WWWG initiates a productive email exchange and, if necessary, hold online meetings by January-February 2025 to initiate this review.

**Conclusion 23.** The Scientific Committee adopted the **Recommendation 16.11** "Commercial Whale Watching Activities in the ACCOBAMS Area" as shown in <u>Annex III</u> to this report.

# 3.3.5 Marine debris & chemical and biological pollution

- 62. Mark Simmonds, the CMS COP-appointed councillor on marine pollution, reported on the recent workstream on marine debris, noting that this was underpinned by ACCOBAMS Resolution 8.20 on Marine Litter & Chemical Pollution, adopted by ACCOBAMS Parties in 2022. An ACCOBAMS workshop was convened on 6-7 April 2024 (Catania, Sicily), in collaboration with the University of Padova and with Mark Simmonds, Cristina Fossi and Sandro Mazarriol acting as co-conveners with the objective to improve collection of relevant data, especially from stranded cetaceans, with a specific focus on identifying best practice related to monitoring ingested marine litter and entanglement evidences in the ACCOBAMS Area (ACCOBAMS-SC16/2024/Inf14). All the recommendations from this workshop were presented to the IWC Scientific Committee (22 April 3 May 2024, Bled, Slovenia), which endorsed them.
- 63. Mark Simmonds also made an introduction to Fishing Aggregation Devices (FADs) as a source of marine debris (ACCOBAMS-SC16/2024/Inf15). It was noted that CMS has identified the Mediterranean as an area to potentially carry out a case study on the role of FADs in the generation of marine debris. The University of Siena and CIMA Research Foundation offered assistance in this. Mark Simmonds will follow up with them and welcomes offers of help from others.
- 64. Maria Cristina Fossi from the University of Siena, Italy kindly offered to Co-organize a future workshop on the topic of multiple stressors in cetaceans within the next triennium at the prestigious University of Siena meeting venue, the Certosa di Pontignano (University of Siena).

**Conclusion 24.** The Scientific Committee adopted the **Recommendation 16.12** "Marine Debris" as shown in <u>Annex III</u> to this report.

<sup>&</sup>lt;sup>1</sup> Full report: PEREIRA DA SILVA, C., NOGUEIRA MENDES, R. JULIÃO, R.P. (2022). Estudo reavaliação da capacidade de carga observação de cetáceos no estuário do Sado & zona marinha adjacente. Relatório Final. Lisboa. Dezembro 2022. 144 pp.

# 3.3.6 Climate change

65. Mark Simmonds (CMS) and Laetitia Nunny (OceanCare) provided an update to the meeting on climate change referring to Document ACCOBAMS-SC16/2024/Inf19 and the paper they submitted in 2022 to the Scientific Committee of the IWC<sup>2</sup>. They explained that recent studies indicate a decline in habitat suitability for striped dolphins, bottlenose dolphins, and fin whales in the Mediterranean Sea due to climate change. They added that the CMS Secretariat and UK Government will host an expert workshop on migratory species and climate change in February 2025.

**Conclusion 25.** The Scientific Committee noted that the CMS Secretariat, together with the Government of the United Kingdom, is organizing an expert workshop on migratory species and climate change on 11- 13<sup>th</sup> February 2025 in Edinburgh, United Kingdom. The ACCOBAMS Scientific Committee looks forward to the results from this workshop which will help to direct its future work on this issue.

**Conclusion 26.** In response to the presentation of Inf.Doc.16 "Bottom Trawling: direct and indirect impacts on cetaceans, with a focus on the Mediterranean Sea" and recalling Conclusion 34 of the 15th Meeting of the Scientific Committee, which concerned the "nexus of activities contributing to climate change and those having an impact on cetaceans", the Scientific Committee recommended that the carbon footprint of bottom trawl fisheries in the Mediterranean Sea should be assessed in terms of their contribution to climate change, including both direct and indirect greenhouse gas emissions. The Scientific Committee also recommended the Secretariat to engage with GFCM and appropriate experts to make this assessment and report back on progress in due course

# 3.3.7 Captivity related issues

- 66. Joan Gonzalvo presented Draft guidelines for best practices during the installation and management of semienclosed facilities for cetacean species (ACCOBAMS-SC16/2024/**Doc21**). He recalled that at its Fifteenth meeting, held on 10-11 May 2023 in Tunis, the ACCOBAMS Scientific Committee adopted Terms of Reference for an ACCOBAMS Advisory Committee on semi-enclosed facilities. The Draft\_guidelines were prepared by the members of this Advisory Committee and have been largely adapted from de document "*Standards for Cetacean Sanctuaries*" adopted by The Global Federation of Animal Sanctuaries (GFAS) and released in June 2023, taking into account the ACCOBAMS framework.
- 67. Sandro Mazzariol was then invited to introduce Document ACCOBAMS-SC16/2024/**Doc22** about the Genetic passport for cetaceans kept in captivity). In 2022, the Eighth Meeting of the Parties to ACCOBAMS (MOP8) requested the development of a template of genetic passport for different cetacean species kept in captivity, in collaboration with the ACCOBAMS Advisory Committee on Captivity related issues.
- 68. Finally, they jointly presented a Note on Procedural Steps for Requesting Advice from the ACCOBAMS Advisory Committee on Semi-Enclosed Facilities which should help in refining future advisory processes and ensure alignment with conservation common objectives.

**Conclusion 27.** The Scientific Committee adopted the **Recommendation 16.13** "Semi-captivity (passport & guidelines" as shown in <u>Annex III</u> to this report.

<sup>&</sup>lt;sup>2</sup> Sandra Striegel, Laetitia Nunny and Mark P. Simmonds 2022. An update on the implications of climate change for cetaceans - with a particular focus on the Mediterranean. Paper submitted to the Scientific Committee of the IWC. 29 pages. SC/69A/E/07 Sea <a href="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative=6392&noattach=true&k="https://archive.iwc.int/pages/download.php?ref=19985&ext=pdf&alternative

# 3.4 Enhance effective conservation of cetaceans' habitats

# 3.4.1 Ongoing efforts regarding CCH

69. Lea David, Task Manager on "Area-based measures for cetacean conservation" reported on activities since last Meeting of the Scientific Committee (ACCOBAMS-SC16/2024/**Doc23**). During SC15, the Scientific Committee recommended to the Task Group on "Area-based measures for cetacean conservation" to review and update the work to be done for "area-based measures for cetacean conservation", also considering the recommendations from the workshop held in March 2022. It was also suggested to replace the term "Cetacean Critical Habitat" with an appropriate terminology. In this framework, a workshop regarding the redefinition of the CCH process was held in Monaco on the 18<sup>th</sup> of March 2024.

70. She informed the Meeting about the 3 main points addressed during the workshop:

- Review of Existing Area-Based Mechanisms: The workshop discussed the review of existing areabased mechanisms and tools relevant to cetacean conservation. This includes updating the process for identifying important cetacean habitats and considering the recommendations from previous workshops.
- Terminology Update: The term "Cetacean Critical Habitat" (CCH) has been updated to "Cetacean Co-occurrence with Human activities" to better reflect the process of identifying areas where cetaceans and human activities overlap.
- Strengthening Cooperation and Recommendations: The workshop emphasized the need to strengthen cooperation with relevant organizations, such as Duke University, and provided recommendations for improving the identification of CCH.

# 3.4.2 Place-based conservation effort: update on IMMAs

71. Simone Panigada recalled that the 1<sup>st</sup> IMMAs workshop for the Mediterranean Region was held in 2016, jointly organized by IUCN, Tethys Research Institute, and ACCOBAMS. Following this first step in Mediterranean Sea, similar workshops for IMMAs were conducted all around the world, including in the Black Sea in 2021. The next Mediterranean Region IMMA workshop is planned for 2026 to update important areas in the area, continuing the collaborative efforts to enhance marine conservation.

**Conclusion 28.** The Scientific Committee adopted the **Recommendation 16.14** "Area-based measures for cetacean conservation" as shown in <u>Annex III</u> to this report.

# 3.5 NETCCOBAMS

- 72. Dimitar Popov, Chair of the NETCCOBAMS Working Group, reported on the use of NETCCOBAMS (ACCOBAMS-SC16/2024/**Doc24**). He recalled that the NETCCOBAMS platform was designed to address specific management needs and objectives of ACCOBAMS by aggregating data in one place, providing scientific validation, and supporting decision-making based on insightful data. Despite having 120 registered users, active participation is limited, with feedback mainly highlighting technical registration issues.
- 73. He added that NETCCOBAMS was featured in two workshops at the European Cetacean Society conference in April 2024, focusing on mapping human activities data in the ACCOBAMS area and advancing knowledge on fin whales in the Mediterranean Sea.

74. Lorenza Babina, from INFO/RAC, presented the ongoing collaboration between NETCCOBAMS and UNEP-MAP KMaP, showcasing tools and functionalities for data sharing and visualization, including an experiment displaying mean boat speed during the summer 2023 over the new PSSA area. She explained that the objective is to improve the current experiment by identifying zones where speed limits are frequently exceeded and enhancing technical/scientific cooperation to create a comprehensive database of boat speed data and meaningful risk maps.

**Conclusion 29.** The Scientific Committee adopted the **Recommendation 16.15** "NETCCOBAMS" as shown in <u>Annex III</u> to this report.

# 3.6 Cetacean culture

75. Mark Simmonds explained that CMS has been leading ground-breaking work on the implications of animal cultures and social learning for conservation (ACCOBAMS-SC16/2024/**Doc25**). Noting that cetaceans are among the species known to have populations that can be defined by their cultural traits, he suggested that ACCOBAMS should give consideration to how this issue may assist in its work.

**Conclusion 30.** The Scientific Committee welcomed the new issue noting the invitation from CMS to engage in this and recommended that a working group would be established to allow for further discussion of this issue and the potential to hold a workshop at the next meeting of the ECS will be explored.

The ACCOBAMS working group on Culture and Social learning will consider the potential importance of social learning and culture for cetacean conservation in the ACCOBAMS region and will liaise as appropriate with the CMS expert group. It will review available information and seek to provide concrete recommendations. The working group will report back on progress to the next Scientific Committee Meeting.

# 4. COLLABORATION

# 4.1 Sub Regional Coordination Units

76. Lobna Ben Nakhla, the SPA/RAC representative informed the meeting that:

- The cetacean monitoring programme in countries has been implemented within the EU funded project "EcAp Med III" in Libya, Lebanon, Egypt, Morocco and Tunisa by national scientific teams trained during ASI;
- The Mediterranean Quality Status Report, adopted by the Contracting Parties to the Barcelona Convention through Decision IG.26/3 (COP 23, December 2023), recommended a series of required measures and actions to maintain/achieve GES for IMAP/ EO1 Common Indicators 3, 4 and 5 including cetaceans;
- The Elements for IMAP revision related to Biodiversity and Non -Indigenous Species (NIS), presented during the related COMRON meeting (June 2023) proposed close collaboration with ACCOBAMS Secretariat and with technical support from the ACCOBAMS Scientific Committee, to further work on some considerations for the cetacean;
- SPA/RAC organized with the MedBycatch Project partners (ACCOBAMS, GFCM, MEDASSET, IUCN, BirdLife WE, TUTAV) a workshop about "Mitigating multi-taxa fisheries interactions in the Mediterranean: collaborative approach to monitor and reduce vulnerable species bycatch and dolphin depredation" during the 2024 Fish Forum (February 2024);
- The Barcelona Convention Decision IG.25/11 (COP 23, December 2023) on Post-2020 SAPBIO invited the relevant organisations, in particular the members of the Post-2020 SAPBIO Advisory Committee, to continue

contributing to the efforts by the CPs in its implementation; to conduct a mid-term assessment of the collective implementation of the Post-2020 SAPBIO;

- UNEP-MAP plans to organize early next year a regional workshop to enable a better understanding of the BBNJ treaty;
- With reference to Post-2020 MCPA-OECM Strategy, the SPA/RAC is working on MCPAs expansion by extending existing MCPAs and /or designating new ones mainly in in the Adriatic or on the southern and eastern shores of the Mediterranean and OECMs identification and reporting at national Level;
- SPA/RAC supported closely the organization of Sixth Conference on Cetacean Conservation in South Mediterranean Countries (Nov 2023) where more than 50 participants took part;
- SPA/RAC supported the MEDACES functioning upon request;

She called for the support from the ACCOBAMS Secretariat for the assessment and update of the regional action plan for the conservation of cetacean in the Mediterranean planned during the biennium 2026-2027, to be submitted for consideration by Barcelona Convention COP 25.

- 77. Iryna Makarenko (Black Sea Commission' Permanent Secretariat or BSC PS), representing also the ACCOBAMS Black Sea Sub Regional Coordination Unit, presented the report and informed 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.).
- 78. She presented the outcomes of the bilateral meeting to discuss common subjects in relation to the Black Sea held on 6-7 March, 2024 in BSC PS office in Istanbul, such as:
  - Update the draft Conservation Plan for Black Sea Cetaceans (2025-2030) for advisory groups and the Black Sea Commission.
  - Implement the Conservation Management Plan for Black Sea cetacean species.
  - Revise the Annex of the MoU between the Black Sea Commission Permanent Secretariat and ACCOBAMS.
  - Enhance cooperation on cetacean conservation among ACCOBAMS, GFCM, BSC PS, EU/DG MARE, and other entities.
  - Conduct a basin-wide survey (ASI2) for estimating cetacean abundance and distribution, and join the ASI2 contact group.
  - Secretariats to coordinate with Ukraine, considering current circumstances.
  - Highlight results of the GFCM harbour porpoise bycatch mitigation project using PALs in future SC and MOP meetings.
  - Consider creating a network between EU/DG MARE, GFCM, ACCOBAMS, and the Black Sea Commission to address harbour porpoise bycatch in the Black Sea.
- 79. She added that the Permanent Secretariat collaborated with projects like EU4EMBLAS and BS CONNECT, implementing the Strategic Research and Innovation Agenda for the Black Sea. Despite challenges, they coordinate the GEF UNDP/UNESCO Black Sea LME Project on biodiversity, the World Bank Blueing the Black Sea Project on pollution, and the FAO GFCM Fisheries Project. They also participated in the World Ocean Assessment III by UN DOALOS.
- 80. Finally, she informed the Meeting that the Regional Action Plan on Marine Litter Management in the Black Sea was adopted in October 2018. The Marine Litter Med II Project included monitoring guidelines, ML assessment, baselines, and national programs in Georgia and Ukraine, plus "adopt-the-beach" and single-use plastics legislation. She explained the need for new drafts of BSIMAP and a SoE report with dedicated chapter on cetaceans

due to a decision from the 44th BSC meeting. Support and expertise from ACCOBAMS would be required for these documents.

# 4.2 ACCOBAMS Partners

- 81. David Barthelemy, the IOGP representative, stated that in the report on the conservation status of cetaceans and relevant activities in Eastern Mediterranean, it was noted: "Continuous oil and gas activities (seismic surveys, drilling) had been observed without concrete mitigation or national legislation ensuring cetacean monitoring and conservation." The IOGP representative stated that Oil and gas operations required a permit, which mandated mitigation measures identified through prior Environmental Impact Assessments. He added that IOGP encouraged ACCOBAMS Parties to collaborate with authorities to enforce these measures. They also urged operators to follow industry best practices outlined in the "joint IOGP-Energeo report 579" and "report 576". Key mitigation measures included, in particular, establishing a 500-meter exclusion zone, deploying trained Marine Mammal Observers (MMOs), initiating a soft-start procedure, and using Passive Acoustic Monitoring (PAM) during low visibility and nighttime operations.
- 82. Nicolas Entrup from OceanCare reported that the Agreement area remains a priority area of work for his organisation. One of the focus areas of work will continue to be the risk reduction of collisions with large whales, in particular in the High-Risk areas of the NW Mediterranean Sea and the Hellenic Trench. He looks forward to collaborate with the Secretariat and Partners within the ShiPrint Project to help making the PSSA work, support integration of effective measures addressing ship strikes and ocean noise in the Management Plan for the Cetacean Migration Corridor and protect sperm whales in the Eastern Mediterranean Sea by promoting routing measures and collaborating with the Greek government to implement the SAvE Whales system in the Strait of Kythira. Another focus area is the reduction of anthropogenic noise as well as addressing human activities harming cetaceans, their habitat as well as contributing the climate change, including bottom trawling. OceanCare thanked the work done by many of the partners, the Secretariat and the SC in their efforts to protect cetaceans as well as jointly working towards achieving the objectives of the ACCOBAMS Agreement.

# 4.3 Other Organizations

- 83. Jenny Renell from the ASCOBANS Secretariat presented an update on collaboration with ACCOBAMS. The Secretariats aim to cooperate as closely as possible and keep each other informed of relevant developments and initiatives. They also encourage coordination and synergies in scientific intersessional work carried out by working groups and regularly hold joint workshops. The latest joint workshop, with navies on underwater noise and cetaceans, was organized the week before the SC meeting and was an example of great collaboration. Another example included joint progress reports to meetings in other fora and ongoing joint working groups. There are many areas of common interest between the two Agreements, and thus the work is complementary in many ways. The most recent meeting of the ASCOBANS Advisory Committee had discussed e.g. Iberian harbour porpoise, a population in the Agreements' overlap area. Outcomes of potential interest from the ASCOBANS MOP10 included <u>Resolution 10.2</u> Work Plan 2025-2028, <u>Resolution 10.3</u> Conservation of Beaked Whales, <u>Resolution 8.6</u> (<u>Rev.MOP10</u>) Ocean Energy, <u>Resolution 10.4</u> Maritime Spatial Planning, <u>Resolution 10.6</u> Mitigating the Impacts of Recreational Activities on Small Cetaceans, and <u>Resolution 10.7</u> Shallow-water Mining and Small Cetaceans.
- 84. Iain Staniland, from IWC, explained that IWC has a long and strong collaboration with ACCOBAMS on a range of issues including matters related to population assessment, ship strikes, bycatch, whale watching, noise, chemical pollution and CMPs. At their recent meetings the IWC Scientific and Conservation Committees made a suite of

relevant recommendations that are detailed in their reports available through the IWC website. Most notably progress on joint draft CMPs was noted for fin and sperm whales along with a potential multispecies threat based CMP for bottlenose, common and Risso's dolphins. The recent discussions on Iberian killer whales had also raised the potential for a CMP proposal. Other highlights include the IWC Strandings Initiative collaborating with ACCOBAMS and others in the development of a database of strandings. Recommendations from the recent ACCOBAMS workshop on marine debris were endorsed by the IWC and its intersessional correspondence group on marine debris is looking forward to working with ACCOBAMS on these and the 2022 IWC resolution on Plastic Pollution. Information on vessel strikes and updates or additions to the whale watching handbook were encouraged. The IWC Bycatch Mitigation Initiative is also looking forward to the 2nd Meeting of the Joint Bycatch Working Group of ASCOBANS and ACCOBAMS in 2025.

- 85. Loriane Mendes explained that CIESM was an intergovernmental research commission dedicated to advancing international marine research across the Mediterranean and adjacent seas. Powered by the expertise of thousands of scientists, CIESM addresses emerging issues across all marine disciplines. In the 1990s, under the leadership of Giuseppe Notarbartolo di Sciara as Head of the CIESM Marine Mammal Task Force, the Commission expanded its focus on cetacean research. CIESM Workshop Monograph No. 25 (2004) later centered entirely on exploring the roles of cetaceans in marine ecosystems. Subsequent research on cetaceans was highlighted in CIESM Workshop Monograph No. 45 (2013), which examined their risk of extinction, and later in CIESM Workshop Monograph No. 50 (2018), which investigated the interactions between cetaceans and the sardine purse seine fishery. Currently, CIESM is coordinating a program on Migratory Species, focusing primarily on seabirds and elasmobranchs. Incorporating cetaceans into this program remains a feasible goal for the future, offering potential for enhanced synergies and wider collaboration.
- 86. Paolo Carpentieri, GFCM Fishery Resource Monitoring Officer stated that the collaboration between GFCM and ACCOBAMS was a long-standing partnership that has significantly advanced during years in the shared objectives to promote the conservation of marine biodiversity and ensure the sustainable management of fishery resources. This collaboration was formalized in 2012 through the signing of a Memorandum of Understanding, which underscores the common commitments. Over the years, this partnership has resulted in several impactful initiatives and activities that have significantly contributed to advancing our common goals. In 2018, ACCOBAMS contributed significantly to the first GFCM Fish Forum by hosting a side event on the ACCOBAMS Survey Initiative which highlighted the preliminary results on cetacean distribution, abundance, and their habitats across the Mediterranean.

The cooperation continued with ACCOBAMS' support in advancing the adoption of the GFCM Regional Plan of Action for Vulnerable Species by GFCM CPCs in 2023. This collaboration played a key role in raising awareness among CPCs about the importance of protecting vulnerable species, including marine mammals.

Most recently, in February 2024, ACCOBAMS was a central partner during the second edition of the GFCM Fish Forum in Antalya by supporting the organization of a parallel workshop focused on the outputs of the MedBycatch and Depredation projects. Those projects, funded in previous years by MAVA, have been instrumental in addressing critical conservation challenges of vulnerable species in the Mediterranean (not only marine mammals but also seabirds, sharks and rays, and sea turtles). The results of these two projects (MedBycatch and Depredation) have then contributed to the development of the Regional Plan of Action for Vulnerable Species.

Key conclusions, from the GFCM Fish Forum 2024, also emphasized the urgent need to strengthen cross-sectoral

collaboration. This includes enhanced coordination among regional and national fisheries and environmental management organizations, scientists, policy-makers, fishers, and NGOs. Additionally, it emphasized the importance of reinforcing science-based approaches to tackle the complex challenges posed by vulnerable species interactions in Mediterranean multi-taxa fisheries.

# 5. WORKING METHODS OF THE SCIENTIFIC COMMITTEE

# 5.1 Rules of Procedure

- 87. The Executive Secretary informed the meeting that at the 15<sup>th</sup> meeting of the Bureau had decided to consider the effectiveness of the new composition of the Scientific Committee (based upon Resolution 8.3) and that the Bureau had *inter alia* invited the Secretariat and the Scientific Committee (ACCOBAMS-BU15/2023/Doc13) to:
  - "prepare an examination on the subject that takes into account the functionality of the Scientific Committee and the budgetary implications linked to the increased number of SC members;
  - propose options for the designation of SC regional representatives to be appointed by the Parties."

88. She informed that Giuseppe Notabartolo di Sciara is preparing for the Secretariat a proposal on the subject.

**Conclusion 31.** The Committee **agreed** that it was important to meet the Bureau's expectations and provide input into the process. It requests the Chair of the Scientific Committee and the Secretariat to draw attention to the Bureau and Extended Bureau to its suggestions and comments on the existing Rules of Procedure provided in <u>Annex VII</u>, recognising that the responsibility for the Scientific Committee Rules of Procedure lies with the Meeting of Parties.

89. The Committee also discussed how best to assist the hard-pressed Secretariat to receive the best SC input and advice. *Inter alia* this will cover approaches to addressing implementation of SC recommendations (and/or scientific components of MOP Resolutions) including specialist workshops, trainings and contracts awarded by the Secretariat relevant to the provision of scientific advice. The intention is not to criticise or subvert the Secretariat's ability to make decisions, but rather to ensure that it receives the benefits of the full Committee's advice where it is relevant.

**Conclusion 32.** It was agreed that to the extent possible, known or likely "activities (e.g., workshop, training, contract)" with a scientific component should be indicated in the triennial plan agreed by the Scientific Committee and appropriate Steering/Advisory groups identified at SC meetings. Those groups in conjunction with the Secretariat will identify as relevant, Terms of Reference, appropriate experts/expertise (e.g., for workshops, trainings or potential contracts with scientific components), potential budgets as soon as feasible and normally *at least* 3 months prior to the "activity" and circulate these to the full Scientific Committee with the possibility for it to comment.

# 5.2 Scientific Committee Handbook

**Conclusion 33.** The Committee agreed upon the value of drafting a "SC Handbook" in clear language that integrates the information from a variety of sources (*inter alia* Agreement text, Resolutions, SC reports, past practice etc.) to (1) elucidate the present role of the Scientific Committee and (2) document its current working practices and bring together in one place any agreed good practice Guidelines. Such a document has been found to be valuable in the context of the IWC. It should be considered a "living" document that is updated as methods and key advice is change with time.

- 90. The objective is to facilitate the ways which the SC can work co-operatively, effectively and efficiently as a body, with the Secretariat and with other organisations, to provide the best scientific and conservation advice to *inter alia*: the Parties; the Secretariat; ACCOBAMS Partners and key stakeholders in the region. Note that the Handbook is designed to codify agreed processes (and to be updated as needed). Any new or revised processes will need to be discussed by the SC and the MOP.
- 91. Any final text for a Handbook will need to be approved by the SC as a minimum and at least provided to the Parties as an information document. The Committee agreed that a small group under Greg Donovan will develop a draft for circulation to the full Committee in January for comment with the possibility open for it to be available for the extended Bureau meeting in April. Table 1, here below, provides the outline for the draft handbook.

## Table 1 - Draft initial outline of a Scientific Committee Handbook

•	INTRODUCTION What is the Scientific Committee? What is the Handbook for?			
•	SC PLACE WITHIN THE ACCOBAMS SYSTEM Brief summary of the ACCOBAMS ecosystem (Parties, MOP, Secretariat, SC, Partners)			
•	SC STRUCTURE, MEMBERSHIP AND OFFICERS Structure of the SC and its working groups, membership (members, observers etc.). Officers (chair, vice-chair, Task masters etc – election, roles and responsibilities)			
•	MEETINGS AND WORKSHOPS Types, timings, guidelines for participation, guidelines for workshops, funding etc.			
•	REPORTS AND PAPERS Full meetings, workshops, endorsements, guidelines for papers, confidentiality etc.			
•	RESEARCH AND FUNDING ACCOBAMS projects (e.g. LTMP), contracts etc			
•	DATA AVAILABILITY Data rules for ACCOBAMS funded/sponsored projects (e.g. ASI)			
•	SCIENTIFIC WORK Summary of important SC work and recommendations			
•	AGREED TECHNICAL AND SCIENTIFIC GUIDELINES SC endorsed procedures and guidelines on various matters including:			
•	CONSOLIDATED COMPILATION OF DOCUMENTATION RELEVANT TO THE WORKING OF THE SCIENTIFIC COMMITTEE (AGREEMENT TEXT, RULES OF PROCEDURE, WORKING METHODS, ETC.) <i>Full formal text of matters referred to in the above chapters of the Handbook</i>			

# 6. WORKING PROGRAMME OF THE SCIENTIFIC COMMITTEE FOR THE TRIENNIUM 2026-2028

**Conclusion 34.** Conclusion 18 – The SC agreed that the Chair and the Vice-Chair will (i) review the proposed Work Programme for the Triennium 2026-2028 elaborated during the meeting in cooperation with PoC of the relevant recommendations with the view of its harmonization with the actions reflected in each Recommendation and (ii) circulate to all SC16 participants for final approval.

The final proposed Work Programme for the Triennium 2026-2028 appears in Annex VIII.

# 7. ANY OTHER BUSINESS

92. In recognition of Susana Salvador's contributions, a short video of thanks has been presented. Participants expressed their gratitude for her significant contributions over the years, which have positively impacted the work of ACCOBAMS.

# 8. ADOPTION OF RECOMMENDATIONS AND CONCLUSIONS

**Conclusion 35.** The Scientific Committee adopted 15 recommendations annexed (Annex III) to the report: Recommendation 16.1 - Post-war plan for the Black Sea cetaceans Recommendation 16.2 - Abundance and distribution Recommendation 16.3 - ASI2 and LTMP Recommendation 16.4 - Species list for monitoring purposes Recommendation 16.5 - Population structure Recommendation 16.6 - Strandings issues (AETFS, functioning stranding networks) Recommendation 16.7 - Bycatch and bottom trawling Recommendation 16.8 - Revision of the FAO GFCM guidelines on monitoring incidental catch of vulnerable species in the Mediterranean and Black Seas (FAO 2019) Recommendation 16.9 - Anthropogenic underwater noise Recommendation 16.10 - Ship strikes Recommendation 16.11 - Commercial Whale Watching Activities in the ACCOBAMS Area Recommendation 16.12 - Marine Debris Recommendation 16.13 - Semi-captivity (passport & guidelines) Recommendation 16.14 - Area-based measures for cetacean conservation Recommendation 16.15 - NETCCOBAMS

# 9. CLOSURE OF THE MEETING

93. After the customary exchange of courtesies, the Chair of the Scientific Committee closed the Meeting at 18h45 on Thursday 5 December 2024.

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## MEMBERS OF THE SCIENTIFIC COMMITTEE

#### **CIESM appointed Members**

#### **MENDEZ** Loriane

Mediterranean Science Commission Research Officer Highly Migratory Species Department 16 boulevard de Suisse 98000 Monaco Tel: +33629414208 Imendez@ciesm.org

### AMAHA ÖZTÜRK Ayaka

Vice-Chair Turkish Marine Research Foundation Istanbul University Yalikoy Meydani Sok No 15 Beykoz, 34820 Istanbul, Türkiye Tel: +90-533 7475915 ayakamaha@hotmail.co.jp

## PANIGADA Simone

Chair 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 appointed Members**

# 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**

Full Professor in Ecology and Ecotoxicology Università di Siena Via P.A. Mattioli, 4 53100 Siena - Italy Tel: +39 3204374459 <u>fossi@unisi.it</u>

**CMS appointed Member** 

SIMMONDS Mark Peter CoP-Appointed Councillor United Nations Campus, Platz der Vereinten Nationen 1 53113 Bonn, Germany Tel: +44 7809 6430 00 mark.simmonds@sciencegyre.co.uk DONOVAN Greg Beannacht, 4 High Street Haddenham, Cambs CB63XA, UK Tel: +44 759 326 0638 corkblue1o@gmail.com

#### **Regional Representative Members**

## Western region & contiguous Atlantic area

LAMOUTI Souad Researcher CNRDPA 11 boulevard Colonel Amirouche, Bou-Ismail w. de Tipaza – Algérie Tel: +213 24326410 - +213 772365757 souad.lamouti@gmail.com s.lamouti@cnrdpa.dz

# LAURIANO Giancarlo

Senior Researcher Italian National Institute for Environmental Protection and Research (ISPRA) via Vitaliano Brancati 60 00144 Rome, Italy Tel: +39 3381446999 giancarlo.lauriano@isprambiente.it

## TAMSOURI Mohamed Naoufal

Researcher National Institute of Fisheries Research BP 31, M'diq, Morocco Tel: +212 60 605 6084 tamsouri@inrh.ma

## **Central region**

FORTUNA Caterina Senior Researcher Italian National Institute of Environmental Protection and Research via Vitaliano Brancati 60 00144 Rome, Italy Tel: +39 349 7344094 caterina.fortuna@isprambiente.it

#### **GENOV** Tilen

MORIGENOS, Slovenian Marine Mammal Society Tartinijev Trg 10 6330 Piran Slovenia Tel: +386 59014067 tilen.genov@gmail.com

# Eastern region

#### KOMNENOU Anastasia

University Hospital, Department of Clinical Sciences, School of Veterinary Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, AUTH, 11 St. Voutyra str, 54627, Thessaloniki Greece Tel: +30 2310 994443/35 – Mob: +30 6945 531850

natakomn@vet.auth.gr, natakomn@gmail.com

## **MAHFOUZ** Céline

Associate Researcher National Centre for Marine Sciences 59 Zahia Salmane Street, Jnah Beirut, Lebanon Tel: +961 70106332 celine.mahfouz@gmail.com celine.mahfouz@cnrs.edu.lb

## SAMUEL Yianna

Fisheries and Marine Research Officer Department of Fisheries & Marine Research Ministry of Agriculture, Rural Development and the Environment Vithleem 101 2033 Strovolos Cyprus Tel: + 375-22-807841 ysamuel@dfmr.moa.gov.cy

## **Black Sea region**

GOL'DIN Pavel Schmalhausen Institute of Zoology National Academy of Sciences of Ukraine & Ukrainian Center of Ecology of the Sea vul. Bogdana Khmelnytskogo 15 01030, Kyiv - Ukraine Tel: +380673900118 pavelgoldin412@gmail.com

## **POPOV** Dimitar

GREEN BALKANS NGO 1 Skopie str., office 10 Plovdiv, Bulgaria Tel: +359885108712 dpopov@greenbalkans.org

TONAY Arda M. İstanbul University, Faculty of Aquatic Sciences - Turkish Marine Research Foundation (TUDAV) Kalenderhane Mah. Onaltı Mart Şehitleri Cad. No: 2 Fatih 34134 İstanbul, Türkiye ardatonay@yahoo.com atonay@istanbul.edu.tr

**Members designated by Parties** 

## SPAIN

GIMÉNEZ VERDUGO Joan Permanent Researcher Instituto Español de Oceanografía (IEO-CSIC) Puerto de Málaga, Distrito Centro, 29002, Málaga Tel: +34619176849

joan.gimenez@csic.es

#### **OBSERVERS**

## **ACCOBAMS Sub Regional Coordination Units**

BEN NAKHLA Lobna UNEP/MAP SPA/RAC Specially Protected Areas Regional Activity Centre 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

## MAKARENKO Iryna (Online - Agenda Items 3, 4, 5, and 6)

Black Sea Commission Permanent Secretariat Pollution Monitoring and Assessment Officer Su Isleri Bakanligi, Maslak Mh Buyukdere Cd 265 Sariyer 34398 Istanbul - Türkiye Tel: +905333936225 iryna.makarenko79@gmail.com

## **Other Intergovernmental Organizations**

## **BABBINI Lorenza**

UNEP/MAP INFO/RAC Director Via Vitaliano Brancati 48 Tel: +393402459238 lorenza.babbini@info-rac.org

## CARPENTIERI Paolo (Online - Agenda Items 3, 4, 5, and 6)

General Fisheries Commission for the Mediterranean (GFCM) Palazzo Blumenstihl Via Vittoria Colonna, 1 00193, Rome, Italy Tel: +390657056566 paolo.carpentieri@fao.org

# RENELL Jenny (Online - Agenda Items 3, 4, 5, and 6)

UN Environment/CMS/ASCOBANS ASCOBANS Coordinator Platz der Vereinten Nationen 1 53115 Bonn GERMANY Tel: +49 228 815 2418 jenny.renell@un.org

## STANILAND lain (Online - Agenda Items 3, 4, 5, and 6)

International Whaling Commission Head Of Science Conservation and Management Suite 2, First Floor, Victory House, Vision Park Histon, Cambridge, CB24 9ZR Tel: +44 (0)79105658003 Iain.staniland@iwc.int

#### **Experts**

**CAÑADAS** Ana

Researcher Marine Geospatial Ecology Lab Duke University Durham, NC., United States Tel: +34 676481284 ana.canadas@duke.edu

## **COTTALORDA Jean-Michel**

Researcher UMR 7035 ECOSEAS Côte d'Azur University – CNRS Parc Valrose, 28 Av. Valrose 06108 Nice cedep2, France Tel: +33 603092438 jean-michel.cottalorda@univ-cotedazur.fr

# GAUFFIER Pauline (Online - Agenda Item 3.2.3 Population structure)

Marine Biologist **Madeira Whale Museum** Rua Garcia Moniz №1, 9200-031 Caniçal Machico, Madeira - Portugal Tel: +351 291 961 858/9 pauline.gauffier@gmail.com

## GNONE Guido (Online - Agenda Item 3.2.5 Conservation Management Plans)

Fondazione Acquario di Genova Area Porto Antico, Ponte Spinola 1 16128 Genova – Italy Tel: +39 0102345285 ggnone@costaedutainment.it

## **GONZALVO** Joan

Researcher Tethys Research Institute Gessami 3, Cruïlles 17116 Girona – Spain Tel: +34 650434808 joan.gonzalvo@gmail.com

# JAUNIAUX Thierry (Online - Agenda Item 3.2.6 Functional stranding networks and response to emergency situations)

Université de Liège Faculté de Médecine vétérinaire Département de morphologie et pathologie (DMP) Bât. B43 Département de morphologie et pathologie (DMP) Quartier Vallée 2, Avenue de Cureghem 6 4000 Liège 1 - Belgique Tel: +32 4 3664078 t.jauniaux@ulg.ac.be

# LANFREDI Caterina (Online - Agenda Item 3.2.5 Conservation Management Plans)

Tethys Research Institute Marine Biologist, Ph.D. Viale G.B. Gadio 2 20 121 Milan, Italy Ianfredicaterina@gmail.com

## LÜEBER Sigrid (Online - Agenda Item 3.3.2 Anthropogenic underwater noise)

OceanCare & JNWG President & Co-Chair JNWG Gerbestrasse 6 CH-8820 Wädenswil – Switzerland Tel: +41 447806688 slueber@oceancare.org

# **MAGLIO** Alessio

SINAY Chargé d'étude 117 Cours Caffarelli 14000 Caen - France Tel: +33 7 86 17 92 85 alessio.maglio@sinay.fr

## **MAZZARIOL** Sandro

Università degli Studi di Padova Dipartimento di Biomedicina Comparata e Alimentazione (BCA) AGRIPOLIS - Viale dell'Università, 16 35020 Legnaro – Italy Tel: +39 049 827 2063 sandro.mazzariol@unipd.it

## MENDES Ricardo (Online - Agenda Item 3.3.4 Cetacean watching)

PNA & RNES Staff - Senior Technician ICNF Portugal Parque Natural da Arrábida e Reserva Natural do Estuário do Sado Praça da República, 2900 - 587 Setúbal, Portugal Tel: +351 265 541 140 <u>ricardo.mendes@icnf.pt</u>

#### **MOULINS Aurélie**

CIMA Research Foundation Senior Researcher Via Magliotto, 2 -17100 Savona – Italy Tel: +39 019 230 271 aurelie.moulins@cimafoundation.org

#### SOUAMI Yanis (Online - Agenda Item 3.3.2 Anthropogenic underwater noise)

SINAY CEOi 117 Cours Caffarelli 14000 Caen – France Tel: +33 2 50 01 15 50 yanis.souami@sinay.fr

#### SEQUEIRA Marina (Online - Agenda Item 3.3.4 Cetacean watching)

Chair of the Whale Watching Working Group Institute of Nature Conservation and Forests (ICNF) Biologist Av. da República, 16 – 16 B 1050-191 Lisboa, Portugal Tel: + 351 919274795 marina.sequeira@icnf.pt

#### **ACCOBAMS Partners and other Entities**

## BARTHELEMY David

IOGP Associate Member City Tower, 40 Basinghall Street EC2V 5DE, London, United Kingdom Tel: +33 6 88 79 70 10 david.barthelemy@totalenergies.com

## **BEARZI Giovanni**

President Dolphin Biology and Conservation Via Cellina 5 33084 Cordenons, Pordenone – Italy Tel: +39 329 4069996 admin@dolphinbiology.org

## **BOUCHARD Bertrand**

Researcher CNRS – CEFE 1919 Route de Mende 34293, Montpellier, France Tel: +33 782281424 bertrand.bouchard@cefe.cnrs.fr

# **BRAVO VILLA Carlos**

Policy Expert C/ Prado, 23 40400 El Espinar, Segovia, Spain Tel: +34 62 69 98 241 cbravovilla@oceancare.org

#### **DEGOLLADA Eduard**

EDMAKTUB Association President Ctra Sant Vicenç 17 08393 Caldes d'Estrac Barcelona, Spain Tel: +34630038829 edmaktub@edmaktub.org

## **ENTRUP Nicolas**

OceanCare Gerbestr.6 8820 Wädenswil, Switzerland Tel: +436602119963 nentrup@oceancare.org

#### **GOUNOT** Laurine

MIRACETI Chargée de mission Place des traceurs de pierres La Couronne, 13500 Martigues Tel: +33 6 61 04 30 85 Igounot@miraceti.org

## **MARTY** Mia

Ocean Policy Officer Institut Océanographique Avenue Saint-Martin 98000 MONACO Tel: +377 93 15 36 67 m.marty@oceano.org

# NUNNY Laetitia

OceanCare Senior Science Officer Gerbestrasse 6 8820 Wädenswil, Switzerland Tel: +34 628115234 Inunny@oceancare.org

**TORRENTE Angelo Giovanni** CNRS - IGF 141, rue de la Cardonille 34094, Montpellier, France Tel: +33 768664907 angelo.torrente@igf.cnrs.fr

## **TORT Beatriu**

EDMAKTUB Association, Secretary Ctra Sant Vicenç 17 08393 Caldes d'Estrac Barcelona, Spain Tel: +34697680567 <u>beatriutort@edmaktub.org</u>

## TRUDELLE Laurène

MIRACETI Chargée de mission Place des traceurs de pierres La Couronne, 13500 Martigues Tel: +33 6 87 25 49 82 Itrudelle@miraceti.org

## **XYDIAS Alexandros**

OceanCare Policy Advisor – Shipping Expert Gerbestrasse 6 CH-8820 Waedenswil – Switzerland Tel: +30 6957595399 axydias@oceancare.org

## **SALVADOR Susana**

Secrétaire Exécutif Les Jardins d'Apolline - Bloc C 1 Promenade Honoré II MC-98000 Monaco Tel: +37798988010/2078 ssalvador@accobams.net

## **MONACO Clara**

Programme & Project Officer Les Jardins d'Apolline - Bloc C 1 Promenade Honoré II MC-98000 Monaco Tel: +37798989313 cmonaco@accobams.net

#### **NIGRI Frida**

Accountant Les Jardins d'Apolline - Bloc C 1 Promenade Honoré II MC-98000 Monaco Tel: +37798982078 fnigri@accobams.net

NOTARBARLO DI SCIARA Giuseppe Consultant <u>disciara@gmail.com</u>

RAIS Chedly Consultant <u>chedly.rais@okianos.org</u>

#### SALIVAS Maÿlis

Programme & Project Officer Les Jardins d'Apolline - Bloc C 1 Promenade Honoré II MC-98000 Monaco Tel: +37798984275 <u>msalivas@accobams.net</u>
#### **1. OPENING OF THE MEETING**

## 2. ADOPTION OF THE AGENDA

## 3. CONSERVATION ACTIONS

- **3.1** Report by Regional Representatives
- 3.2 Improve knowledge about state of cetaceans
  - 3.2.1 Mediterranean modelling results
  - 3.2.2 Cetacean population estimates and distribution
  - 3.2.3 Population structure
  - 3.2.4 Monitoring cetaceans' status
  - 3.2.5 Conservation Management Plans
  - 3.2.6 Functional stranding networks and response to emergency situations

#### 3.3 Reduce human pressures on cetaceans

- 3.3.1 Interactions with fisheries / aquaculture
- 3.3.2 Anthropogenic underwater noise
- 3.3.3 Ship strikes
- 3.3.4 Cetacean watching
- 3.3.5 Marine debris & chemical and biological pollution
- 3.3.6 Climate change
- 3.3.7 Captivity related issues
- 3.4 Enhance effective conservation of cetaceans' habitats
  - 3.4.1 Ongoing efforts regarding CCH
  - 3.4.2 Place-based conservation effort: update on IMMAs
- 3.5 NETCCOBAMS
- 3.6 Cetacean culture

## 4. COLLABORATION

- 4.1 Sub Regional Coordination Units
- 4.2 ACCOBAMS Partners
- 4.3 Other Organizations

## 5. WORKING METHODS OF THE SCIENTIFIC COMMITTEE

## 6. WORKING PROGRAMME OF THE SCIENTIFIC COMMITTEE FOR THE TRIENNIUM 2026-2028

7. ANY OTHER BUSINESS

# 8. ADOPTION OF RECOMMENDATIONS AND CONCLUSIONS

9. CLOSURE OF THE MEETING

## **ANNEX III - RECOMMENDATIONS**

RECOMMENDATION 16.1	POST-WAR PLAN FOR THE BLACK SEA CETACEANS
RECOMMENDATION 16.2	ABUNDANCE AND DISTRIBUTIONS
RECOMMENDATION 16.3	ASI2 AND THE ACCOBAMS LTMP
RECOMMENDATION 16.4	SPECIES LIST FOR MONITORING PURPOSES
RECOMMENDATION 16.5	POPULATION STRUCTURE
RECOMMENDATION 16.6	STRANDINGS ISSUES (AETF, FUNCTIONING STRANDING NETWORKS)
RECOMMENDATION 16.7	BYCATCH AND BOTTOM TRAWLING
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RECOMMENDATION 16.14	AREA-BASED MEASURES FOR CETACEAN CONSERVATION
RECOMMENDATION 16.15	NETCCOBAMS

## **RECOMMENDATION 16.1 – POST-WAR PLAN FOR THE BLACK SEA CETACEANS**

*Recalling* Resolution 8.12 on "IUCN Red List Status of Cetacean Species in the ACCOBAMS Area" which: 5. Calls on Parties to take into account the military and anthropogenic impacts of military operations during the implementation of Conservation Management Plan in the Black Sea;

## Recalling Resolution 8.17 on "Anthropogenic Noise" which:

7. asks the Scientific Committee to develop a post-war Plan for the Black Sea region towards the mitigation of warfare consequences on cetaceans, their habitat and their preys;

*Taking into consideration* its operative paragraph is clearly not restricted to looking into noise generating activities and impacts, but with a generic approach addressing all consequences resulting from warfare activities including marine pollution, eutrophication, increased risk of infections, increased risk of bioinvasions of alien (non-indigenous) species, and other effects. Also, war activities not directly related to combat are to be considered, such as construction works (especially those producing underwater noise or altering the seascape) or changes in shipping routes.

*Taking into consideration* the results of the Joint ACCOBAMS – Black Sea Commission Meeting, where it was stated that: "In the framework of the AETFS [Emergency Task Force for Stranding events], a specific "Black Sea" Sub-Task, composed by experts from Black Sea Countries is to be created and shall provide annual summary information to the AETFS, and to the "Network for harbour porpoise bycatch in the Black Sea between the European Commission, DG Mare, GFCM, ACCOBAMS and the Black Sea Commission"."

The Scientific Committee **specifically notes** that the military operations may have adversely impacted all the riparian countries to some degree.

#### Therefore, the Scientific Committee recommends:

- to organize dedicated regional workshops including the experts on the relevant topics to elaborate the road map for the Post-war Plan for the Black Sea region towards the mitigation of warfare consequences on cetaceans, their habitat and their preys (hereinafter, Post-war Plan for the Black Sea);
- to consider, *inter alia*, the areas, topics and activities/measures listed in the **Annex I** during the work on the Conservation Management Plan for the Black Sea cetaceans and the Post-war Plan for the Black Sea;
- to promote implementation of applicable activities/measures under the Post-war Plan for the Black Sea as soon as it is adopted, regardless of the military situation, as some of the activities/measures are relevant at that moment.

#### Annex I

# Areas, topics and activities/measures relevant for the Post-war Plan for the Black Sea region towards the mitigation of warfare consequences on cetaceans, their habitat and their preys

#### Assessment

1. Comprehensive monitoring of underwater noise, chemical pollution, marine debris and biological indicators of stress in animals, as well as *postmortem* studies, studies of pathology, lifespan and population structure, are necessary for understanding and managing the war impact and other anthropogenic impacts (construction, seismic surveys), until it is secured that the post-war impacts have been decreased to pre-war levels.

2. Collecting and long-term archiving of organ and tissue samples for the purposes of multiple screening and identification of causes of death, including but not limited to identification of contaminants, pathogens, ingestion of or entanglement in marine debris, evidence of acoustic trauma or blast injury, brain damage and indicators of individual stress. *Building and enhancing the capacity of the Parties, including national stranding networks and tissue banks, will contribute to this effort.* 

3. Assessment of the losses, damage and potential possibility or need for restoration of species, populations and habitats. Development and application of existing remote sensing methods for assessing marine and coastal environments (including detection of sea mines and ammunition, other objects which can threaten the cetaceans and their prey at the sea floor). Enhancing new technology, including screening techniques for identification of contaminants, pathogens and alien (non-indigenous) species introduced by war related activities.

4. Assessing the impacts on distribution and abundance of prey for cetaceans is necessary.

Assess potential shift in distribution of species and populations, their feeding and breeding grounds and migration routes due to warfare activities. This may include cooperation with the GFCM and other dedicated national and international bodies related to fisheries.

5. Assessing increase of bycatch risk and related bycatch mitigation measures in light of shifts in prey distribution and other stress factors affecting animal health.

## Action

6. Demining is crucial for the short and long-term health of cetaceans and the entire marine ecosystem. By prioritizing the removal of explosives, both historical and contemporary, using Best Available Technology and Best Environmental Practices, we can minimize the impact of explosions on the environment and support ongoing research efforts. This may include building on existing demining initiatives in the North and Baltic Seas to develop comprehensive guidance for identifying and safely removing all types of underwater explosives, both floating and sunk.

7. Establishing new marine protected areas by Parties planned on the basis of previously identified Important Marine Mammal Areas (IMMAs), including transboundary and international reserves, will be important for cetacean conservation. Biosphere reserves may be suggested for areas of high cultural importance and exceptionally high anthropogenic impact, including those damaged by war.

8. Response to stranding events is recommended to be enhanced by Parties, aligned with strengthening the national stranding networks and cooperation with the relevant task force for a better response and capacity to carry out *postmortem* investigation, collect, preserve and analyse samples.

9. Development and implementation of bycatch mitigation measures including those responding post war effects are recommended to be further elaborated by Parties, along with monitoring of the bycatch.

10. Education and public awareness campaigns for the Black Sea marine ecosystem under pressure, particularly from military activities, are recommended to be provided and created by Parties for a broad audience and professionals in relevant fields.

11. A post-war basin-wide synoptic survey of cetaceans in the form of aerial survey will be necessary for updating the status of cetacean populations in the Black Sea.

12. Cooperative regional effort is necessary for achieving the aforementioned objectives. This also may involve international and transboundary projects and agreements, as well as the Sub-Regional Coordination Unit.

#### **RECOMMENDATION 16.2 – ABUNDANCE AND DISTRIBUTIONS**

#### **MODELLING ANALYSES BY DUKE UNIVERSITY**

Cañadas presented a summary of her work on analysis of more than two decades of survey data (including ASI data) in the Black Sea and the Mediterranean Sea. This was the result of an enormous collaborative effort, where 12 organizations from the Black Sea shared their data totalling more than 42,000 km of survey effort yielding more than 8,000 observations of cetaceans, and 43 organizations from the Mediterranean Sea shared their data totalling more than 1,600,000 km of survey effort yielding more than 40,000 observations of cetaceans. All these data were analysed by Cañadas to produce abundance estimates and distribution maps through density surface modelling and applying correction factors for availability and perception biases to all surveys, as well as other methods like winsorizing to avoid unrealistic extrapolations and a statistical approach to assign unidentified species to particular species. Challenges encountered during the analysis were discussed, as well as cautions in the interpretation of results, and opportunities that these approaches present for the future.

The Committee welcomed the presentation by Cañadas that reflected an enormous and comprehensive effort to try to integrate a vast amount of data from a wide variety of data sources over some two decades to examine cetacean abundance and distribution. This vast dataset provides an excellent opportunity to examine the implications of many assumptions involved in such an integration process and, especially, in terms of examining the costs and benefits of such an approach in terms of the effects on uncertainty on abundance estimates and distribution in terms of their use in a conservation and management context.

The Committee recommends that:

(1) the abundance estimates provided by this modelling exercise are **not** considered approved estimates in a conservation and management context, at least until the uncertainties behind the assumptions of the analysis and the robustness of the results (in terms of precision and bias) have been examined and the question as to what time period they may be considered to apply;

(2) the great potential to use the extensive work undertaken so far to examine the implications of assumptions made is not lost e.g., with respect to: inclusion/exclusion of different datasets, e.g., types of survey; treatment of uncertain identifications; approaches to estimate g(0) and effective strip widths; use of "climatologies", "winsorising" etc. This is of wider implication than simply for the region presented and has important implications for distribution modelling, as well as abundance; and

(3) the results from the design-based analyses from the ASI surveys represent the best recent abundance estimates for the region (recognising, as did the ASI programme itself that for some species, e.g., deep divers and those with limited distribution such as coastal populations, broad-scale surveys may not represent the most appropriate way to obtain abundance estimates) – this is consistent with the approach agreed in the report of the ICES group (ICES. 2024. Workshop on Cetacean Abundance Estimation Through Distance Sampling Methods (WKCE-TAB);

(4) the published ASI estimates (recognising the limitation for some species identified above) will be submitted to the IWC Scientific Committee for review as part of ongoing efforts to develop internationally recognised and consistent lists of approved abundance estimates;

(5) once the work on assumptions and uncertainty with respect *inter alia* to datasets referred to under (2) are dealt with, efforts are made to integrate such time series of appropriate data within modelling exercises to improve analyses of distribution.

## **RECOMMENDATION 16.3 – ASI2 AND THE ACCOBAMS LTMP**

The Scientific Committee **welcomes** the commitment in principle shown by the Parties to ASI2 as part of the ACCOBAMS LTMP (recommendation 14.1) expressed in Resolution 8.10 where, *inter alia*, ACCOBAMS Parties stated that :

... the LTMP is not only fundamental to the ability of the Parties to meet the stated objectives of ACCOBAMS, but will also assist individual Parties to meet relevant national and international commitments, which include the objectives of the Barcelona Convention Ecosystem Approach/Integrated Monitoring and Assessment Programme (EcAp/IMAP) and the Action Plan for the Conservation of cetaceans in the Mediterranean Sea (IG25/13), the European Union relevant legal frameworks, inter alia the Habitats and Marine Strategy Framework Directives, the Black Sea integrated monitoring and assessment programme.

It **notes** that despite the exhortations of Resolution 8.10 and the efforts of the Secretariat, the Scientific Committee and some Parties, the necessary funds to implement the work required to start the LTMP programme/ASI2 were not obtained. In summary, the Scientific Committee **stresses the urgency** of the Parties meeting their commitments to ASI2 soon as possible and:

(1) **reiterates** the fundamental importance of a synoptic ASI2 survey and the LTMP to the ability of ACCOBAMS to meet its stated objectives;

(2) **agrees** that new technologies do not, certainly at present time, provide a scientifically (or economically) viable alternative to the existing agreed protocols for ASI2;

(3) **confirms** that ASI2 thus needs to follow the approved survey design principles and methods adopted during ASI, modified in the light of (a) consideration of the geopolitical situation; (b) final evaluation of the density maps from ASI; and (c) the available funding, noting that an initial re-examination of the costs for similar coverage to ASI will be close to the breakdown and estimate shown in SC16-Doc08 (1,100,000 EUR) and that finessing this is dealt with under (5) below;

(4) **endorses** the Bureau's decision to postpone the implementation of ASI2 for the Mediterranean and the contiguous Atlantic area to at least summer 2026;

(5) **stresses** that the ASI experience has shown that the scientific and logistical work involved in organising and coordinating such a large-scale, multi-national survey is immense and cannot be achieved in a timely fashion (even for summer 2026) without immediate minimal support, especially in the form of the appointment of a scientific coordinator and a project officer as soon as possible;

(6) **recommends** that the Executive Secretary, in collaboration with the Chair of the Scientific Committee, and the support of the Bureau, reignites urgent contacts with the Parties to:

- reiterate in a practical manner their commitment to Resolution 8.10 on the ACCOBAMS Long-Term Monitoring Programme and especially ASI2;
- secure the necessary financial contributions or at least formal commitments by or soon after the extended Bureau meeting to allow the necessary planning time for a summer 2026 survey.

With respect to the financial aspects, the Scientific Committee notes the significant contribution of funds by bodies that are non-ACCOBAMS parties such as the MAVA Foundation and recognises that this will likely need to be the case for ASI2. The Scientific Committee was informed that the US Navy expects an update of the spatial distribution models developed by the Marine Geospatial Ecology Lab, discussed under Item 3.2.1. The voluntary submission of data at the basin scale were crucial for this exercise and the ASI data were a major contribution. ASI2 data will be essential for the success of any future exercise. Given this, the Scientific Committee **recommends** that in its approaches to potential donors, the Secretariat emphasises this to the US Navy, and those who attended the November 2024 Joint ACCOBAMS-ASCOBANS Workshop with Navies on Underwater Noise and Cetaceans and invites them to consider contributing to the implementation of ASI2.

Finally, the Scientific Committee **notes** with appreciation Italy's confirmation of its in-kind contribution to the activities planned under the MSFD and acknowledges the proposal to postpone these activities to 2026 to align them with ASI2. Although recognising the practical difficulties, the Scientific Committee furthermore respectfully requests Spain to carefully investigate the possibility to defer its planned 2025 survey activities to 2026.

## **RECOMMENDATION 16.4 – SPECIES LIST FOR MONITORING PURPOSES**

Article I of the Agreement text states that the "Agreement applies to **all cetaceans** that have a range which lies **entirely or partly within the Agreement area** or that **accidentally** or **occasionally** frequent the Agreement area" and directs to "an **indicative** list" of species [emphasis added] which is provided in Annex 1 of the Agreement.

However, in the context of the implementation of the EU Marine Strategy Framework Directive (MSFD) and the Ecosystem Approach (EcAp)/IMAP processes, ACCOBAMS Resolution 6.12 (2012) instructed the Scientific Committee to:

assist ACCOBAMS Parties, both European Union Member States and non-European Union Member States, in integrating conservation action reflecting objectives, decisions, recommendations and information by ACCOBAMS within their national programme of measures, with a view to achieving a good environmental status under the MSFD and relevant EcAp Processes.

Accordingly, an MSFD/EcAp Working Group was established in 2017 at SC11 (ACCOBAMS-SC11/2017/Doc25/Annex9). One of the ACCOBAMS SC MSFD/ECAP Working Group ToR is to:

suggest the set of species representative of each species group for the MSFD assessment of Good Ecosystem Status regarding marine mammals as recommended by the European commission (Decision 2010/477/EU).

All sightings are recorded in national and international monitoring programmes; however, sub-regional lists of regularly occurring species are necessary to assist ACCOBAMS Contracting Parties to design the best monitoring plan tailored to the resident species in each sub-region of the Agreement Area. The need for agreed sub-regional list of species was also highlighted by the ABIOMMED project.

Therefore, the Scientific Committee **recommends** to the Parties the adoption of the list in Appendix I. The Scientific Committee will periodically reconsider it in view of a potential need for updating linked, for example, to climate change or other factors.

Appendix I – Sub-regional list of cetacean species for monitoring purposes

Species / Sub-region	Adjacent Atlantic area	Western Mediterran ean	Central Mediterran ean and Ionian Sea	Adriatic Sea	Aegean & Levantine Sea	Black Sea
Phocoena phocoena	REG	VAG	NP	NP	NP	NP
Phocoena phocoena ssp. relicta	NP	NP	NP	NP	REG / Turkish Straits System pop	REG
Steno bredanensis	NP	NP	REG	NP	REG	NP
Grampus griseus	REG	REG	REG	REG	REG	NP
Tursiops truncatus	REG	REG	REG	REG	REG	REG(?)
Tursiops truncatus ssp. ponticus	NP	NP	NP	NP	REG(?)	REG
Stenella coeruleoalba	REG	REG	REG	REG	REG	NP
Delphinus delphis	REG	REG	REG	VAG	REG	REG(?)
Delphinus delphis ssp. ponticus	NP	NP	NP	NP	REG(?)	REG
Pseudorca crassidens	REG	VAG	VAG	NP	VAG	NP
Orcinus orca	<b>REG</b> / Iberian pop	<b>REG</b> / Iberian pop	NP	NP	NP	NP
Globicephala melas	REG	REG	NP	NP	NP	NP
Mesoplodon densirostris	REG	NP	NP	NP	NP	NP
Ziphius cavirostris	REG	REG	REG	REG	REG	NP
Physeter macrocephalus	REG	REG	REG	REG	REG	NP
Kogia sima	REG	VAG	VAG	NP	NP	NP
Eubalaena glacialis	VAG	NP	NP	NP	NP	NP
Balaenoptera acutorostrata	REG	VAG	VAG	NP	VAG	NP
Balaenoptera physalus	REG	REG	REG	REG	REG	NP
Megaptera novaeangliae	REG	VAG	NP	NP	NP	NP

**Key**: **REG** = regular; **VAG** = vagrant; **NP** = not present (this category to "surely not "regular").

## **RECOMMENDATION 16.5 – POPULATION STRUCTURE**

*Recalling* ACCOBAMS Resolution 3.9 "Guidelines for the establishment of a system of tissue banks within the ACCOBAMS area and ethical code",

*Recalling* also that the ACCOBAMS Scientific Committee has recognized the need for Institutions dedicated to the preservation of body samples/parts from marine mammals of the Mediterranean and Black Seas. Such Institutions should: a) promote non-invasive or post-mortal collection of samples from cetaceans living in the Mediterranean and Black Seas and adjacent waters; b) prepare such samples for long term storage; and c) distribute them to the community of marine mammal researchers,

*Recalling* Recommendations from the ACCOBAMS Workshop on Data Collection on Cetacean Population Genetics, *Recalling* Resolution 8.11 "Cetacean population genetics",

1) The Scientific Committee reiterates the need:

- a. for Partners conducting sample collection and research on population genetics to apply the ACCOBAMS Best Practices on Cetacean Population Genetics in their work and to regularly provide the Secretariat with relevant information to update the online cetacean sample database, as well as the list of suitable genetics laboratories and new scientific publications;
- b. for Parties to collect updated information regarding research results on population genetics and to include it in their National Report.

2) The Scientific Committee **recommends** Parties to provide the Secretariat with relevant national legislation and standard procedures for the exchange of samples (for example, under the Nagoya Protocol, or CITES permits).

3) The Scientific Committee **encourages** the harmonization of the procedures for samples exchanges among CITES scientific and forensic institutions in the ACCOBAMS area.

## **RECOMMENDATION 16.6 – STRANDINGS ISSUES (AETF, FUNCTIONING STRANDING NETWORKS)**

**Recalling** the Eighth Meeting of Parties to ACCOBAMS (November 2022, Malta), when Parties agreed to encourage the creation of a regional Task Force and collaborations among national network of parties for stranding events (Resolution 8.2) and provisioned this work as the CA1d Conservation Action for 2022/2025;

**Recalling** the Resolution 8.15 reiterating the urgent need of implementing effective and functioning stranding networks enforcing cooperation, also using novel technologies, and encouraging exchange of information and samples at regional level using the existing tissue banks for joint analyses;

**Noting** that during the meeting jointly organized by the Secretariats of ACCOBAMS and of the Black Sea Commission that took stock of common subjects in relation to the Black Sea on 6-7 March 2024, in Istanbul, participants agreed that in the framework of the ACCOBAMS Emergency Task Force for Stranding events (AETFS), a specific "Black Sea" Sub-Task, composed by experts from the Black Sea Countries has to be created;

**Noting** that standardized post-mortem investigations and harmonized interpretation of findings were considered relevant for the implementation of different ACCOBAMS strategies like those related to by-catch, ship strikes, marine litter and underwater noise;

the Scientific Committee recommends:

- to update the ToR for ACCOBAMS Emergency Task Force for Stranding events (AETFS) by taking into consideration other existing initiatives, in terms of objectives and a prioritization system to provide support in case of capacity building request and emergency response;
- to consider an emergency situation as a cetacean stranding event which can overwhelm local resources and/or representing a transboundary emergency situation (e.g., mass strandings, large whales, unusual mortality events, epidemic outbreaks), or even single events involving threatened/endangered/data deficient species in the ACCOBAMS area (e.g., Cuvier's beaked whales, sperm whales, Iberian killer whales);
- to keep a continuously updated list of existing stranding experts and stranding networks contact points/coordinators to be included in the ACCOBAMS website to facilitate reporting and communication. Additionally, keep updated lists of tissue banks (Resolution 3.9), responsible institutions designed by the parties and laboratories registered as CITES scientific and/or forensic institutions including the WOAH collaboration centers, for facilitating transboundary exchange of samples and investigations;
- to update existing ACCOBAMS adopted documents related to strandings management and investigations (best practices, guidelines and protocols) when needed through regular meetings among experts to include novel findings and analyses and to promote harmonization in interpreting post-mortem findings;
- to promote a systematic adoption of technologies for remote assistance during investigations, supporting the acquisition of suitable hardware and software to routinely apply this approach in the ACCOBAMS area;
- to implement capacity building through the training modules targeting veterinarians and biologists involved in post-mortem investigations using novel technologies (i.e., virtual/augmented reality, metaverse, 3D printing) and including principles of forensic photographs and tele-necropsy. National Focal Points shall provide the appropriate support to collect information on any human related activity that could be related to

the event. Stranding network coordinators and relevant authorities shall help in bringing carcasses to competent laboratories in order to allow in-depth identification of causes of death;

to create an emergency fund through voluntary contribution by Parties, international organizations, and public
and private donors. The emergency fund should be managed by the ACCOBAMS Secretariat with the advice of
the AETFS, creating simple and effective procedures to support expensive analyses (e.g., toxicology, genomics,
research on hearing), samples exchange and any expert travel for investigations on emergencies in Countries
asking for support. The procedures for requests and funding should be discussed with the AETF and the
ACCOBAMS Secretariat and proposed to the ACCOBAMS Scientific Committee for approval.

## **RECOMMENDATION 16.7 – BYCATCH AND BOTTOM TRAWLING**

The ACCOBAMS Scientific Committee (SC) strongly reiterates that bycatch in fishing gear is a widespread and significant threat to cetaceans across the Agreement Area. Particularly, in the Black Sea, bycatch was identified as the main source of human-induced mortality for the threatened Black Sea harbour porpoise (*Phocoena phocoena relicta*).

The ACCOBAMS Survey Initiative - the first synoptic survey conducted in 2018 and 2019 - provided baseline cetacean abundance estimates for the whole Agreement Area. During the same period in the Black Sea, intensive work on the assessment of bycatch levels and testing of mitigation measures, such as acoustic deterrent devices (pingers), has been carried out in the framework of CeNoBS and ACCOBAMS SCF projects. These were followed by the GFCM's CetaByM project which confirmed the effectiveness of Wideband PAL (Porpoise Alert Devices) pingers in the mitigation of porpoise bycatch in the Black Sea. New data from the Black Sea and the Mediterranean Sea have indicated that interactions of bottlenose dolphins (*Tursiops truncatus*) and common dolphins (*Delphinus delphis*) with mid-water trawls and purse seiners may have lethal effects on these cetaceans (Tonay, pers. comm.; Keznine et al., 2024).

Fisheries management tools prohibit bottom trawling in the Mediterranean Sea in narrow coastal areas and deeper than 1,000 meters<sup>3</sup>. The ACCOBAMS SC **welcomes** the EU Action Plan "Protecting and restoring marine ecosystems for sustainable and resilient fisheries" adopted in 2023, which urges EU Member States to adopt national measures or, where appropriate, propose joint recommendations to prohibit bottom trawling in the Marine Protected Areas (MPAs) that are Natura 2000 sites designated under the Habitats Directive that protect the seabed and marine species, and to ensure that bottom trawling is phased out in all MPAs by 2030.

Taking into account that certain points of ACCOBAMS Recommendation 14.5 on bycatch have been implemented, in terms of monitoring the ACCOBAMS SC strongly recommends that:

- 1. parties ensure that monitoring schemes by independent observers are made obligatory for the fishing methods that have been proven to pose a threat to cetaceans (e.g., bottom-set gillnets targeting turbot in the Black Sea, purse seine fishery and mid-water trawls in the Mediterranean and the Black Seas);
- 2. the FAO-GFCM Guidelines for bycatch monitoring (FAO, 2019) be revised as 0.5% coverage for onboard observation is far from being satisfactory to understand the complete situation of cetacean bycatch (see Recommendation 16.8;
- 3. whenever possible, the relevant authorities (environmental and fisheries) should encourage the retrieval of dead bycaught animals from vessels to perform necropsies by relevant institutions involved in the national strandings network. As a minimum, onboard observers should collect tissue samples for a wide range of analyses (minimum samples for age (teeth), genetics (skin), and physiological status (blubber)) to understand the status and demographic characteristics of the affected populations (e.g., ICES 2024);
- 4. Parties implement active awareness-raising programmes among fishermen to encourage reporting of bycatch events in order to improve data collection and assess more precisely the extent of this threat.

## In terms of mitigation, the ACCOBAMS SC:

- strongly recommends the use of PAL pingers in turbot fishery in the Black Sea as an effective measure to mitigate harbour porpoise bycatch in bottom set gillnets according to the best available practices (FAO, 2019; Hamilton and Baker, 2019);
- 6. **encourages** further testing and development of bycatch/depredation mitigation measures in the ACCOBAMS area;

<sup>&</sup>lt;sup>3</sup> Commission Implementing Regulation (EU) 2022/1614 of 15 September 2022 determining the existing deep-sea fishing areas and establishing a list of areas where vulnerable marine ecosystems are known to occur or are likely to occur, OJ L 242, 19.9.2022, p. 1-141.

- 7. **encourages** the ACCOBAMS Secretariat to strengthen the collaboration with GFCM in addressing the impacts of several fisheries on cetaceans, their prey, and habitats;
- 8. **requests** that the ACCOBAMS Secretariat engages with GFCM and ICCAT to address illegal driftnets' continued use in the Western Mediterranean Sea;
- encourages ACCOBAMS Parties to phase out bottom trawling within MPAs, including Natura 2000 Sites of Community Importance, by 2030;
- 10. **encourages** fishery national authorities to strengthen control to prevent IUU (illegal, unreported, unregulated) fisheries.

## References

FAO. 2019. Monitoring the incidental catch of vulnerable species in Mediterranean and Black Sea fisheries: Methodology for data collection. FAO Fisheries and Aquaculture Technical Paper No. 640. Rome, FAO.

FAO. 2021. *Fishing operations. Guidelines to prevent and reduce bycatch of marine mammals in capture fisheries.* FAO Technical Guidelines for Responsible Fisheries No.1, Suppl. 4. Rome. <u>https://doi.org/10.4060/cb2887en</u>

Hamilton, S., Baker, G.B. 2019. Technical mitigation to reduce marine mammal bycatch and entanglement in commercial fishing gear: lessons learnt and future directions. *Rev Fish Biol Fisheries* **29**, 223–247. https://doi.org/10.1007/s11160-019-09550-6

ICES. 2024. Third Workshop on appropriate sampling schemes for Protected, Endangered and Threat-ened Species bycatch (WKPETSAMP3). ICES Scientific Reports. 6:1. 96 pp. <u>https://doi.org/10.17895/ices.pub.25061522</u>

Keznine, M., Mghili, B., Awadh, H., Analla, M., Aksissou, M. 2024. Impact of interactions between common bottlenose dolphins and purse-seiners in the Moroccan Mediterranean region: case study in the Al Hoceima fishing grounds. *African Journal of Marine Science*, *46*(1), 55–64. <u>https://doi.org/10.2989/1814232X.2024.2310528</u>

## RECOMMENDATION 16.8 – REVISION OF THE FAO GFCM GUIDELINES ON MONITORING INCIDENTAL CATCH OF VULNERABLE SPECIES IN THE MEDITERRANEAN AND BLACK SEAS (FAO 2019)

The ACCOBAMS Scientific Committee (SC) was informed that, following a special request from the European Union's Directorate-General for Environment (DG-ENV), ICES convened a series of workshops on appropriate sampling schemes for protected, endangered and threatened cetacean species bycatch (WKPETSAMPs). In particular, WKPETSAMP3 (2024) that was tasked with providing concrete inputs for appropriate bycatch monitoring and assessment and for the promotion of regional cooperation. This workshop ran new simulations on multiple, ground-truthed scenarios, in addition to considering the "0.5% scenario", which is indicated as the minimum appropriate level by the FAO/GFCM guidelines on monitoring incidental catch in the Mediterranean and Black Seas (FAO 2019). These guidelines were adopted by the relevant Data Collection Framework Regional Coordination Groups (DCF RCGs) within the Agreement Area and used to build national monitoring programmes.

The FAO/GFCM (FAO 2019) refers to 0.5% as "often accepted (MARE/2014/19, 2016)". MARE/2014/19 (2016) used 0.5% as target for bycatch monitoring, stating that 0.5% is "what is commonly achieved by the by-catch monitoring programmes carried out under the Regulation (EC) No. 812/2004 (see Northridge et al. 2015)". However, both documents fail to clarify that (1) those were commonly achieved targets under the Habitats Directive (92/43/EEC), not Regulation 812/2004 and (2) Northridge et al. (2015) clearly state that those coverages are mostly related to métiers for which they "do not consider [to] have representative coverage" (ICES WGBYC 2021).

Simulation scenarios (via downsampling at the haul level datasets from on board monitoring), WKPETSAMP3 concluded that:

(i) above a certain level of monitoring effort (circa >10%) and for more frequently bycaught species, the bias and CV (Coefficient of Variation) on BPUE (Bycatch Per Unit Effort) are low and increasing observation effort does not improve estimate and precision;

(ii) the bias and CV on BPUE increase rapidly at low levels of monitoring effort and, in some case, (e.g. **0.5% effort**) they **are unacceptable**;

(iii) the **detection probability of a species** as a bycaught event, increases rapidly with increasing coverage, and less so for the rarer species. Hence, to "*be able to certainly detect a bycatch event when happens for species with "very high" or "high/moderate" or "very low" bycatch frequency, the coverage needs to be higher than about 1% or 5% or 50%, respectively"*. In addition, "to exit the field of detection causality/random detection" for "species with very low bycatch frequency.

The ACCOBAMS SC **recognises** the extensive simulation work incorporating realistic scenarios. Supporting these results and conclusions, the SC **recommends** that FAO/GFCM guidelines (FAO, 2019) are updated to incorporate the best available advice on appropriate onboard observer coverage as soon as possible.

## References

FAO. 2019. Monitoring the incidental catch of vulnerable species in Mediterranean and Black Sea fisheries: Methodology for data collection. FAO Fisheries and Aquaculture Technical Paper No. 640. Rome, FAO.

ICES. 2024. Third Workshop on appropriate sampling schemes for Protected, Endangered and Threatened Species bycatch (WKPETSAMP3). ICES Scientific Reports. 6:1. 96 pp. <u>https://doi.org/10.17895/ices.pub.25061522</u>

Northridge S, Kingston A, Thomas L. 2015. Annual report on the implementation of Council Regulation (EC) No 812/2004 during 2014.

## **RECOMMENDATION 16.9 - ANTHROPOGENIC UNDERWATER NOISE**

A progress report was provided by the co-chair of the Joint Noise Working Group (JNWG) on activities, based on the JNWG WP 202302 final.pdf, which included:

- the ACCOBAMS Mediterranean technical assessment on anthropogenic underwater noise as part of the 2023 Quality Status Report of the Barcelona Convention (IG.26 taken at COP23 of UNEP/MAP);
- the collaboration with the TG-Noise for the development of new EU guidelines on underwater noise monitoring and assessment;
- the participation to the SeaSounds project;
- engagement in the Joint ACCOBAMS-ASCOBANS Workshop with Navies on Underwater Noise and Cetaceans held on 26-27 November 2024 which focused on mitigating the impact of underwater noise—particularly from sonar and unexploded ordnance (UXO) blasts—on cetaceans.

A discussion addressed numerous issues relating to the results of the activities reported, as well as on other matters and developments related to the impacts of anthropogenic noise on cetaceans in the ACCOBAMS area.

## The ACCOBAMS Scientific Committee (SC) recommends that:

- 1) an in-person meeting of the JNWG is organised and requests the ACCOBAMS Secretariat to explore with the Secretariats of the other two IGOs how this can best be progressed, recognising that the meeting will require Terms of Reference, a steering group and funding;
- 2) the ACCOBAMS Secretariat responds positively to an invitation to join the Intersessional Working Group (IWG) on noise, created in the framework of the Mediterranean Strategy for the Prevention of, Preparedness, and Response to Marine Pollution from Ships (2022-2031) of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC). ACCOBAMS participation in this group shall also promote the use of NETCCOBAMS and encourage ACCOBAMS Parties to provide data for the work of this group, which is vital for the further development of the NETCCOBAMS software accordingly;
- 3) the Threshold Values for Impulsive and Continuous Noise emissions recently adopted by EU Member States shall become applied and used by all ACCOBAMS Parties;
- ACCOBAMS Parties support the adoption of "ocean noise pollution" as a Common Indicator at the Barcelona Convention, which is currently a Candidate Common Indicator; and that cetacean species are used as indicator species for its application;
- ACCOBAMS Parties apply the "IMO Guidelines for the reduction of underwater radiated noise from shipping to address adverse impacts on marine life" [IMO/MEPC 1/Circ.906] and participate in the experience building phase submitting respective information to the IMO's Marine Environment Protection Committee (MEPC);
- 6) ACCOBAMS Parties participate and contribute to the global review of marine seismic airgun surveys currently being undertaken by the International Whaling Commission (IWC) <u>https://forms.gle/vmrnHSWrWR3ywz3FA</u> and that regional representatives are asked to bring this initiative to the attention to the respective national focal points;
- 7) the promotion of the ACCOBAMS HQ MMO/PAM training and certification to all stakeholders;
- 8) ACCOBAMS Parties request the employment of ACCOAMS HQMMO/PAM certified people, if respective activities take place, as complementary mitigation measure;
- 9) the ACCOBAMS Parties, SC and Secretariat contribute to the development and implementation of the "Post-War Plan for Black Sea Cetaceans" [Recommendation 16.1] and respective activities, with particular focus given to the removal of all types of underwater explosives, both floating and sunk, including mines.

The ACCOBAMS SC refers ACCOBAMS Parties to Resolution 8.17 and **reiterates** the need for Parties to provide comprehensive information on impulsive noise-generating activities to allow a proper assessment of noise emissions in the Agreement area and their potential impact on cetaceans. National responsible institutions are requested to provide data on impulsive noise generating sources and activities from anywhere in the ACCOBAMS Area into the existing Regional Noise Registry, managed by ACCOBAMS for publicly available data.

The ACCOBAMS SC encourages the JNWG to continue its work as proposed within its update Report, including:

- further development of the concept of "quiet zones" as outlined in Recommendation 10.5 of the ACCOBAMS SC;
- 2) updating the noise models available in NETCCOBAMS and securing their compliance with evolving guidance from EU-TG Noise under the European Union Marine Strategy Framework Directive (MSFD-2008/56/EC);
- comparison of the results of noise modelling with appropriate in situ anthropogenic noise recordings made throughout the ACCOBAMS Area, taking account of the diverse sensitivities of the different cetacean species;
- 4) continued efforts to monitor anthropogenic activities generating underwater noise;
- 5) further encouragement of the use of mitigation measures for anthropogenic activities generating underwater noise;
- 6) further efforts to develop and assess the effectiveness of new mitigation measures; and
- 7) improved facilitation of the exchange of relevant information with competent authorities related to military activities and exercises, from planning to assessment of impacts.

## **RECOMMENDATION 16.10 – SHIP STRIKES**

ACCOBAMS and the International Whaling Commission (IWC) have long recognized the problem of ship strikes, particularly of large whales. This spans the issues of conservation, animal welfare and human safety. They have been working together to develop a better understanding of the problem and to develop effective mitigation measures, *inter alia*, within the ACCOBAMS area, particularly for fin and sperm whales. The Pelagos "Collisions and Shipping" Focus Group (PCSFG) is working on improvements of the precision surrounding the identification of collisions and the Committee welcomes further co-operation (see below).

The Scientific Committee **welcomes** the adoption in July 2023 of IMO Resolution MEPC.380(80) establishing the Northwestern Mediterranean Sea as a Particular Sensitive Sea Area (NW Med PSSA) at the initiative of the four ACCOBAMS countries (Spain, France, Italy and Monaco).

The Scientific Committee **recommends** that Panigada, as convenor, liaises with the Pelagos Agreement to create a Joint Ship Strikes Working Group with agreed Terms of Reference, part of which will include:

- (a) liaison with riparian nations, the IWC and other stakeholders to continue (and improve) the collection of information on cetaceans and vessel traffic, to enable better identification of actual or potential high-risk areas for cetaceans (especially fin and sperm whales) by incorporating information on whale and vessel distribution into risk models (more details on how to achieve this can be found under Item 3.3.3 of the SC report);
- (b) incorporating the results of the IWC-IUCN-ACCOBAMS workshop (Messinia, 2019) and work on IMMAs;
- (c) investigation of ways to support the integration of and updating of cetacean risk information (e.g. IMMAs) into Electronic Charts Systems (ECDIS) used for maritime navigation;
- (d) improving efforts and approaches to quantifying ship strike occurrence (e.g. via necropsies and evaluation of signs in photos obtained in the context of photo-identification studies);
- (e) promotion and use of the IWC ship strikes database and appropriate modules within NETCCOBAMS;
- (f) elaboration of improved methods to evaluate the effectiveness of mitigation measures and especially recent or new PSSAs (and associated protective measures), building for example on work within NETCCOBAMS and OceanCare and studies of "near miss events" and "close point of approach (CPA)";
- (g) review of the results of relevant studies being undertaken in the region e.g., Life SeaDetect, Life *conceptu maris,* SEAsteMAR;
- (h) review of the results of existing efforts and encouragement of the development of new real time cetacean localization projects, which are designed to be complementary tools in avoiding ship strikes; and
- (i) review of the progress on the development of a whale-safe certificate (e.g., within the Shiprint project or the Green Marine Europe programme, related to keeping speeds below 13 knots).

The Scientific Committee also recommends that ACCOBAMS Parties and the Secretariat:

- (a) promote communication with stakeholders (e.g., shipping companies, navies, port authorities, whale watching organisations, etc.) on the issue of vessel strikes, including mitigation approaches and reporting to the IWC ship strikes dat-abase;
- (b) encourage and support regional data collection and mitigation initiatives and foster the development of incentive systems to shipping companies that adopt appropriate mitigation methods;
- (c) continue to work within IMO (and its MEPC) on relevant initiatives including mitigation approaches such as shipping lanes, including through initiatives with member states (the most appropriate mechanism for IMO action);
- (d) foster and improve collaborative efforts with other bodies working on this issue including, IWC, the Pelagos Agreement, IMO, CMS;

- (e) support efforts to improve access to the temporal and spatial distribution of shipping, particularly vessels that do not transmit AIS information;
- (f) support, when appropriate, activities within the framework of SEAsteMAR in particular for the activity 1.4 Definition of criteria for the identification of high-risk areas;
- (g) offer support to the Greek Authorities for reducing the risk of ship strikes the Hellenic Trench, including strengthening collaboration with the International Hydrographic Organization (IHO) and the Hellenic Hydrographic Office to develop standards and accelerate the process for nautical charts to be updated and reflect the area crucial for the protection of marine life;
- (h) inform stakeholders of the willingness of the ACCOBAMS Scientific Committee to provide advice on ship strikes and mitigation approaches.

## **RECOMMENDATION 16.11 - COMMERCIAL WHALE WATCHING IN THE ACCOBAMS AREA**

Recalling Article II of the Agreement, according to which the Parties shall prohibit and take all necessary measures to eliminate any deliberate taking of cetaceans, including harassing or attempting to engage in such conduct,

Recalling Section 2 of Annex 2 to the Agreement, according to which Parties shall develop guidelines and/or codes of conduct to regulate or manage activities that create direct and indirect interactions between humans and cetaceans, such as tourist activities,

Aware that ACCOBAMS Resolution 4.7 sets forth Guidelines for Commercial Cetacean Watching Activities in the ACCOBAMS Area and Annex 2 to Resolution 6.20 provides regulations governing use of the collective certification mark "High Quality Whale-Watching<sup>®</sup>" and the Guidelines for acquiring a label for whale-watching operators in the Pelagos/ACCOBAMS Area,

The ACCOBAMS Scientific Committee:

- in line with previous ACCOBAMS resolutions (Res. 4.7, Res. 6.20 and Res. 7.16) reiterates the need for legally enforceable whale watching regulations to be in place and fully implemented by all of the ACCOBAMS Parties;
- reiterates the importance of carrying an analysis of existing national legislations related to whale watching
  regulations that could support the work of the expert who will be tasked to analyse existing national
  legislations related to whale watching. This analysis should be done in coordination with the work done by the
  Pelagos WG Leggi in particular with item: "Action I-29b Study of governance procedures and legislative
  measures and namely to the whale watching activities";
- encourages the continuation of the testing and updating the IlogWhales App that incorporates the common procedure for data collection by whale watching operators, making sure that there is compatibility with other similar programmes running on collaborative platforms (eg.: OBSenMER);
- **encourages** the collaboration with relevant organisations such as IWC, CMS and Pelagos Agreement on issues related to whale watching activities;
- **approves** the implementation of pilot studies to define the whale watching carrying capacity in a targeted geographical area where commercial whale watching is intensively practised;
- recommends that the regulations governing the use of the collective certification mark "High Quality Whale Watching<sup>®</sup>" (HQWW) be revised with the objective of simplifying the implementation at the national level and facilitates replication in other geographical areas;
- **urges** the Greek government to implement specific legislation, in accordance with the "Guidelines for Commercial Cetacean Watching Activities in the ACCOBAMS Area", to mitigate current and potential pressure put on the Critically Endangered Gulf of Ambracia bottlenose dolphin subpopulation due to the development of unregulated dolphin-watching activities in the Gulf in recent years by operators, as well as locals offering opportunistic dolphin-watching trips.

## **RECOMMENDATION 16.12 – MARINE DEBRIS**

*Recalling* recent workstream on marine debris, noting that this was underpinned by ACCOBAMS Resolution 8.20 on Marine Litter & Chemical Pollution, adopted by ACCOBAMS Parties in 2022,

*Recalling* the ACCOBAMS workshop convened on 6-7 April 2024 (Catania, Sicily), in collaboration with the University of Padova with the objective to improve collection of relevant data, especially from stranded cetaceans, with a specific focus on identifying best practice related to monitoring ingested marine litter and entanglement evidences in the ACCOBAMS Area,

*Taking into consideration* that all the recommendations from this workshop were presented to the IWC Scientific Committee (22 April - 3 May 2024, Bled, Slovenia) which endorsed them,

## The SC particularly encourages:

- a more coordinated effort to better understand the toxicological effect of macro and micro-litter ingestion in cetaceans (considering both chemical, ecotoxicological and physical effects);
- harmonization of a diagnostic methodology that includes: a) evaluation of the presence of marine litter in marine mammals gastro-intestinal tract (GIT) (at least) (ACCOBAMS/ASCOBANS, 2019; Corazzola et al. 2021);
   b) categorization and quantification of identified marine litter through the determination of polymers by spectroscopy technique (FT-IR); c) detection of plastic additives and absorbed contaminants to plastics in organism tissues; and d) develop risk, impact and mortality indexes;
- Parties to further collaborate at a regional level between tissue banks, to facilitate the exchange of tissue samples for joint analyses and retrospective studies;
- continued joint efforts in the Adriatic Sea to merge data on bottlenose dolphin-human interactions (including set net interactions, marine debris ingestion) and mitigation efforts, as well as creating a multi-level multidisciplinary model to identify hotspot risks;
- the defining and development of new methods to evaluate the exposure to plastics and plastic additives in free-ranging organisms, including new approaches such as -omics, which could reveal the exposure to a plethora of stressors (microplastics, emerging chemicals, legacy chemicals etc.) and drive the identification of new end-points (via e.g., metabolomics, transcriptomics, epigenetics);
- multiple stressors investigation: development of new diagnostic techniques to understand the effects of cumulative stressors on cetaceans both on:
  - stranded organisms, investigating the potential ecotoxicological effects caused by the ingestion of marine litter and emerging and legacy chemicals, both through biomarker identification and analysis of tissues;
  - *in vitro* experiments, assessing the effects of micro- and nano-plastics (combined by the presence of emerging and legacy chemicals) through new technologies applied on cetacean cell lines, organoids and "organ-on-chip" technology.

## **Recommendations on Indicator Species**

The SC **recommended** that cetacean species should be promoted as indicators for microplastics (*i.e.,* fin whale, *Balaenoptera physalus*) and macro-litter pollution (*i.e., Physeter macrocephalus* and, *Ziphius cavirostris*) at the ACCOBAMS scale. *Tursiops spp.* could be used as indicators at sub-basin levels.

The SC also **encourages** the Barcelona Convention and the European Commission to include cetaceans as indicator species within the IMAP candidate indicator 24 and MSFD descriptor 10.

## **RECOMMENDATION 16.13 – SEMI-CAPTIVITY (PASSPORT & GUIDELINES)**

**Recalling Resolution 5.14** on live removals of bottlenose dolphins (*Tursiops truncatus*) in the Black Sea in which the Black Sea Parties were asked, in coordination with the Black Sea Permanent Secretariat, to carry out an assessment and an inventory of all specimens of bottlenose dolphins kept in captivity by means of genetic, morphological and photographic identification methods;

**Recalling Resolution 3.20** providing Guidelines for the Release of Cetaceans into the Wild: all this document stresses a particular attention that should be paid in relocating captive animals in a wild or semi-wild condition with one of the main concerns of possible genetically contamination of the local population(s) in case of escape from the pen expressed by several documents (MOP7.Inf09 and MOP8/2022/Inf52);

**Considering the existing international legal** frameworks asking for a proper identification and internationally recognized system for identifying cetaceans kept by human in officially accredited facilities;

**Recalling the Resolution 8.11** on Cetacean Population Genetic giving proper details on cetaceans samples for genetic analyses, their preservations and technical approaches;

The SC recommends to the Parties that they adopt the process toward cetacean genetic passport and adapt the form and the template proposed in <u>Annex I</u>, which includes genetic and other relevant individually distinct biological data, to the current national procedures for the identification of cetaceans kept in aquaria and dolphinaria, including CITES permits, information and laboratory results from genetic analyses which should be performed for all the animals to confirm their origins. The form should be then transmitted to the ACCOBAMS Secretariat and kept in a centralized repository.

Moreover, **Parties are advised** to refer to the Guidelines for *Best Practices During the Installation and Management* of Semi-enclosed Facilities for Cetacean Species in the ACCOBAMS Area (<u>Annex II</u>), as well as to the Procedural Steps for Requesting Advice from the ACCOBAMS Advisory Committee on Semi-Enclosed Facilities (Annex III), when these kinds of initiatives are prospected within their jurisdiction.

Individual information				
1. Name		5. ID Type		
2. Species	Latin name	6. ID number		
	Common name			
3. Sex	M/F	7. Place of birth	Specify complete address	
4. Origin	wild/zoo/other	8. Date of birth		
9. Previous facilities	1.	2.	3.	
	CITES inf	ormation	•	
10. Type of document		12. Date of Issue		
11. No. of the certificate		13. Country of origin		
14. Permit*		16. Date of Issue		
15 No. of permit		17. Country of import		
		· ··		
Father ID dataile**	Parents in	Nother ID details**		
Father ID details**		Nother ID details**		
18. Name		23. Name		
19 .Species		24 .Species		
20. ID Type		25. ID Type		
21. ID number		26. ID number		
22. Origin		27. Origin		
Physical marks and features				
28. Total length (cm)		29. Total weight (kg)		
30. General picture from the left***				
31. General picture from the right***				

# **ANNEX I - Genetic Passport Template**

32. General picture from the top***				
33. Picture of the dorsal fin (from the right and from the left)***				
34. Picture of the caudal fin (from the top)***				
35. Description and pictures of morphological peculiarities, abnormalities, scars and injures (left)****				
a.	b.	с.	d.	
е.	f.	g.	h.	
36. Description and pictures of morphological peculiarities, abnormalities, scars and injures (right)****				
а.	b.	с.	d.	
е.	f.	g.	h.	
X-ray for age determination	Y/N			
* If imported	*** include pictures in the form and attached originals			
** Include all documentation	Il documentation for parents **** Refer with letter different marks on the drawings			
	Geno	otype		
37. Laboratory				
38. ID of the sample in the laboratory		39. Date of the analysis		
40. Description of the sample (blood/swab/tissue)		41. Date of sampling, methods or preservation and name of the sampler		
42. Species confirmation		43. Targeted genes		

44. Locus	Fragment Size	Primer Sequence	
1. D08			
2. EV37			
3. KWM2			
4. KWM9			
5. KWM12			
6. MK6			
7. MK8			
8. MK9			
9. Ttr04			
10. Ttr11			
11. Ttr19			
12.Ttr58			
13. Ttr63			
14. TexVet05			
15. TexVet07			
16.			
17.			
18.			

# ANNEX II - Draft Guidelines for Best Practices During the Installation and Management of Semi-enclosed Facilities for Cetacean Species in the ACCOBAMS Area

Joan Gonzalvo, Frances Gulland, Lori Marino, Giuseppe Notarbartolo di Sciara and Sandro Mazzariol (ACCOBAMS Advisory Committee on semienclosed facilities)

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#### 1. BACKGROUND

Semi-captivity of cetaceans has been an issue considered for several years by ACCOBAMS, which was addressed in particular in 2 reports: "Taking of cetaceans, dolphinaria and quasi-dolphinaria: a legal analysis relating to ACCOBAMS Parties" (<u>ACCOBAMS-MOP7/2019/Inf 09)</u>; and "Scientific perspective on "potential marine semi-enclosed facilities" in the ACCOBAMS Area" (<u>ACCOBAMS-MOP8/2022/Inf52</u>).

Based on the recommendations of the latter, the Eighth Meeting of the Parties to ACCOBAMS (MOP8) agreed that the Scientific Committee should establish an Advisory Committee on semi-enclosed facilities to provide guidance to interested Parties in relation to all questions related to semi-enclosed facilities. At its Fifteenth meeting held on 10-11 May 2023 in Tunis, the ACCOBAMS Scientific Committee adopted Terms of Reference for an ACCOBAMS Advisory Committee on semi-enclosed facilities (ACCOBAMS-SC15/2023/Doc17). The present document, drafted by the members of this Advisory Committee, has been largely adapted from de document *Standards for Cetacean Sanctuaries* adopted by The Global Federation of Animal Sanctuaries (GFAS) and released in June 2023, taking into account the ACCOBAMS framework.

A few initiatives have been made public, which aim at providing increasingly necessary facilities posing an alternative to dolphinaria and marine parks, by creating the so-called cetacean sanctuaries or refuges. In an ACCOBAMS' context it is suggested to use the latter term *refuge*, to avoid confusion with concepts of marine protected areas. For example, the "Pelagos Sanctuary for Mediterranean whales and dolphins", a well-known protected area in the Mediterranean, has a completely different nature and goal than dolphin refuges. Hence, tentatively, hereafter Semi-enclosed Facilities for Cetacean Species will be referred as refuge/s.

It must be emphasized that a true refuge intends to approximate a natural cetacean habitat to the fullest extent possible while promoting diverse, natural behaviours and relationships amongst the cetaceans. The welfare of cetaceans takes priority over all other considerations, including visitors, caregivers, scientists and donors. Cetacean refuges, as do traditional dolphinaria and marine parks, must provide human care essential for animal health and safety.

Finally, the recent application should be noted of the <u>EU Directive 2016/429 on transmissible animal diseases and</u> amending and repealing certain acts in the area of animal health, also named "Animal Health Law" (AHL) and the Regulation 2035/2019 supplementing Regulation (EU) 2016/429 of the European Parliament and of the Council as regards rules for establishments keeping terrestrial animals and hatcheries, and the traceability of certain kept terrestrial animals and hatching apply to potential cetacean refuges.

These legal frameworks dealing with diseases transmission in all the animals kept under human care, including terrestrial and aquatic wild animals, should be applied by EU members and candidate Countries. This legal framework provides a well-defined legal classification for all the facilities keeping animals, including those maintaining wild animals in a confined establishment. All the member states will adopt differently the classification of the different establishments and, in case of proposal of a dolphin refuge, this national classification should be considered as a legal reference. As an example, Italy has adopted the above-mentioned EU legal framework with the Law Decree 135/2022 and the following decrees from the Ministry for Health and Ministry for the Environment:

- Dolphin refuges are included among the collections of wild species different from zoos and aquaria.
- All these establishments have to identify proper management measures considering biosafety, animal welfare and workers safety and respond to national and international recommendations.

#### 2. CETACEAN HOUSING

#### 2.1. General considerations

The habitat and living conditions consider hygiene and the species' physiological, psychological, and social needs. This includes consideration of outdoor and temporary/short-term indoor space, vertical and horizontal space, and diversity and complexity of space.

Policies and procedures are in place such that personnel can enter and exit enclosures without risk of the animals escaping, and can shift animals as appropriate between and out of enclosures prior to entering the enclosure. Facility design takes into account caregiver-animal safety and ease of maintaining a positive relationship.

Animals are provided access to as many areas of the enclosures as possible at all times, except during facility maintenance activities, unless security or welfare concerns dictate otherwise. All enclosures are constructed without creating "dead ends" to allow for freedom of movement of subordinate individuals.

Animals are provided with regular access to outdoor space with sufficient room to engage in natural behaviours and designed to promote species-specific wellbeing. Access is ideally given daily, with consideration to weather and animals' individual needs (e.g., animals in quarantine or isolation, or being observed for medical reasons, may be kept indoors), and species-specific risks.

The habitats include an acoustic monitoring system and provide appropriate visual and acoustic barriers and physical distance from the public/human activity, where necessary. Exposure to high-intensity sounds or noises are avoided. Appliances or machines in the vicinity of the enclosure that produce such noise in the animals' hearing range are insulated as much as possible.

The habitat provides security from predators and unauthorized human access. 24-hour systems are in place to minimize the risks of theft, malicious damage or harm to animals. This may include staff on site, security guards, security cameras, alarm systems, etc. Moreover, in addition to the primary permeable perimeter on the ocean side, a secondary permeable barrier should be considered to prevent direct human access and to serve as secondary containment should an animal escape.

Enclosures have enough area (see Housing section below) per animal to accommodate natural individual and group behaviours/activities. Enclosures provide enough area for individuals to be spatially dispersed from one another according to the individual preference or in the event of social conflict.

Quarantine facilities have appropriate housing and design features for treatment of injured or ill animals. Healthy animals admitted to quarantine have as large an enclosure as possible to help maintain natural locomotion and behaviours. Features of the quarantine facilities should comply with EU Zoo Directive 1999/22/CE and EAZA guidelines for marine mammals kept under human care.

Enclosures are designed to allow for safe cleaning. Any products used for cleaning the enclosure and other features (e.g., foot baths, cleaning products for food buckets and enrichment items) should be reviewed by attending veterinarian for use with the species housed.

A regular program of refuge maintenance is in place. Any enclosure in need of repair, or any defect that may cause harm to animals, is immediately repaired or replaced. If that is not an option, the animals are relocated to an alternative secure enclosure.

All gates and walkways are constructed of materials which minimize any injury to the animals due to shape, sharp or rough surfaces and/or those which would create additional noise in the environment.

If enclosures use netting for walls or floors, the netting is appropriate for the species. If enclosures use netting or another form of barrier for "walls" the distance between the top of the wall and any walkway above or adjacent to it is only a few centimetres wide to minimize the possibility that an animal gets entangled or trapped.

#### 2.2. Housing

- ✓ Many factors influence the minimum space required for animals, including natural species-specific behaviours, health needs, and social groupings.
- ✓ For cases where mixed-species housing is foreseen, enclosure dimensions can be adjusted accordingly so that the space reflects that required for multiple species if housed separately.
- ✓ The refuge's area should be at least equivalent to the average daily swim performed in the wild for the species being housed. Moreover, enclosures should provide enough space to allow the animals to move horizontally in a straight line for at least 10+ tail strokes. The determination of average daily swim distance should be based on the best available science as determined by consultation with experts on conspecifics in the wild and current available scientific literature, at the time the refuge is designed. The process used to determine the average daily swim distance should be documented and verifiable. The latest <u>Standards and Guidelines for the management of aquatic mammals under human care by European Association for Aquatic Mammals (EAAM)</u>, for bottlenose dolphins, propose a minimum pool surface area of 550 m<sup>2</sup> and a pool volume of 2,000m<sup>3</sup>, for 1-6 animals (adding 75 m<sup>2</sup> and a 300m<sup>3</sup> per additional animal. These values should be considered as an absolute minimum. In the context of a modern and newly created dolphin refuge, we should expect facilities considerably larger.
- ✓ The refuge's depth should be equal to or greater than the typical dive depth in a near- shore environment for the species being housed, for at least one-third of the overall space. If the typical dive depth is not known for the species being housed, then, at a minimum, a depth equal to or greater than 3 times the body length of the resident species should be used. The determination of typical dive depth in a near-shore environment should be based on the best available science. The process of expert consultation and literature review used to determine the typical dive depth of conspecifics in the wild in a near-shore environment should be documented and verifiable.
- ✓ The refuge should contain variable depths and range in natural topography.
- ✓ The water volume provided should allow for the animal(s) to dive and spend the majority of their time below the water surface.
- ✓ Animals requiring treatment for illness or injury are housed in enclosures that allow for appropriate treatment and ease of care.
- Cetacean Refuge sites must possess the requirements to ensure the well-being of the animals on the basis of their ecology, behaviour and physiology. For example, a potentially feasible site may be either in a sheltered, shallow and semi-enclosed body of marine water such as a small bay or fjord, or in a coastal lagoon, where appropriate enclosures can be fenced.
- ✓ Enclosed areas need to be as protected as possible from severe weather, and have easy access for personnel to care for the animals in all weathers.
- ✓ To ensure that the refuge animals can experience acoustic connectivity to their environment, the refuge should have at least a portion of its perimeter defined by an acoustically permeable barrier (e.g., an enclosed bay may be defined by land on three sides but defined by net at the opening of the bay, thus allowing acoustic connectivity).
- ✓ The shape of the refuge perimeter does not disrupt the swimming pattern of the animals in a harmful way or allow any animals to be cornered.
- Experts in captive cetacean behaviour should be consulted to ensure that netting or other containment material is designed to minimize risk to the refuge residents. The permeable barrier should include design features that prevent cetaceans from getting trapped under any floating walkways or entangled due to "bagging" (i.e., slack in a net caused by water movement), in any cables, floats, edges or anchoring systems.

The mesh size and gauge for the permeable barrier is appropriate for containing the animals without risk of entanglement, and suitable for excluding wild species or allowing them to pass through without risk of entanglement).

- ✓ A comprehensive list of local species known to be present in the area of the refuge should be compiled and used to inform the decision on mesh size and gauge.
- ✓ Netting should be constructed to maintain its integrity (i.e., mesh size and gauge) throughout the required duration of the enclosure, be able to be effectively cleaned and maintained while in place, and to minimize abrasion or other potential risks to the refuge cetaceans or wild species in the area. Double netting should be considered as a basic measure to prevent dolphin escapes.
- ✓ The anchoring system for the perimeter and any associated structures should be robust enough to withstand normal weather patterns for the region (as determined by marine engineers).
- The barriers should be inspected and maintained at regular intervals to avoid the accumulation of biological fouling, which could compromise the integrity of the barrier over time by creating significant drag. Maintenance may be preventative and include components such as algae and/or marine debris control booms.
- $\checkmark$  Barriers and enclosures are inspected routinely for signs of breach.
- ✓ The refuge staff should have the capacity to repair permeable barriers on-site in an emergency situation and replace them when necessary.
- ✓ The structure that the permeable barrier hangs from should not pose a risk to the animals being housed or wild species and be well marked.
- ✓ A marine vessel "no-go" zone should be established and clearly marked around the perimeter of the refuge to ensure that the animals cannot be accessed by the public via water.
- The refuge design should allow for continuous monitoring of the animals throughout the entire refuge, both visually and acoustically to minimize blind spots. This may include a network of underwater and above-water cameras and hydrophones.
- ✓ Maintenance of operational data archives (e.g., video recordings, acoustic recordings) will be necessary.

#### 2.3. Gates

- Animal holding areas (i.e., separation areas and larger refuge areas) should be equipped with gates to allow for the movement of animals between areas when needed.
- ✓ Gates should be appropriately sized to the species held in the refuge and designed to allow for animals' normal swimming while traveling through. Moreover, caregivers must be able to have a clear view of enclosures and animals while operating the doors.
- ✓ Gates and doors are constructed of appropriate materials and designed to ensure safety of animals and humans and to remain functional under all circumstances.
- ✓ The refuge should have tools available on-site to guide animals to a specific location (e.g., herding and crowding nets).

#### 2.4. Shelter and Shade

✓ Ideally, refuges are located where water depth is sufficient to filter the majority of light, to protect residents from overexposure to UV light simply by spending more time at or near the bottom of the enclosure(s). Nonreflective enclosure substrate is encouraged to protect animals from overexposure to UV light. ✓ Areas of shelter from the sun should be provided for the animals where water depth may not be sufficient to filter the majority of light, such as with medical or quarantine pools.

## 2.5. Sanitation

- The refuge must be designed based on a carefully planned "carrying capacity", which should be documented in a plan created prior to moving any animals into it. This means that, based on site-specific hydrology and physical features, as well as anticipated waste production per animal (calculated for each individual based on species, surrounding water temperature and daily food intake), there is a limit to how many animals can be housed at the refuge without negatively impacting (nutrient and bacterial loading) the surrounding environment.
- Once animals are residing in the refuge, impact should be monitored with regular (annual at a minimum, in addition to every time a new animal is introduced) sediment and water column sampling. All sampling records should be archived.
- Monitoring protocols should be in place for animal feedings so that food waste within the refuge itself is kept to a minimum and not concentrated in a single area (e.g., underwater cameras at the location of remote food deployment devices).
- ✓ Protocols should be in place to remove food not consumed by refuge animals.
- ✓ Each enclosure/separation area has dedicated equipment and tools to prevent cross contamination. When resources restrict the ability to have dedicated tools, tools are disinfected between enclosures to prevent the spread of parasites and disease.
- Adequate protocols must be in place to dispose of waste, including food waste and human waste/trash so that it does not accumulate on-site in a way that negatively impacts the local environment or area in which the animals are residing.
- ✓ Quarantine facilities must be designed in order to be properly sanitized: surfaces should be easily cleanable and disinfected with round corners, smooth edges and proper water filtration systems.

## 2.6. Environment

- The refuge should be located in a climate appropriate to the animals being housed (i.e., seasonal fluctuations, maximum storm cycles, and days of sunshine per year should all be within the normal range for the species in the wild)
- The temperature should be within an acceptable range for the species housed. Allowance is made to accommodate individual animals unable to tolerate temperatures above or below the usual range of comfort for the species. Housing of geriatric, juvenile, and/or ill animals may not be appropriate for some refuges and will require case- by-case review. In case, proper facilities for these categories should be projected with the capability of controlling temperatures.
- ✓ Water temperature should be within the thermoneutral range for the species. Records of daily water temperature should be maintained along with water quality data.
- ✓ A hydrological study of the area should be obtained prior to construction of the refuge and should be kept on record.
- The refuge area should have adequate flushing, ensuring that there is not harmful (to the refuge animals or surrounding ecosystem) nutrient accumulation from waste material in the vicinity of the refuge. If natural tidal flushing is not adequate pumps, paddles or sprayers can be used to increase flushing.

- ✓ The water current and dynamics of the site should not be strong enough to threaten the integrity of the netted perimeter, anchoring system, or associated structures.
- Water quality in the area should have adequate dissolved oxygen, minimum turbidity appropriate for the ecosystem and resident species, minimal contaminant and pollution levels, as well as locally appropriate and resident species appropriate nutrient, pH and salinity levels. Water quality should be monitored for temperature, salinity, pH, pathogens daily, weekly for pollutants, and records of results should be archived. Parameters should comply with any governmental or permitting agency mandates and consistent with bathing water quality regulations.
- ✓ The refuge should be located in an area protected from large sources of acoustic pollution (e.g., not directly next to a shipping lane, not near a military testing site). Low level acoustic pollution (e.g., recreational boaters) should be limited, either by selecting a site that is more remote and thus not exposed to heavy activity, or by creating and enforcing a no-go zone around the refuge that limits acoustic pollution to a level that does not interfere with the animal's daily activity. The impacts of acoustic stimuli should be monitored using passive acoustic monitoring coupled with behavioural observations of the animals.
- ✓ If the refuge overlaps with habitat for sensitive or protected flora or fauna, protocols should be in place to ensure that normal refuge activities do not negatively impact those sensitive species. As stated above, a double fence should prevent any escape or intrusion. Additionally, a contingency plan for any incidental exit or entrance should be prepared.
- Supplemental lighting is provided as needed to ensure adequate light for caregivers to observe animals, clean enclosures and perform related animal care tasks. Light pollution from artificial lights should be minimized along the shoreline of the refuge.

## **3. NUTRITION REQUIREMENTS**

#### 3.1. Hydration

- ✓ Fresh clean water must be available in sufficient quantity at all times to all individuals via high quality food and supplemental hydration when required.
- ✓ Fish quality and water content are kept at the highest possible level to maintain appropriate water absorption during feeds.
- If hydration supplementation is deemed necessary, hydration should be achieved via established methods, utilizing the least invasive methods whenever possible, under the supervision and direction of the attending veterinarian.
- ✓ Hydration should be monitored utilizing regular voluntary blood sampling, examination of eyes, mucous membranes and skin.
- ✓ Water used for hydration should be at room temperature (temperature of the food prep area or comfortable indoor temperature) when administered (unless providing ice cubes is the method utilized).
- Potable water sources should be tested for quality and contaminants annually at a minimum (more frequently in location with annual variations in water quality) and whenever there is a change to the water system or reason for concern (such as an animal exhibiting a medical concern for an unknown reason).

#### 3.2. Diet

- ✓ A balanced and healthy diet is provided appropriately based on the needs of each animal, following veterinary instructions for special needs.
- A veterinarian or qualified veterinary nutritionist periodically reviews all aspects of the animals' diets at the refuge and makes adjustments to individual diets with consideration of species, age, life stage, size and condition. The calories in foods used as enrichment are considered when planning the overall diet.
- ✓ Diets of individual animals (including vitamin supplementation) are of a quality, quantity and variety to match the physiological and psychological state of the individual as it changes over time, with consideration for the age, life stage, species, condition, size and health of the individual.
- The refuge utilizes a feeding procedure that ensures each individual receives adequate nutrition regardless of status in social groups, such as routine observation of feeding activity. Each animal's daily dietary needs are available to animal care staff.
- ✓ Daily food consumption and other behaviours are monitored and, if any changes are detected, immediately reported.
- ✓ Feed types should remain varied as appropriate for each species to ensure that the animals are able to easily adapt to changes in food availability.
- Protocol should be implemented for testing the quality of each lot of food. Food quality is continually monitored. Food safety and quality should meet criteria for human consumption included in current national regulations. If not already adopted by the food suppliers, who should provide detailed information, protocols should include analysis of calories, nutritional components, lipid oxidation, histamines and peroxides, contamination, and microbiology sampling such as enterobacteria, salmonella, and mesophilic aerobes.
- ✓ Social status must not negatively impact food quantity for any individual animal (e.g., dominant animals taking more food than subordinate animals and thus certain animals not receiving their required daily intake).
- ✓ If animals are believed to be consuming live food items from the habitat, similar food items should be collected and sampled to assess nutritional content, as well as screened for contaminants and toxicity.
- Prior to offering vitamins or other supplements, the individual animal's health and condition, as well as the diet, are reviewed by the veterinarian or a nutritionist experienced in the species' care.
- ✓ Species-appropriate supplements should be utilized to support each animal's nutritional needs and compensate for the nutrient loss due to the feed freezing and thawing process.
- ✓ To the extent possible, food should be sourced from local fisheries using environmentally friendly and sustainable methods (but this effort should not compromise the nutritional needs of the animals by dictating type or quantity of feed). A dedicated program involving local fishermen could be implemented considering local fish species, in order to adapt the dolphins to more natural conditions.
- Any diet changes, based on weight and condition of the animal, food consumption, activity level and other medical or behavioural considerations, should be made or approved by the veterinarian or other qualified personnel, with any adjustments made to the entire diet to ensure continued nutritional balance.

#### 3.3. Food Presentation and Feeding Techniques

- ✓ The feeding schedule should make every effort possible to mimic the frequency and timing of feeding patterns in the wild for each species.
- Records for each feed, including the type of food, amount consumed, supplements and medications given, and behaviours during feeding should be kept.

- ✓ Feeding in multiple locations can encourage wider utilization of the refuge area and helps to ensure that lowranking individuals have adequate access to food.
- ✓ Feeding stations are able to be monitored effectively both above and below the water, so that food intake can be monitored and uneaten food does not accumulate in any location
- A variety of feeding techniques and locations should be offered to encourage more diverse feeding behaviours (e.g., remote feeders, enrichment devices, and, when appropriate, live food)
- ✓ All methods used to encourage engagement with enriching feeding methods should be based on positive reinforcement.

#### 3.4. Food Storage and Handling

- ✓ Food processing and storage should be done in dedicated kitchen and rooms build according the national regulation for human consumptions: walls and floors should be easily cleanable with round edges and corners; the surface materials have to be easily cleaned with water and routine disinfectants at the working surface; the room should have enough light to ensure proper evaluation of the food and dirty areas; the working areas should have proper drinkable water supply and drainage for cleaning; windows and doors should be equipped with mosquito nets to avoid entrance of flies and other insects; a pest control and cleaning programs should be adopted and routinely implemented.
- ✓ Food is stored, handled and prepared in an appropriate manner to retain nutritional value, freshness, and prevent its deterioration, invasive species or other forms of contamination.
- ✓ Frozen fish or other frozen food should be stored in freezers that are maintained at a maximum temperature of -18°C. A recording system for temperature control should be adopted.
- ✓ Items frozen for use are dated and labelled, and no frozen items are thawed and refrozen. A freezer register should be adopted.
- ✓ Frozen food items should be stored in a sanitary freezer, away from the walls, elevated off the floors and away from the condenser/fans of the freezer to allow for proper air circulation within the freezer.
- Thawed fish/food should be stored in a refrigerator or kept on ice to maintain a temperature no greater than 4°C, used within 12 hours of thawing to minimize bacterial overgrowth, and clearly labelled with the time of thawing.
- ✓ Food items requiring refrigeration are stored in a clean, dry refrigerator, and/or ordered at regular intervals in amounts that can be used prior to spoilage.
- ✓ Products are dated and expired food as well as bags damaged by pests are discarded.
- $\checkmark$  Two to three months' worth of food availability should be ensured at all times.
- ✓ During its handling, food is protected against deterioration, mold, and/or contamination by insects, birds, rodents or other animals.
- ✓ Food preparation surfaces are thoroughly cleaned and disinfected between uses and personnel wash hands thoroughly prior to handling food. Wearing gloves during food preparation is recommended.
- ✓ Staff should avoid handling food while sick.
- Thawing should take place in a refrigerator. If this is not possible or food is still frozen, clean, cold, running salt water can be used. If salt water is not available, thawing with potable, running fresh water may be considered, assuming the area/water is clean and post-thaw refrigeration remains prompt.
- ✓ Food handling protocols should be plainly visible in the food preparation and storage areas.
## 4. VETERINARY CARE

## 4.1. Veterinary Program Personnel

- ✓ The refuge's veterinary medical program is developed and carried out under the supervision of a licensed and experienced cetacean veterinarian and with adequate support personnel.
- ✓ Refuges unable to maintain a full-time veterinarian have access to a part-time veterinarian with suitable training and experience for the animals housed.
- ✓ The refuge has properly trained and qualified professional and supporting personnel as necessary to implement: (1) husbandry (caregivers) and (2) technical support (veterinary technicians, or individuals trained at the refuge).
- One or more personnel is trained and designated to deal with emergencies until a veterinarian arrives or is reached. According to national legislation and under the direction of the veterinarian, he or she should be able to, perform basic first aid, assess animals, administer prescribed medications and treatments, be responsible for administration of post-surgical care, and be skilled in maintaining appropriate medical records.
- Refuges have the appropriate number of personnel, including veterinarians and veterinary technicians or assistants, to meet these standards for all animals in their care 24/7, with consideration given to the number of animals, number of enclosures and/or social groups, and individual medical conditions or needs (e.g., a large number of geriatric or elderly animals, known disabilities or conditions, etc.).
- ✓ The attending veterinarian(s) must be comfortable conferring with other marine mammal veterinarians/specialists as needed for complex cases.

## 4.2. Veterinary on-site Capabilities (laboratory & diagnostics)

- The refuge has on-site and/or off-site capabilities for pathology, surgery, and other veterinary procedures and treatments, and any on-site facilities are appropriately maintained. If it does not have an on-site veterinary facility, or only a partially outfitted facility, it has an arrangement with a nearby veterinary practice for off-site treatment as needed.
- ✓ On-site and/or off-site facilities and services include the following:
- ✓ Diagnostic capabilities including cytology, microbiology, parasitology, complete blood count, blood chemistry, urinalysis, serology, radiology, ultrasound, endoscopy and other appropriate laboratory procedures.
- ✓ Necropsy capabilities include capacity for collection of tissues for histopathology.
- Medical treatment facilities that are clean, have adequate lighting and ventilation, can be easily cleaned and disinfected, and with access to appropriate anaesthetic and emergency equipment.
- ✓ Drugs should be acquired managed and stored according to existing legal framework.
- ✓ Medical treatment equipment is maintained in good working order and is on a program of routine preventive maintenance.
- ✓ Only a licensed veterinarian or veterinary nurse can perform all medical procedures using best practices and protocols for the species.
- ✓ Protocols, guidelines and best practices should be recognized as international standard and they should be approved by a scientific and ethical committee.
- ✓ Veterinarians and support personnel are compassionate and knowledgeable about the humane aspects of animal treatment, including the proper use of anaesthetics, analgesics, and tranquilizers.

- ✓ Basic physical capture and restraint equipment to facilitate medical treatment is available at the refuge and there is the possibility to rapidly isolate an animal in a way that allows veterinary or care staff to access an animal in the event it is medically or otherwise necessary (slide outs are acceptable in most situations, but the refuge should be equipped with a medical lift or medical pool area with hydraulic lift floor that can facilitate safe access to an animal unable to or unwilling to slide out).
- ✓ Medical lifts should be appropriately sized to the species held, designed to remain functional under all circumstances (e.g., be easily connected to a back-up power sources in the event of a power outage), and maintained in good working order.
- ✓ The ability to weigh each animal should be incorporated into the design of the refuge so that every cetacean resident can be effectively weighed (including those in quarantine).
- Necropsies on any deceased animals, will be done at a separate facility. If on-site, this area should be physically separated from live animal holding areas and daily care facilities such as food storage, as well as from other medical areas used to treat live animals.
- ✓ Removal of cetacean remains from the refuge should follow all applicable levels of regulations.
- A detailed report of necropsy results must be archived at the facility. Cause of death and contributing factors for each animal that dies at the facility should be reviewed. Any appropriate changes to husbandry protocols, facilities, and/or medical care should be diligently incorporated based on the findings.

# 4.3. Preventative Medicine Program

- The veterinary medical program includes long term preventative medical protocols and disease surveillance and containment procedures, and is developed and carried out under the supervision of a licensed veterinarian with training or experience in providing medical care for the species housed at the refuge, and who is aware of any specific health issues of the individual animals.
- ✓ Preventive medicine protocol will address the following:
  - regularly scheduled physical examinations/health assessments and blood analysis
  - behavioural assessments
  - quarantine procedures
  - parasite surveillance and control
  - immunization
  - contraception if not regulated with social group management
  - infectious disease screening
  - dental prophylaxis
  - periodic reviews of diets and monitoring of feed intake
  - applicable species-specific husbandry needs
  - routine water quality screening
- ✓ Daily health checks of each animal should include (but are not limited to):
  - Observing physical appearance
  - Assessing activity level
  - Monitoring behaviour and eating habits
  - Nature and frequency of respirations
- ✓ Animals are immunized as recommended by the attending veterinarian, using currently recommended procedures and products as appropriate for the country, species and individual. When animals are immunized on-site by refuge personnel, the type, serial number, and source of the product are recorded in the individual animal's medical record.

- ✓ Each animal should receive at least one comprehensive medical exam annually. This is a minimum standard for preventative medicine and should be exceeded when conditions warrant.
- ✓ A comprehensive medical exam should include:
  - Morphometrics (including body build index and/or weight)
  - Body condition exam consistent with any applicable scoring system (including skin, eyes, teeth, genital opening, anus, blowhole, mentation and responsiveness, buoyancy, overall symmetry, etc.)
  - Dental examination
  - Blood sampling (routine haematology and serum chemistry, hormone and additional analysis as indicated)
  - Blowhole cytology and microbiology, including antibiotic resistance, and evaluation of respiratory system health
  - Endoscopy or gastric wash and collection of gut microbiome data
  - Faecal sampling (cytology, parasitology, and bacterial culture, possibly including microbiomics, proteomics and metabolomics)
  - Pathogen screening (tailored to the specific pathogens of concern for the region, species, and individual history)
  - Diagnostic sonography
- Each animal is weighed annually at a minimum, either during a routine physical or through the use of a builtin scale integrated into slide-outs, to monitor for signs of illness and to determine dosages for pharmaceuticals and chemical anaesthetics.

# 4.4. Quarantine and Isolation Care and Facilities

- ✓ The refuge should have separation areas for separation of animals not in need of full medical quarantine (e.g., animals in need of separation due to behavioural considerations, separating females from males during fertile periods, or animals being isolated prior to introduction to the larger refuge area). A separation area may have shared water with the larger refuge area (simple netted separation).
- ✓ The refuge should have a medical quarantine facility with adequate capacity to prevent pathogen transmission between hosted cetaceans, and between refuge cetaceans and wild populations (e.g., double netting).
- ✓ Quarantine areas may be shaded or indoors if deemed necessary for animal care or necessary to meet applicable regulation requirements.
- A medical quarantine facility must have the ability to do full examination and treatment of the animals under care: the quarantine pool should have the physical features as suggested by EAZA and EU Directive 1999/22/CE including easily cleanable surface with round edges and corners; controlled water supply and management with a disinfectant dosage system; a pump system able to change rapidly the entire water body; the ability to manage rapidly water depth through a lifting floor or by a rapid draining system which allow a rapid intervention on the animal
- All utensils, equipment, supplies, and outer clothing used in quarantine are restricted to that area. Where this
  is not possible, items that the refuge does not have duplicates of and which cannot be restricted to quarantine
  areas must be thoroughly cleaned and disinfected prior to being moved to or from quarantine areas, and
  movement between areas should be minimized.
- Protective clothing, boots and footbaths are used by all staff entering the quarantine area or areas containing quarantined animals. Quarantine clothing is not removed from the quarantine area, except in a sealed container for cleaning. Footbaths are changed regularly.

- ✓ Caregivers are equipped with appropriate personal protective equipment such as masks, face shields, disposable examination gloves, boots, Tyvek-type suits or sleeves, when cleaning or handling anything with which the quarantine animals come into contact.
- ✓ Water from the medical quarantine area should be filtered or treated and disposed of in a safe area away from the habitats of the other refuge animals.
- ✓ Waste or biological material from medically quarantined animals should be treated as biologically hazardous material and disposed of accordingly.
- Clearly visible signs indicating areas of quarantine are displayed as needed, with particular consideration for placement at entry/access points.
- ✓ A detailed risk assessment must be completed for each new animal introduced to the refuge. The risk assessment should identify any potential threats to the health of the current refuge animals, new animals, and the local ecosystem, as well as outline planned steps to mitigate those threats. The likelihood and consequences for each identified threat should be considered.
- All new arrivals to the refuge from captive facilities should undergo a health evaluation and be pre-screened for transmissible pathogens, including serological examinations, prior to transport and kept isolated after prescreening from those that are not being transferred to the refuge.
- Prolonged isolation of an animal either in a medical quarantine area or a separation area should be avoided (see Well-being and Handling of Cetaceans section);
- ✓ During quarantine of incoming animals, the following procedures should be performed as applicable: examination, vaccination as appropriate, clinical and laboratory tests, treatment for external and internal parasites as needed, evaluation of psychological well- being, verification of identification.
- ✓ An enrichment program is in place for quarantined animals.
- ✓ Animals that die in quarantine receive a complete post-mortem examination including histopathology.

## 4.5. Breeding Policy and Contraception (no intentional breeding of animals in lifetime care)

- ✓ Group management rather than medical contraception should be preferred to prevent breeding and avoid reproduction.
- ✓ In case it is not possible, contraception programs are appropriate for the species and, as determined by the veterinarian, prioritise the most effective and minimally invasive methods.
- ✓ Moving pregnant females should be avoided. In the event that a pregnant individual is brought to the refuge, appropriate habitat for birthing and caring for an unweaned calf should be provided to the mother-calf pair.
- If animals arrive at the facility pregnant, the refuge provides necessary care as determined by the veterinarian.
   Neonates are only removed from the mother for hand-rearing if there is a threat to the life of the new-born or mother.
- ✓ Males should not be housed with pregnant females, prepartum or postpartum females.

## 4.6. Zoonotic Disease Control Program

- The personnel and refuge veterinarian are knowledgeable about zoonotic diseases that may affect animals at the refuge, and implement appropriate policies and procedures as needed to mitigate risk and deal with any exposures that occur.
- ✓ The refuge has emergency procedures and a defined process to avoid transmission of all potential or emerging diseases through bites, scratches, body fluids, direct contact with animals and other means.

- ✓ Personnel have adequate training to understand the potential risk of disease transmission, including potential sources of disease, modes of disease transmission, and clinical signs associated with disease, and are encouraged to contact their own health care provider if they experience any unusual symptoms after working with cetaceans. All personnel are informed when a zoonotic disease occurs at the refuge and relevant personnel are trained in how to safely care for animals with disease.
- Personnel should periodically be checked according to the national worker safety legislation. They should declare any contact with domestic, wild or livestock animals in order to prevent any contact and implement proper screenings.
- ✓ When a reportable disease is identified, all local, state/province, and national regulatory officials are contacted, as required.
- ✓ A complete necropsy, including histopathology and microbiology, has to be performed on deceased animals known or suspected to carry zoonotic disease within 24 hours of death.
- ✓ All areas in which personnel have direct contact with animals have hand-washing facilities available in the immediate vicinity (or an equivalent; e.g., bactericidal hand wipes).
- $\checkmark$  Food consumption by personnel does not occur in the immediate area of animal contact.

# 4.7. Euthanasia (IF performed, in compliance with any national or local law, under the strict supervision of a licensed veterinarian)

- ✓ The veterinarian is the only person responsible for recommending and performing humane euthanasia, according to the national existing laws. Euthanasia is in the best interest of the individual animal and is only used as a final option, and is not used as a management tool (such as a means to create space for more animals).
- ✓ Acceptable reasons for euthanasia include:
  - incurable medical/behavioural health status that is likely to cause unmanageable pain or suffering;
  - medical/behavioural health status where available treatment will cause unmanageable pain/suffering, or it will not be effective in restoring the animal to an acceptable quality of life;
  - medical/behavioural health where treatment is beyond the normal community standards of monetary expenditure and would cause an excessive burden on the refuge resources, and no other facility/placement provides a reasonable alternative option;
  - the process of aging has resulted in an unacceptable quality of life;
  - in the event of presenting an infectious disease risk to some or all of the residents;
  - in the event of presenting a high risk of harming themselves, other animals and/or humans.
- ✓ Euthanasia should be adopted after the evaluation of an ethical committee.
- ✓ The decision whether or not to separate (both visually and acoustically) the animal being euthanized from the other animals should be made by the attending veterinarian and the animal care staff.
- ✓ A complete post-mortem examination including histopathology should be performed to confirm the underlying medical reason for euthanasia.

# 4.8. Biosafety and biosecurity

- A refuge may be also dedicated to wild animal rehabilitation. If that is the case, any rehabilitation area should be physically separated and different personnel and equipment should be used.
- Any wild animals entering the refuge deemed to be non-releasable, should undergo a strict quarantine and health check including all the known diseases listed for cetaceans (virological, microbiological, parasitological)

and mycological) including serological evaluation. Exams should include investigations of blood, serum, blow, mouth scrubs, faeces and should be performed using both cultural and the more advanced techniques as virome and microbiome approach. Antimicrobial resistance should be tested.

- A complete and throughout plan considering biosafety should be implemented. The plan should include the hazard analysis, critical control point management and a contingency plan in order to identify possible risks, the severity of risks and possible mitigations to prevent or solution to be adopted.
- The plan should include the evaluation of pathogens entrance considering water and food supplies, pests' control, personnel and equipment contamination, wild or domestic animals' entrance, animals' admittance and medical controls, quarantine procedures. Additionally, the plan should consider the data coming from the epidemiological situation in the area for all relevant and reportable diseases.
- ✓ The plan should also consider waste and food remains management; water output monitoring including viruses, bacteria and protozoa; procedures for water output treatment.
- ✓ The plan should include all the programs implemented for monitoring animals' and personnel health, water quality and food safety, disinfection and cleaning process for different areas and facilities, water output management and treatment; integrity of fences, gates and separation. The plan should also state all technologies implemented and frequency of the procedures to ensure its regular and consistent implementation.
- ✓ Biosafety measures include also the contingency plans to avoid any incidental entrance of wild animals, incidental exit of the kept animals and entrance of external person or monitor of volunteer damages.
- ✓ The plans should include checklists forms, reporting systems and traceability of all the processes.

## 5. WELFARE AND HANDLING OF ANIMALS

## 5.1. Physical Welfare

- ✓ Animals should be routinely monitored by qualified personnel to ensure their physical well-being (i.e., nutritional, physical and social conditions) and any unusual activity should be reported and recorded, with appropriate timely response.
- ✓ The physical environment of the refuge should allow for a wide range of behaviours, including those related to the majority of cetacean species daily activity in the wild (see Cetacean Housing section). The refuge should allow for the animals to spend the majority of their time oriented to the underwater environment, while allowing for the animals to rest (stationary or swimming), interact with a stimulating natural environment, and to interact with any objects provisioned for enrichment. If possible, with consideration for provisioned food, animals should be allowed to forage for prey.
- ✓ Animals should be able to visually and physically distance themselves from one another, as well as humans such as care staff outside of interactions necessary to provide for the health and well-being of the animals.
- Physical abuse, deprivation of food, and other forms of negative reinforcement or punishment-based training are never used to train, shift or otherwise care for animals and will be considered as animal abuse according to the national legislation.

## 5.2. Social Housing and Group Management

- ✓ Animals are grouped so that they are compatible, with consideration to their natural social groupings and individual history, and with the safety of animals and refuge personnel in mind.
- ✓ Animals are housed so that:
  - those in the same enclosure are compatible;
  - they are not housed near animals that interfere with their health or cause them physical or psychological discomfort;
  - there is appropriate space between individuals within and between social groupings and to allow for temporary voluntary isolation from others;
  - no individual endures constant harassment or suffers physical injury, nor do social behaviour prevent any individual from maintaining proper nutrition and hydration.
- Solitary housing is generally reserved for situations including, but not limited to: quarantine; medical assessment and/or care; lack of appropriate social partners or social tension resulting in disruption to the social group, physical aggression leading to injuries, and anticipated birth. Ideally and when appropriate, individuals in solitary housing should have access to visual and auditory access to conspecifics as well as regular caregiver interaction.
- Staff have an understanding of the natural history and normal behaviour of the species in the wild and are regularly assessing compatibility among individuals through ongoing behavioural and health monitoring and assessments.
- ✓ If multiple species (not recommended) are present at the refuge, species are integrated or separated based on the well-being of the animals (e.g., no direct mixing of predator and prey species).
- ✓ If applicable and appropriate for the species, every effort should be made to keep mother- calf pairs in the same groupings.
- ✓ Introduction of any new animal to a social group is done safely and according to techniques appropriate for each species, under the direction of designated personnel.

## 5.3. Behavioural/Psychological Well-Being

- Schedules should be structured around the needs of the animals and, accordingly, individualized welfare plans prepared and approved jointly by veterinarian and animal care staff, are in place to enhance well-being. Their implementation is documented and archived.
- The behavioural choices of the animals should be monitored through non-invasive methods, documented and archived to ensure that the monitoring and review of long-term data of each individual is informing decisions impacting their well-being.
- ✓ The animal care staff should be trained to identify, address and minimize stereotypic or harmful behaviours (including the ability to interpret data).
- ✓ Individualized protocols to reduce/eliminate stereotypic or harmful behaviours should be developed and approved jointly by the veterinarian and animal care staff, and results documented and archived.
- There should be a positive reinforcement training program in place to maintain voluntary participation in animal care and veterinary procedures that support health and welfare goals. The animal care staff should be provided the tools and resources needed to safely and successfully implement the positive reinforcement training protocols.
- ✓ The refuge should provide staff with training on animal welfare and assessment methods. This training should be regularly updated to incorporate currently available information.

- Animal welfare should be assessed at a regularly established interval, and additionally as needed, including when significant changes occur, such as the addition (or removal) of animals, major environmental changes (e.g., weather events), and location changes. Results from welfare assessments should be documented, archived, available for review and should directly inform action plans created by animal care staff.
- Although the refuge environment should provide the appropriate physical and mental stimulation for the animals, there may be situations that necessitate additional opportunities, which are to be provided by staff.
   Whenever possible, engagement with the natural environment as a source of enrichment should be encouraged over artificial enrichment techniques.
- ✓ All enrichment opportunities should be evaluated and adjusted as necessary for each animal's well-being and should be safe for both the resident animals and any wild flora or fauna that may be exposed.
- ✓ If enrichment sources include human interaction with trained staff, the interaction should be limited by the interest level of the animals and should be non-disruptive to other animals in the vicinity.
- ✓ Emphasis should be placed on underwater enrichment sources rather than surface-level enrichment sources to encourage behavioural patterns normally seen in the wild.
- ✓ The refuge has an enrichment program that promotes species-appropriate behavioural opportunities at all times (including periods of quarantine and isolation) and ensures the animals' psychological well-being. An appropriate program may include the following:
  - Structural enrichment Enclosure design and furniture that add complexity to the environment and promote species-specific behaviour.
  - Object enrichment Objects that encourage inspection and manipulation and promote species-specific behaviour.
  - Food enrichment Varying food choices and food presentation, including the use of puzzles that increase food procurement time.
  - Social enrichment Affiliative interactions between caregivers and animals may be appropriate in some instances.
- All animal care personnel are trained to recognize species-specific behaviour, abnormal behaviour and clinical signs of illness, and a plan to address the concerns is developed.

# 5.4. Animal-Caregiver Relationships

- Positive relationships between animals and caregivers must be maintained. However, to the extent possible, the most important relationships for each cetacean should be relationships with other cetaceans. Relationships between cetaceans and staff should be encouraged to be secondary and exist in support of meeting the animal's social and health needs in more species appropriate ways (i.e., cetacean to cetacean).
- ✓ Where possible, new caregivers accompany a trusted caregiver until the animal becomes comfortable with the new individual.
- ✓ Where possible and appropriate, animals become familiar with the veterinary staff, allowing close observation.
- Relationships between staff and the animals are evaluated at a pre-established regular interval and additionally when needed. Accordingly, changes are made to staff assignments when staff and animal relationships are found to be disruptive to the animals.

## 5.5. Handling and Restraint

 Any necessary handling and restraint must be done safely and appropriately, with minimal distress to animals, and personnel are trained in species-specific safe handling techniques/practices.

- ✓ Protocols for species-appropriate handling and restraint methods should be developed, while tools and resources needed for safe handling and restraint should be available on- site and maintained in good working order. These will include, at least, appropriately sized stretchers, medical lift(s) and netting.
- ✓ There should be protocols in place for managing animals should they not be near an area designed for handling and restraint in the event of an emergency (e.g., a cetacean in deep water a distance away from a medical lift or a netted bottom).
- Animals being handled or restrained should be closely monitored by qualified staff (cetacean veterinarians and/or highly trained animal care staff) for signs of stress both during and after the handling or restraint.
- Handling for veterinary care is done as expeditiously and carefully as possible in a manner that does not cause trauma, overheating, excessive cooling, physical harm, or unnecessary discomfort, and minimizes physical and psychological stress as much as possible.
- Chemical capture is performed only by a licensed veterinarian and only when other methods are not possible due to the significant risks of sedating free-swimming cetaceans. Specific anaesthetic protocols, including record-keeping, are followed. Emergency resuscitation drugs and equipment (oxygen, on-demand PPV, etc.) must be on-hand during any sedation event.
- Chemical capture is not used when multiple animals are in an enclosure except in an emergency situation. In such cases, all possible precautions are taken to prevent danger to personnel, all animals in the enclosure, and the animal being sedated.

# 5.6. Cetacean Transport (conducted only when strictly necessary – being transported to the refuge)

- ✓ Ideally, the refuge location should be easily accessible and well connected. Reaching the site should be easy through roads in good conditions to facilitate the arrival of heavy vehicles delivering materials, animals and, occasional visitors. The presence of an airport within a <100 km radius will also be an asset. In any case, cetacean transport should be conducted only when necessary (e.g., being transported to the refuge).
- ✓ A comprehensive plan that addresses every process step is established and communicated to all involved parties prior to any transport. Authority, roles and responsibilities are clear to all.
- ✓ Health examinations are conducted prior to an animal's arrival at the refuge or prior to transfer to another facility. These examinations may include a complete physical exam with attention to parasite checks, necessary vaccinations, and completion of any tests required by regulations of the receiving state/province or country.
- Candidates for transport should be medically and behaviourally evaluated prior to transport, and criteria should be established on an individual basis to ensure that the animal being transported is fit for transport (mentally, emotionally, and physically) and in appropriate condition for the receiving location (e.g., free from uncontrolled transmissible pathogens).
- ✓ Health certificates and any required transport permits accompany the animal when being transported interstate or internationally.
- Capture, restraint, and transportation methods consider the animal's temperament and behaviour in order to minimize injury and distress.
- Equipment suitable for lifting, cradling (where applicable) and transportation of animals kept within the refuge is maintained in good condition and readily available. Transport containers and vehicles are cleaned after use.
- All transport equipment should be appropriately fitted to the animal being transported and maintained in excellent condition and meet appropriate animal welfare standards. This equipment includes but is not limited to:

- Stretchers

- Cradles
- Emergency medical/veterinary equipment
- Monitoring equipment
- Care equipment (e.g., spray bottles, sheets, A&D ointment)
- Lifting equipment (e.g., cranes, lifting cables, taglines)
- Communication equipment
- ✓ When possible, animals should be conditioned to the possible stressors of transport, such as stretcher and cradle training.
- All transport team must include members who have previous cetacean transport experience and all members should be trained on the transport procedure and aware of their individual roles within it
- ✓ Transport routes should be predetermined and secured (e.g., security escort agreements in place, local municipalities informed) prior to transport.
- ✓ Contingencies should be established for all parts of the transport and alternative arrangements should be available on standby during the transport.
- ✓ The transportation route should be selected based on the welfare of the animal being transported, taking into consideration duration, method of transport, and safety.
- ✓ The cetacean should be carefully monitored (respirations, heart rate, temperature, signs of distress or agitation) throughout the transport by trained staff.
- ✓ Sources of physiological and psychological stress should be mitigated. Methods should be employed to: maintain optimal temperature (cooling/warming), mitigate positional
- ✓ stress (padding, positioners), minimize noise, bright light and movement around the animal, and keep individuals with familiar cohorts.
- ✓ If the transport method uses a water-filled transport box, water temperature should be maintained in a species-appropriate range throughout transport.
- ✓ An appropriate supply of emergency food (based on species, individual eating habits, and routine duration/logistics) should be transported with the cetacean.
- $\checkmark$  A qualified cetacean veterinarian must be present throughout the transport.
- ✓ All animals taken outside the refuge are kept securely at all times and managed in such a way that the animal is under control and not likely to suffer distress, cause injury or transmit or contract disease.

## 6. ECONOMICS; considerations on long-term sustainability and operational costs

- ✓ The refuge will host cetacean primarily originating from the captivity industry and, whenever needed and possible, dolphins that have been rescued after stranding. Therefore, a cetacean refuge should be considered a permanent accommodation for all animals deemed to be unfit for release. Since these will be long-lived marine mammals, in many cases needing housing for a few decades, the long-term economic sustainability of this facility must be assured to every possible extent. A business plan should be developed and proposed considering all the costs and revenues.
- In this document it is not possible to tailor a generic economic sustainability plan for a cetacean refuge model because this plan may vary largely depending on a number of variables (e.g., country, authorities involved, geography). In any case, commitment of long-term support from local, national, regional and international authorities is essential.
- ✓ Additional possible sources of funding may include and are not limited to, among others, the following:

- Private Donations from individuals, NGOs and foundations interested in marine conservation and animal welfare.
- Corporate Sponsorships through partnerships with businesses interested in marine conservation and animal welfare.
- Admission Charges from visitors and educational groups. Specialized tours focusing on education and conservation may be also an option.
- Membership Programs: Annual memberships offering benefits to regular supporters.
- Merchandising and educational materials (can be extended through an online store).
- Collaborative Programs: Joint initiatives with universities, research institutions, and NGOs.
- Application to different funding programs and calls
- Considering the variability of funding, a clear document stating the organization of the management of the refugee, including the different institutional bodies involved, should be clarified.

# 7. EDUCATION & OUTREACH

An effective educational program and outreach strategy can significantly enhance the impact a of a cetacean refuge. By engaging the public, raising awareness, and fostering a connection between people and marine life, the refuge can build strong support for its conservation efforts and ensure long-term sustainability.

## 7.1. Education and research program development

- ✓ Potential for an education/interpretation centre with multimedia resources providing information on the biology of the animals, their conservation needs as well as the rationale dictating the need for cetacean refuges.
- ✓ Well-defined research proposals for non-invasive and unobtrusive respectful scientific research should be considered. These should be carefully reviewed by both, a scientific and an ethics committee, in collaboration with the refuge team. Priority should be given to the welfare of the animals hosted in the refuge and all proposals should include a protocol for the monitoring of the animals before, during and after the study/experiment is conducted. If any animal shows signs of distress when exposed to the research-related activities (directly or indirectly) the activity must be immediately interrupted.
- Research and educational programs should be aimed to enhance conservation and welfare of the animals in the wild.

## 7.2. Public engagement

- The refuge may allow, under certain conditions, the presence of visitors (see economics section). Dolphin observation will be encouraged by using remote technologies (e.g., webcams, advantaged land-observation points). Educational programs will be conducted to inform the public about the implications and consequences of captivity as well as promoting research programs on the rehabilitation and, when possible, the release of dolphins at sea.
- ✓ Volunteer Programs and Paid volunteer opportunities may be considered for individuals interested in contributing to and working at the refuge.

## 7.3. Communication channels

- ✓ By developing and implementing a well-rounded communication strategy, a cetacean refuge will be able to effectively promote its mission, engage with the community, and provide new opportunities for funding and collaborations (not only with potential sponsors but also, for instance, with research and conservation organizations). Key messages at the epicentre of the communication strategy must be very clear. Some to be considered may be:
  - Cetacean behaviour and ecology
  - Importance of Cetaceans (e.g., ecological, cultural, and economic significance)
  - Refuge's role
  - Cetacean conservation (threats, conservation strategies...)
  - How to help: steps for people to support the sanctuary (donations, volunteering, citizen science...).
- ✓ Some communication channels to be considered are:
  - Website: Create a dedicated website with regular updates, articles, and educational resources.
  - Social Media: Use platforms like Facebook, Twitter, Instagram, and YouTube to share engaging content, such as videos, infographics, and stories.
  - Email Newsletters: Send regular updates to subscribers about news, events, and ways to get involved. Share compelling stories of individual cetaceans, success stories from the refuge, as well as profiles and/or testimonials of volunteers and staff.
  - Press Releases: Distribute press releases to media outlets to announce important news and events.
  - Community Events: Host events such as beach clean-ups, educational workshops, and guided tours of the refuge.
  - Partnerships: Collaborate with schools, universities, and other organizations to reach broader audiences.
  - Key metrics such as website traffic, social media engagement, email open rates, event attendance, and media coverage should be regularly evaluated (quarterly?) to get feedback on communication initiatives and their success.
  - Feedback from visitors, volunteers, and partners also important to assess the effectiveness of communication efforts.
  - Act accordingly and make adjustments to the strategy to improve outreach and engagement, as necessary.

# ANNEX III - Note on Procedural Steps for Requesting Advice from the ACCOBAMS Advisory Committee on Semi-Enclosed Facilities

**Step 1.** Those seeking advice on issues related to semi-enclosed facilities for cetacean species in the ACCOBAMS Area are invited to firstly read carefully the Guidelines for Best Practices During the Installation and Management of Semi-enclosed Facilities for Cetacean Species in the ACCOBAMS Area<sup>4</sup>.

If after reading those guidelines they feel the need to ask for further advise, they are kindly requested to produce a concept note to present the initiative/project for which advise is being requested (e.g., dolphin refuge)

Concept note should include:

- Background and context.
- Specific questions or guidance sought.
- Relevant supporting documents, including national legal background and scientific data.

Step 2. Submission of the concept note to the ACCOBAMS Permanent Secretariat by e-mail.

**Step 3.** The ACCOBAMS Secretariat will review the request for completeness and relevance, will acknowledge receiving the above-mentioned message (Step 2) and, if duly completed, will forward it to the Advisory Committee on semi-enclosed facilities (AC).

**Step 4.** The Chairman of the AC receives the e-mail with the concept note and, after confirming that at this stage no other information is needed, this concept note will be shared with the rest of the AC members and convene a meeting, if needed, depending on urgency.

**Step 5.** The AC, after internal consultation, will share its opinion with ACCOBAMS SC. It may also be the case that additional information or clarification from the submitting party is requested by either AC or SC.

Step 6. Once a response has been formulated, it is sent to the requesting party, via the Secretariat.

# Step 7. Follow-Up Actions by AC.

Implement recommendations or seek further clarification, if needed.

If the matter requires ongoing support, the body seeking advice may consider establishing a formal collaboration with ACCOBAMS or relevant working groups.

# Step 8. Reporting and Feedback

Within one month after receiving a response from the Secretariat, the body seeking advice should provide feedback to ACCOBAMS on how the advice is meant to be implemented and establish a calendar for providing a brief report on it.

<sup>&</sup>lt;sup>4</sup> At the moment of presenting this note at SC16, the Guidelines document is still a draft doc.

This procedure should help in refining future advisory processes and ensure alignment with conservation common objectives.

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## **RECOMMENDATION 16.14 - AREA-BASED MEASURES FOR CETACEAN CONSERVATION**

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

*Recalling* that in 2010, the ACCOBAMS Scientific Committee started a preliminary identification of areas of special importance for cetaceans in the Agreement Area, mainly based on "expert opinions" (Resolution 4.15 Annex). Moreover, thanks to the ACCOBAMS efforts, including the recent ACCOBAMS Survey Initiative (ASI), knowledge of cetacean species has since greatly improved as has work in mapping pressure e.g. through the European Directive Marine Spatial Planning,

*Recalling* that at the MOP8 in 2022, Parties requested the revision of this Annex and of the ongoing process looking at quantifying anthropogenic pressures over cetacean habitats "*taking into account the already existing mechanisms and tools related to area-based cetacean conservation*" (e.g. IMMAs, OECMs, MPAs, MSP, etc.),

*Recalling* the ACCOBAMS-SC12/2018/Doc35 "Recommendation 12.8 on the value of the designation of IMMAs and CCH to achieving ACCOBAMS objectives", the report of SC15 conclusion 36 recommending to the Task Group on "Areabased measures for cetacean conservation" to review and update the work to be done for "area-based measures for cetacean conservation", also considering the recommendations from the workshop held in March 2022, the suggestion to replace the term "Cetacean Critical Habitat" with an appropriate terminology and the MOP8 discussions and Annex 14 of the report, and finally the internal workshop hold in March 2024 in order to reframe the process,

Aware of the Scientific Committee's advice of the need for care and sensitivity when providing official maps which, although they provide a powerful communication tool, also have a potential capacity for misuse and/or misinterpretation,

Aware of the difficulties of appropriately combining overlapping maps created in different ways and from datasets of different spatial and temporal scales exercise to show robust and realistic co-occurrence to risk-area maps,

*Recognising* that IMMAs - "discrete portions of habitat, important to marine mammal species, that have the potential to be delineated and managed for conservation" - are an initiative of the Joint IUCN SSC/WCPA Task Force on Marine Mammal Protected Areas (the "Task Force") and are identified following application of agreed criteria. This process has been acknowledged by CMS (Resolution 12.13, 2017), that *inter alia* requested Parties and invited Range States to identify specific areas where the identification of IMMAs could be beneficial,

*Recalling* the joint IMMA Task Force/ ACCOBAMS October 2016 workshop identifying IMMAs in the Mediterranean Sea (<u>www.marinemammalhabitat.org/imma-eatlas/</u>),

*Recalling* to the Post-2020 Regional Strategy for Marine and Coastal Protected Areas and Other Effective Area-based Conservation Measures in the Mediterranean, adopted by the Barcelona Contracting Parties at their 22nd Meeting (COP 22) (Antalya, Türkiye,7-10 December 2021).

The Scientific Committee recommends:

- (a) adoption of the terminology and process agreed at the (2022 and 2024 workshops) and in particular replacing the term "Cetacean Critical Habitat" with the more appropriate **Cetacean Co-occurrence with Human activities;**
- (b) continuation of the work of the CCH Task Group to develop proposed CCHs area, taking into account the recommendations of the workshop, as well as existing mechanisms and tools related to area-based cetacean conservation presented in the annex to the workshop report;
- (c) further exploration with relevant experts (including those at the IWC Scientific Committee) on appropriate consideration and mapping of uncertainty and the integration of maps of cetacean and human activities, including experts on Marine Spatial Planning;
- (d) liaison with INFO/RAC and PAP/Rac and their mapping platform Kmap as well as continued exploration of the facilities of the NETCCOBAMS network;
- (e) active participation in the "Strategical Alliance among the Secretariats of ACCOBAMS, GFCM, IUCN-Med, UNEP/MAP through SPA/RAC and in collaboration with MedPAN" and the Pelagos Agreement, concerning Spatial-based Protection and Management Measures for Marine Biodiversity;
- (f) reiteration of the great value of the IMMA process to ACCOBAMS and the need for the re-assessment of the Mediterranean region for the identification of IMMAs in 2026 as a priority action for the next triennium;
- (g) replacement of Resolution 4.15 with the present one and ensuring that the Archived Resolution Annex being clearly marked with the following text:

This document was prepared in the framework of the 5<sup>th</sup> Meeting of the Parties to ACCOBAMS in 2010. It should not be published or quoted without the permission of the ACCOBAMS Secretariat. The designations employed and the presentation of the material in this document, that should be considered as a whole and not as extracts, do not imply the expression of any opinion whatsoever on the part of the Agreement concerning the legal status of any State, Territory, city or area, or of its authorities, or concerning the delimitation of their frontiers or boundaries. The opinions expressed in this document do not necessarily represent the views of the Agreement.

## **RECOMMENDATION 16.15 - NETCCOBAMS**

Considering the Recommendation 14.10 - NETCCOBAMS,

## The SC recommends:

- to review and update the Terms of Reference of the expert working group (WG) on NETCCOBAMS;
- to develop Guidelines on NETCCOBAMS use including specification on access to maps, data and information according to different types of users, in order to guarantee the safe use of sensitive data;
- to the NETCCOBAMS WG to organize dedicated meetings (ToR to be prepared), as appropriate, to review existing maps, data and information present on the platform, and to agree on the best use of the platform's options;
- to the NETCCOBAMS WG to periodically meet, as appropriate, in order to determine which type of users can access the new material added into the platform (maps, data and information);
- that once published, the Secretariat should disseminate information on the value of the NETCCOBAMS online platform (including its contribution to achieved mitigation measures) to national and international fora, managers, stakeholders (e.g., shipping companies, ports and IMO) to increase the visibility of the work done and encourage its use and the submission of data.

# ANNEX IV - SUMMARY OF THE WORK CARRIED OUT BY THE CORRESPONDENCE GROUP ON REVISION OF RECOMMENDATION 12.1

# [REGIONAL REPORTS ON THE CONSERVATION STATUS OF CETACEANS AND RELEVANT ACTIVITIES]

**Members**: Caterina FORTUNA, Ayaka AMAHA ÖZTÜRK, Lobna BEN NAKHLA, Léa DAVID, Tilen GENOV, Pavel GOL'DIN, Drasko HOLCER, Anastasia KOMNENOU, Souad LAMOUTI, Giancarlo LAURIANO, Celine MAHFOUZ, Iryna MAKARENKO, Aurelie MOULINS, Simone PANIGADA, Dimitar POPOV, Maylis SALIVAS, Yianna SAMUEL, Mohamed Naoufal TAMSOURI, Arda M. TONAY.

# FIRST PART

In light of the discussions carried out at the SC15 (2023), the primary objective of the "Recommendation 12.1 Correspondence Group" was to review and update the procedures and guidelines for the preparation of the reports from Regional Representatives (RRs), including the associated template, for consideration at SC16 meeting.

The Correspondence Group (CG) reconsidered the two existing objectives of such reports that is: to "*provide a report to the SC* [Scientific Committee] *on*":

- a) "the conservation status of cetaceans"
- b) "relevant activities".

In particular, it was considered whether the RRs should and could engage into the activity of providing a periodic report (e.g., triennial) to the Scientific Committee *"on the conservation status of cetaceans"* rather than just compile a list of *"relevant activities"* twice per triennium (which is an activity more in line with the role of Sub-regional Coordination Units).

It was noted that RRs would need to receive some instructions from the National Focal Points (NFPs) of the Contracting Parties (CP) on their *"conservation targets"* which are needed to be able to assess (and define) the *"status of cetaceans"* in the ACCOBAMS context (e.g., follow EcAp/IMAP or EU MSFD definitions).

The CG concluded that such reports would represent a challenging task to be achieved but, in principle, this would be an appropriate challenge for members of the ACCOBAMS SC. The CG also felt that simpler reports, such as ones listing ongoing activities, had little utility and high risk of duplicating National Reports submitted by Contracting Parties (Annex 2) or ACCOBAMS Partners (Annex 3) to the MOP.

The CG considered if some sort of "indices" could be identified and used as "proxies" of conservation status, in order to at least highlight whether the status of a population and/or species was improving, stagnating or deteriorating, based on the most recent IUCN Mediterranean Red List Assessment for each species or sub-population. For example, using semi-quantitative information on abundance, mortality, reproduction, health status, newly identified threats or cessation of those, and improvement of legal status following the IUCN Red listing category.

## SECOND PART - RECOMMENDATIONS

It was noted that the role of Regional Representatives should be reconsidered in the SC Rules of procedure, as the Agreement Article V on the role of the two sub-regional Co-ordination Units states that they "1. [...] c) to service meetings of the Scientific Committee and to prepare a report for communication to the Meeting of the Parties through the Agreement secretariat. 2. Each Co-ordination unit, in consultation with the Scientific Committee and the Agreement secretariat, shall facilitate the preparation of a series of international reviews or publications, to be updated regularly, including: a) reports on the status and trends of populations, as well as gaps in scientific knowledge; b) a sub-regional directory of important areas for cetaceans; and c) a sub-regional directory of national authorities, research and rescue centres, scientists and non-governmental organizations concerned with cetaceans.". This Agreement article essentially indicates that SC Regional Representatives should have an

assisting/consulting role (on behalf of the SC) in the compilation of reports/documents prepared by the sub-regional Co-ordination Units, which are the actual leading bodies.

When considering ways to achieve useful and streamlined reporting on relevant activities in the Agreement, the SC agreed on the need to identify a formal and systematic process on how Sub-regional Coordination Units, National Focal Points and RRs gather the necessary information, so that the reports are informative, efficient and, most importantly do not duplicate, even partially, any information or effort, and that they ensure the highest level of participation and flow of information. A formal and systematic process to prepare any ACCOBAMS Report should consider, at the very least, the following points: WHO: identify the bodies that would be in charge of launching the "data/information request" within a reasonable deadline (e.g., Permanent Secretariat only, sub-regional Coordination Units only, or both bodies); WHAT: identify the necessary information required to achieve the objectives of each reporting (e.g., alert on important/unusual issues, provide news on ongoing activities or threats, or assess conservation status of species and populations); HOW: identify ways to collate the necessary information (e.g., decide which "communication tools/protocols" and a timeline, including considerations on: (a) the time required to develop such report/s; (b) the appropriateness of the reporting period in relation to the preparation of other relevant reports (e.g., sub-regional Coordination Units reports, National Reports, Partners reports, IUCN/ACCOBAMS Red List updates and any other major assessment by the Scientific Committee); (c) the production of a single "institutional" report; and (d) time required to obtain any meaningful information on the indices of conservation status; (e) potential new/other ways to convey at least some of the information (e.g., ACCOBAMS website, NETCCOBAMS, ACCOBAMS newsletter digest, published papers digest); (f) the role and contribution of Regional Representatives and of other members of the Scientific Committee to the preparation of these reports; (g) automatization of the reporting (e.g., shared online submission form and working flow/system with different level of credentials).

In terms of template for a "Sub-Regional Coordination Units and Regional Reports on the conservation status of cetaceans and relevant activities", the SC endorses the attached proposal (Annex 1) largely based on the list of subsections of the ACCOBAMS work plan and recommends its adoption for the next triennium.

Moreover, in regard to the need to avoid duplications or overlaps with National Reports (Annex 2) and ACCOBAMS Partners activity reports (Annex 3), the SC recommends the drafting of a single triennial Report including all four ACCOBAMS regions, drafted in the year before the MOP, which would be part of an overall reporting system including Annex 1 and a fully revised version of Annex 2 and 3, besides a section from *Sub-Regional Coordination Units*. This would ensure consistency, brevity and help avoiding duplications. In this respect, the SC respectfully suggest to the Secretariat and the Bureau to reconsider the content of both the National and Partner reports, in particular, sections highlighted in red in the Annexes.

The SC **recommends** that the Secretariat establishes a shared online reporting system including, *inter alia*, past National reports, past Regional reports, which would allow RRs and the SRCUs to work on a shared report and avoid duplications.

The SC **recommends** devoting some time to agree on the "data collection" method (e.g., Where will the data/information come from? Would data gathering be the responsibility of the RRs or NFPs that will provide the relevant ones to the RRs? What data types would be useful in informing this process?).

The SC **recommends** that the section on recommendation on scientific and monitoring activities (or others' reports) are fully discussed at its meeting with a view at endorsing and upgrading them to a SC conclusion/recommendation to the MOP.

# ANNEX 1 - REPORT ON THE CONSERVATION STATUS OF CETACEANS AND RELEVANT ACTIVITIES IN THE ACCOBAMS AREA

## **1. RATIONALE**

The aim of this report, drafted by the Sub-regional Coordination Units (section 2 and 4) and Regional Representatives of each ACCOBAMS region (section 3 and 4), is to provide an update on cetacean research and monitoring activities (by Sub-regional Coordination Units), as well as on potential changes to the cetacean conservation status relative to the latest IUCN Red list Assessment (by Regional Representatives).

The report also includes recommendations, proposed by Sub-regional Coordination Units and Regional Representatives, on important research and conservation actions, which are deemed necessary for the following triennium. These recommendations are submitted to the ACCOBAMS Scientific Committee for its consideration.

[Generally, the reporting period is the one between the last IUCN Red list Assessment for each subpopulation and three months before the last meeting of the SC before the MOP, but in case of exceptional events this rule can be relaxed. Reports from the last triennium should also be used as background information on which to build the new report]

## 2. OVERVIEW ON MONITORING-RELATED ACTIVITIES

[These sections are compiled by the two sub-regional Coordination Units based on National Reports, working documents or information gathered from NFPs, ACCOBAMS Partners and any other relevant organisations in the ACCOBAMS Area.

The SRCUs are encouraged to get in contact with ACCOBAMS Task Managers and the Secretariat to get an update on relevant activities carried out in their regions.]

## 2.1 Cetacean monitoring

- 2.2 Functional stranding networks and responses to emergency situations
- 2.3 Whale watching operations
- 2.4 Captivity-related issues

## 3. OVERVIEW ON THE CONSERVATION STATUS OF ACCOBAMS CETACEAN SUBPOPULATIONS

[RRs summarise only new scientific information for each species/subpopulation assessed by IUCN/ACCOBAMS on the topic listed (as an example) in sections from 3.1.1. to 3.1.4. Include a list new papers/reports under each relevant heading.

In this section National projects should not be listed as this information is included in the National Reports.

RRs are encouraged to get in contact with ACCOBAMS Task Managers and the Secretariat to get an update on relevant activities carried out in their regions.

For topics with no new information, please, write "No new information available".

If some new information is relative only to part of the range of the species/subpopulation considered by the IUCN assessment, please specify it with a reference to relevant countries/subregions.]

Table 1 shows a qualitative overall assessment of potential improvements or worsening of the ACCOBAMS cetacean species and subpopulations, relative to the latest IUCN Assessment. This Table has been filled by the RRs after considering all new information summarised in the following sections (3.1-3.11).

The aim of this table is to highlight potential conservation issues or improvements, which could suggest conducting a full reassessment or implement specific conservation measures.

Species	IUCN listing (category / year)	Range index	Distributio n index	Abundanc e index	Mortality index	Reproduction index	Health index	Improved legal protection index	Overall qualitative assessment	Assessment update (Y / N / ?)	
Genus species1	<u>VU (2019)</u>	=	=	?	2	u د	?		8	?	
Genus species2	EN (2020)	=	=	7	7	7	7	7	٢	Y	
Genus species3											
Genus species4											

#### Table 1 - Summary of the overall qualitative assessment on the potential new status of cetacean species

Key: **↗** improving relative to previous IUCN classification; = "nothing to declare" (assumed as previous); **>** worsening relative to previous IUCN classification; ? no information / uncertain; ③ potentially worsening; ④ potentially unchanged; ⑧ potentially improving.

[For each species in Table 1, please, use the following four sub-items to provide updates that justify what is in Table1. Please note that climate change is cross-cutting factor and can be considered potentially under each relevant sub-item (e.g., effects on distribution, abundance, demographic parameters, etc.)]

## 3.1 Balaenoptera physalus

#### 3.1.1 DISTRIBUTION

[Summary of new information on distributional range, distributional pattern and abundance]

## 3.1.2 POPULATION STRUCTURE

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

#### 3.1.3 HUMAN-INDUCED MORTALITY

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

#### 3.1.4 HEALTH STATUS

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## 3.2 Physeter macrocephalus

#### 3.2.1 DISTRIBUTION

[Summary of new information on distributional range, distributional pattern and abundance]

#### 3.2.2 POPULATION STRUCTURE

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

#### 3.2.3 HUMAN-INDUCED MORTALITY

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

#### 3.2.4 HEALTH STATUS

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## 3.3 Ziphius cavirostris

#### 3.3.1 DISTRIBUTION

[Summary of new information on distributional range, distributional pattern and abundance]

#### 3.3.2 POPULATION STRUCTURE

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

## 3.3.3 HUMAN-INDUCED MORTALITY

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

## 3.3.4 HEALTH STATUS

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## 3.4 Globicephala melas

#### 3.4.1 DISTRIBUTION

[Summary of new information on distributional range, distributional pattern and abundance]

## 3.4.2 POPULATION STRUCTURE

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

#### 3.4.3 HUMAN-INDUCED MORTALITY

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

#### 3.4.4 HEALTH STATUS

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## 3.5 Grampus griseus

#### 3.5.1 DISTRIBUTION

[Summary of new information on distributional range, distributional pattern and abundance]

#### 3.5.2 POPULATION STRUCTURE

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

#### 3.5.3 HUMAN-INDUCED MORTALITY

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

## 3.5.4 HEALTH STATUS

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## 3.6 Tursiops truncatus

#### 3.6.1 MEDITERRANEAN SUBPOPULATION

#### 3.6.1.1 Distribution

[Summary of new information on distributional range, distributional pattern and abundance]

#### 3.6.1.2 Population structure

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

## 3.6.1.3 Human-induced mortality

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

## 3.6.1.4 Health status

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## 3.6.2 GULF OF AMBRACIA SUBPOPULATION

## 3.6.2.1 Distribution

[Summary of new information on distributional range, distributional pattern and abundance]

#### 3.6.2.2 Population structure

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

#### 3.6.2.3 Human-induced mortality

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

#### 3.6.2.4 Health status

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

#### 3.6.3 TURSIOPS TRUNCATUS SSP PONTICUS

#### 3.6.3.1 Distribution

[Summary of new information on distributional range, distributional pattern and abundance]

#### 3.6.3.2 Population structure

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

#### 3.6.3.3 Human-induced mortality

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

#### 3.6.3.4 Health status

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

#### 3.7 Delphinus delphis

#### 3.7.1 INNER MEDITERRANEAN SUBPOPULATION

#### 3.7.1.1 Distribution

[Summary of new information on distributional range, distributional pattern and abundance]

#### 3.7.1.2 Population structure

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

#### 3.7.1.3 Human-induced mortality

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

## 3.7.1.4 Health status

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

#### 3.7.2 GULF OF CORINTH SUBPOPULATION

#### 3.7.2.1 Distribution

[Summary of new information on distributional range, distributional pattern and abundance]

#### 3.7.2.2 Population structure

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

#### 3.7.2.3 Human-induced mortality

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

## 3.7.2.4 Health status

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## 3.7.3 DELPHINUS DELPHIS SSP PONTICUS

## 3.7.3.1 Distribution

[Summary of new information on distributional range, distributional pattern and abundance]

#### 3.7.3.2 Population structure

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

## 3.7.3.3 Human-induced mortality

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

## 3.7.3.4 Health status

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## 3.8 Steno bredanensis

## 3.8.1 DISTRIBUTION

[Summary of new information on distributional range, distributional pattern and abundance]

## 3.8.2 POPULATION STRUCTURE

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

## 3.8.3 HUMAN-INDUCED MORTALITY

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

## 3.8.4 HEALTH STATUS

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## 3.9 Stenella coeruleoalba

#### 3.9.1 MEDITERRANEAN SUBPOPULATION

#### 3.9.1.1 Distribution

[Summary of new information on distributional range, distributional pattern and abundance]

#### 3.9.1.2 Population structure

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

#### 3.9.1.3 Human-induced mortality

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

## 3.9.1.4 Health status

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## 3.9.2 GULF OF CORINTH SUBPOPULATION

## 3.9.2.1 Distribution

[Summary of new information on distributional range, distributional pattern and abundance]

## 3.9.2.2 Population structure

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

#### 3.9.2.3 Human-induced mortality

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

## 3.9.2.4 Health status

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## 3.10 Phocoena phocoena

#### 3.10.1 PHOCOENA PHOCOENA (EUROPEAN ASSESSMENT)

## 3.10.1.1 Distribution

[Summary of new information on distributional range, distributional pattern and abundance]

## 3.10.1.2 Population structure

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

## 3.10.1.3 Human-induced mortality

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

#### 3.10.1.4 Health status

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

#### 3.10.2 PHOCOENA PHOCOENA SSP RELICTA

#### 3.10.2.1 Distribution

[Summary of new information on distributional range, distributional pattern and abundance]

#### 3.10.2.2 Population structure

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

#### 3.10.2.3 Human-induced mortality

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

#### 3.10.2.4 Health status

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## 3.11 Orcinus orca (Strait of Gibraltar subpopulation)

#### 3.11.1 DISTRIBUTION

[Summary of new information on distributional range, distributional pattern and abundance]

## 3.11.2 POPULATION STRUCTURE

[Summary of new information on population/sub-population characteristics via genetics, isotopes, behaviour/culture, etc.]

#### 3.11.3 HUMAN-INDUCED MORTALITY

[Summary of new information on mortality from interactions with fisheries / aquaculture, ship strikes, anthropogenic underwater noise]

#### 3.11.4 HEALTH STATUS

[information on stressors such as chemical & biological pollution /pathogens, marine litter, non-lethal underwater acoustic pollution]

## **4. RECOMMENDATIONS TO THE SCIENTIFIC COMMITTEE**

[Based on the above information and the conclusions in the summary table, the sub-regional Coordination Units and RRs should identify the main high-priority recommendations to be submitted to the ACCOBAMS SC for its consideration.

The text of recommendation needs to be SMART:

Specific: the recommendation clearly states what should be done and who is supposed to do it.

Measurable: the recommendation includes how the progress on the action will be measured.

Achievable: the recommendation is realistic and implementable.

**Relevant**: the recommendation is in line with ACCOBAMS strategic plan, ACCOBAMS work Programme or linked to an urgent emerging issue.

*Time-bound*: the recommendation has a specific timeline for completion (preferably within the upcoming triennium.]

## ANNEX 2 - FORMAT OF NATIONAL REPORTS 2020 - 2022



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## C. Date of submission of national reports (list the years when report was provided):

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<u>D. Specific questions and requests to be considered by the Secretariat, the Bureau, the Follow up Committee, the</u> <u>Scientific Committee or during the next MOP</u>. Major issue(s), specific needs or "hot" topics: please provide details on emerging issues, threats or difficulties encountered and indicate what should be implemented to answer of fix the points raised.

1/ Specific issues and requests to be considered by the Secretariat, the Bureau, the Follow-up Committee, the Scientific Committee or at the next meeting of the Parties:

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# 2/ Recommendations / suggestions for Improvement of the conservation from the regional report(s) of the scientific committee

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• (1 () •)

3/ Major issue(s) or main threats or "hot" topics:

(1/2 page, max 1 page):

(Subjects that is/was important for cetaceans in the region, and probably need that the Scientific Committee take into account and address. Example of subjects: Exceptional high level of strandings, or high seismic activities planned, or new high-speed ferries operating in the region raising the threat of ship-strikes, etc.)

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## **SECTION 1 - MANAGEMENT OF THE AGREEMENT**

1.1. Dates when signed (S), ratified (R), accepted (AC), approved (AP) or joined (J) the ACCOBAMS and competent authority.

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1.2. Reservations expressed in accordance with Article XV or Article X of the Agreement

- 1.3. Date of acceptance, signature, ratification of amendment(s); if under process, please in indicate the competent authority, the procedure and the steps taken.
  - Amendment to Annex 2 of the Agreement on the Conservation of Cetaceans of the Black Sea, the Mediterranean Sea and the Adjacent Atlantic Area on the use of driftnets

Date entry into force: Cliquez ou appuyez ici pour entrer du texte.

Transposition at National Level: Cliquez ou appuyez ici pour entrer du texte.

Extension of the geographical area of ACCOBAMS
 Ratification status: (Not yet processed))

Competent authorithy: Cliquez ou appuyez ici pour entrer du texte.

1.4. Dispensations allowed in accordance with Art. II, par. 2 of the Agreement and par. 6 of Annex 2

1.5. Definition of the marine areas under national jurisdiction included in the Agreement's field of application. Please

indicate if negotiations are under way for limits with neighbouring countries.

For information, an unofficial map of the extension of the maritime domain of the country is available on the following site: <a href="https://www.marineregions.org">www.marineregions.org</a>

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1.6. List the entities with competence, responsibility or interest for cetaceans conservation. Please review and complete the list provided and describe their activities. Please precise the information/communication/coordination mechanisms with other national entities.

•	Intergovernmental Organizations:						
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٠	<u>National authorities / administrations:</u>						
	Cliquez ou appuyez ici pour entrer du texte.						
•	<ul> <li>Non Govermental Organizations:</li> </ul>						
	Cliquez ou appuyez ici pour entrer du texte.						
•	<u>Research Intistutes / Universities:</u>						
	Cliquez ou appuyez ici pour entrer du texte.						
•	Rescue centers:						
	Cliquez ou appuyez ici pour entrer du texte.						
•	Dolphinaria:						
	Cliquez ou appuyez ici pour entrer du texte.						
Whale-watching operators:							
	Cliquez ou appuyez ici pour entrer du texte.						
•	Others:						
	Cliquez ou appuyez ici pour entrer du texte.						

## 1.7. Main national legislative and regulatory texts pertinent to cetaceans

Texts may concern environment (protected species or areas, biodiversity and pollution), fisheries, maritime transport (collision), tourism, energy, pollution, environmental impact assessment or other topics as far as they can concern cetaceans. Provide date, title, responsible authority and link. Add a short description or quote the relevant articles or sections related to cetaceans

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# 1.8. Funds earmarked for research, monitoring and management of cetaceans (including national funding, international, regional or sub regional projects)

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# 1.9. Relevant International or Regional Conventions, Commissions and Agreements to which the country is Party.

Convention/Agreement	Signature	Ratification	Acceptance	Entry into force	Comments
Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks(1995)					
Agreement on the Conservation of Small					
Cetaceans of the Baltic and North Seas					
(ASCOBANS)					
Annex V concerning the protection and					
conservation of ecosystems and Biological					
Diversity of the Maritime Area (OSPAR					
Convention)					
Barcelona Convention for the protection of					
the Mediterranean sea Sea against					
pollution (1976)					
Protocol concerning Specially Protected					
Areas and Biological Diversity in the					
Mediterranean (Barcelona, 1995)					
Convention on Biological Diversity (Rio,					
1992)					
Endangered Species of Fauna and Flora					
(CITES Washington 1972)					
Convention on the Conservation of					
European Wildlife and Natural Habitats					
(Berne, 1979)					
Convention on the Conservation of					
Migratory Species of Wild Animals (Bonn,					
1979)					
Convention on the Protection of the Black					
Sea Against Pollution (Bucharest					
Convention)					
General Fisheries Commission for the					
Mediterranean					
International Commission for Scientific					
Exploration of the Mediterranean					
International Convention for the Regulation					
of Whaling (Washington, 1946)					
OSPAR Convention for the protection of the					
Marine Environment of the North-East					
Atlantic					
the See (Montore Pay 1982)					
Commission Internationals neur					
I Exploration Scientifique de la					
Méditerranée CIESM					

1.10. Bilateral or multilateral fishing agreements with regard to the area of the Agreement (such as GFCM, ICCAT, specific fisheries agreements with the European Union, provide relevant information on the date of signature, duration, area concerned, measures)

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## **SECTION 2: CONSERVATION ACTIONS FOR CETACEANS**

## **2.1: RESEARCH AND MONITORING**

# 2.1. List of cetaceans reported in the area under the jurisdiction of the country included in the distribution area (as defined in Article I, paragraph 3 f of the Agreement).

Legend: "C": Common, "R": Rare, "O": Occasional

Scientific name	English name		R	0	Comments		
PHOCOENIDAE							
Phocoena phocoena	Harbour porpoise						
DELPHINIDAE							
Steno bredanensis	Rough-toothed dolphin						
Grampus griseus	Risso's dolphin						
Tursiops truncatus	Bottlenose dolphin						
Stenella coeruleoalba	Striped dolphin						
Delphinus delphis	Common dolphin						
Pseudorca crassidens	False killer whale						
Orcinus orca	Killer whale						
Globicephala melas	Long-finned pilot whale						
ZIPHIIDAE							
Mesoplodon densirostris	Blainville's beaked whale						
Ziphius cavirostris	Cuvier's beaked whale						
PHYSETERIDAE							
Physeter macrocephalus	Sperm whale						
KOGIIDAE							
Kogia simus	Dwarf sperm whale						
BALAENIDAE							
Eubalaena glacialis	Northern right whale						
BALAENOPTERIDAE							
Balaenoptera acutorostrata	Minke whale						
Balaenoptera borealis	Balaenoptera borealis Sei whale						
Balaenoptera physalus	Fin whale						
Megaptera novaeangliae	Humpback whale						

2.2. List and description of **research programs** and **research projects** related to cetaceans taking into account national, bi-lateral and multi-lateral activities,

*Please provide information on programs and projects regarding cetacean conservation (name of the project, contact details and short description).* 

<u>Please list the projects regarding improvement of knowledge about status of cetaceans</u> (Cetacean population estimates and distribution, Population Structure, Monitoring cetacean's status, Functional stranding networks and responses to emergency situation, etc.)

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<u>Please list the projects regarding reduction of human pressures on cetaceans</u> (Interactions with fisheries / aquaculture, Anthropogenic underwater noise, Ship strikes, Whale watching, Marine debris, Chemical & biological pollution, Climate change, Captivity related issues)



# Please list the projects regarding conservation of cetaceans habitats

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## Please list the projects on public awareness about cetaceans (Information / Communication / Awareness about cetaceans)

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Please list any other relevant projects

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## 2.3. Cetacean stranding

Does the country have a stranding network?

If not, please precise why? If yes, please provide name, contacts and link to database.

Are you transmitting data to MEDACES database?

2.4. Red List of cetaceans at the national or regional level using the IUCN Red List methodology.

Has your country developed or participated in the evaluation of the cetaceans in your national waters or at the regional level? If yes please describe and provide a summary of the results or links to reports and publications. If the use of the IUCN Red List methodology is required by Law, please quote the legal text or relevant articles.

Cliquez ou appuyez ici pour entrer du texte.

2.5. Existence or preparation of **conservation management plan** for cetacean species. Please provide any relevant information.

Cliquez ou appuyez ici pour entrer du texte.

# 2.2: MANAGEMENT MEASURES FOR THE CONSERVATION OF CETACEANS

Please list all management / conservation measures introduced to attain and maintain a favourable state of conservation to cetaceans, and reduce the potential threats, in accordance with ACCOBAMS Resolutions.

2.2.1. **Interaction with fisheries**. Please provide information on existing or potential interaction between fisheries and cetaceans or cetaceans and fisheries (text and/or table). Particularly, the interactions between the following techniques: gill-nets, purse seine nets, drift nets, surface long-lines or others could be documented, indicating the species and number of animals by-caught or depredating in the nets and indicating the existing or planned management measures.

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2.2.2. Navigation regulations and ship strikes



2.2.3. **Anthropogenic noise** (such as exploration/exploitation of mineral resources or military exercises) and Environmental Impact Assessment procedures (EIA)

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2.2.4. Whale watching and other commercial tourism activities



Cliquez ou appuyez ici pour entrer du texte.

## 2.2.6. Emergency plans for pollution, strandings and rescue centres

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## 2.2.7. Captivity related issues and Dolphinaria

Cliquez ou appuyez ici pour entrer du texte.

2.2.8. *Marine protected areas* (MPA), fishery zones, fisheries reserves, or other effective area based conservation measures (OECM-CBD). List and indicate if they are relevant or develop activities for conservation and management of cetaceans.

Cliquez ou appuyez ici pour entrer du texte.

## 2.2.9. Others, please specify

Cliquez ou appuyez ici pour entrer du texte.

## 2.3: COMMUNICATION AND AWARENESS ON THE CONSERVATION OF CETACEANS

Please list all relevant communication and awareness activities

2.3.1. Main events (meeting, symposium, awareness activities, etc.) organized or planned in the Country.

Cliquez ou appuyez ici pour entrer du texte.

2.3.2. Main events (meeting, symposium, awareness activities, etc.) attended by national abroad

Cliquez ou appuyez ici pour entrer du texte.

2.3.3. Main Products (newsletter, brochure, leaflet, poster, video, sticker, etc.)

# 2.4: CAPACITY BUILDING FOR THE CONSERVATION OF CETACEANS

Please list all relevant capacity building activities

2.4.1. National needs in terms of capacity building, in reference to the ACCOBAMS strategy and programme of work

Cliquez ou appuyez ici pour entrer du texte.

2.4.2. Training / workshop sessions realised (national and international) or planned

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# 2.4.3. Lectures, syllabus on cetaceans (universities, schools)

# **ANNEX 3** - ACCOBAMS PARTNER ACTIVITIES FOR 20XX-20XX

Name of the Partner Entity:

Name of the Representative:

Capacity building activities: (max 250 words)

Public awareness activities: (max 250 words)

Research activities: (max 250 words)

Others: (max 250 words)
#### ANNEX V - TERMS OF REFERENCE OF THE WORKING GROUP ON WHALE WATCHING

# <u>Mandate</u>

With a view to 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 work of the expert who will be tasked to analyse existing national legislations related to whale watching. The report of the study will be presented at MOP9;
- Review the results of the study carried out in Portugal to define the whale watching "carrying capacity" in a targeted geographical area where commercial whale watching is intensively practiced (Sado estuary);
- Continue testing the App that incorporates the common procedure for data collection and assess the results achieved so far and the lessons learnt in the areas where the procedure is being tested. The report will be presented at SC17;
- Develop a dedicated programme for data collection on OBSenMER collaborative platform, bearing in mind the necessary compatibility with the App ILogWhales;
- Support the development of project proposal(s) aimed to strengthen exchanges and cooperation between tourism operators, policy makers and scientific institutions in order to assess cetacean watching pressure on cetacean populations.
- Draft and present at MOP9 the revision of the Regulations governing the use of the collective certification mark "HIGH QUALITY WHALE-WATCHING<sup>®</sup>" (<u>Resolution 6.20</u> on Commercial Cetacean Watching Activities in the ACCOBAMS Area).

# ANNEX VI - TERMS OF REFERENCE FOR AN ACCOBAMS WORKSHOP TO IMPROVE DATA REPORTING FROM THE WHALE-WATCHING OPERATORS

According to the ACCOBAMS-MOP8/2022/Doc31/Annex8, the Work Programme 2020-2022 partially achieve:

- Gathering information on cetacean watching activities and identifying potential issues in order to identify the hotspots of WW activities in the ACCOBAMS Area.
- 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.
- Working in close cooperation with IWC and other relevant International Organizations.

Additionally, the Work Programme 2023-2025 (ACCOBAMS-SC15/2023/Doc06), proposed two main actions:

- Monitoring the status of whale watching activities in the ACCOBAMS Area and their potential adverse impacts on individual cetaceans and on populations
- Promote the use of whale watching vessels as platforms of opportunity by:
  - Reviewing and updating the data collection form for commercial whale watching vessels and test the revised common procedure for whale watching activity in identified pilot areas (e.g. the Ligurian-Provençal Basin, including the Pelagos Sanctuary, Gibraltar Strait, and south Portugal).
  - ✓ Organizing photo-ID and data collection training for whale watching operators, with the final goal of sharing the collected data.

Moreover, the workshop "Setting up an international network to reinforce the collaboration with Marine Mammal Tourism companies and enhance their sustainability" held during the 34<sup>th</sup> Conference of the European Cetacean Society in Spain concluded on 3 main challenges in order to reinforce the sustainability of the whale-watching activity:

- 1. the need of a public involvement in label management, data sharing, access, use, and reuse;
- 2. the need to build a collaborative network willing to work together on a joint action plan including the definition of a limited but efficient WW data collection;
- 3. the need to highlight to policy-makers that WW data is complementary data but cannot replace data collected by dedicated research surveys.

In order to improve data collection from whale-watching operators and to monitor the status of whale-watching activities in the ACCOBAMS Area, a one-day workshop is proposed for the next ECS Conference (Azores, May 2025) with the following ToR:

- Assessing the potential adverse impacts on individual cetaceans and populations:
  - Defining indicators to assess the potential adverse impacts on cetaceans.
  - Identifying gaps in whale-watching legislation in the ACCOBAMS area.
- Promote the use of whale-watching vessels as platforms of opportunity by:
  - Defining good practices of collaboration that allow using whale watching vessels as platforms of opportunity;
  - Sharing and using the existing App and web platform to collect and register data.

## ANNEX VII - SUGGESTED AMENDMENTS TO THE RULES OF PROCEDURE OF THE SCIENTIFIC COMMITTEE

This Annex summarises the suggestions and comments of the Scientific Committee with respect to the Rules of Procedure attached to Resolution 8.3. For clarity it does not highlight editorial and grammatical changes only those with substance.

## RULES OF PROCEDURE OF THE SCIENTIFIC COMMITTEE

NB The Scientific Committee offers these suggestions for consideration by the Bureau and the Extended Bureau to assist them in their work, recognizing that it is the responsibility of the Meeting of Parties to determine the Rules of Procedure

## **GENERAL FUNCTIONS**

# Article 1

- 1. The Scientific Committee, established in accordance with Article VII of the Agreement, is the scientific and technical advisory body of the Agreement that provides advice to the Meeting of the Parties, to the Secretariat and/or to individual Parties between sessions, as appropriate, through the Co-ordination unit of the sub-region concerned.
- 2. The functions of the Scientific Committee are defined in Article VII, paragraph 3, of the Agreement.

# COMPOSITION

## Article 2

- 1. The Scientific Committee shall comprise the following members (and see Article 3) appointed by the Meeting of the Parties, namely:
  - Three experts proposed by CIESM;
  - Three experts proposed by IUCN;
  - Up to ten national representatives assigned by region (see Appendix);
  - One representative from the Scientific Committee of the International Whaling Commission (IWC)
  - One representative from the Scientific Council of the Convention on the Conservation of Migratory Species of Wild Animals (CMS);
  - One representative from the European Cetacean Society
  - One representative elected by the ACCOBAMS Partners
- 2. Additional members of the Scientific Committee may be designated by individual Parties. The cost of their participation to the meetings of the Scientific Committee shall not be covered by the Agreement's funds.
- 3. The members of the Scientific Committee shall elect a Chair and the Vice-Chair from amongst the membership, at the first Meeting of the triennium. The Chair and Vice-Chair shall not be experts nominated by the same organisation and the Committee shall take into account gender, geographical balance and alternation in all roles of the Scientific Committee when considering candidates.

#### SELECTION OF MEMBERS AND TERMS OF OFFICE

#### Article 3

- 1. The priorities proposed in the Work Programme for each triennium, as well as the need to ensure a balanced geographical representation, shall be taken into account in selecting the members of the Scientific Committee by the Meeting of the Parties.
- 2. The selection of the Scientific Committee members, proposed by the Extended Bureau, must take into consideration the following criteria:
  - a) To be experts in one or more fields of cetacean conservation science;
  - b) To possess an appropriate level of quality, relevance, productivity and originality in activities related to cetacean conservation and research, as demonstrated through scientific publications and technical reports, communications to conferences, participation in working groups or committees at national or international levels;
  - c) To be available to participate in the work of the Scientific Committee, attend its meetings and contribute to the working groups, with the required continuity;
  - d) To be proficient in one of the Agreement's two working languages (English and French) and have a sufficient knowledge of the other.
- 3. The criteria above will be ascertained through the evaluation of their *curricula vitae*. An evaluation by the Scientific Committee Chair and Vice-Chair will also submit an evaluation of candidates to the Meeting of the Parties.
- 4. The qualified experts proposed by the CIESM and IUCN shall be nominated in close consultation with the Bureau, who will report on the outcome of these consultations to the Meeting of the Parties.
- 5. At its first Meeting, the Scientific Committee shall designate from amongst its members, as many "Task Managers" as required to lead the working groups. These appointments can be modified during the triennium upon decision of the Chair of the Scientific Committee in consultation with the Vice-Chair and the Bureau.

## Article 4

- 1. The terms of office of the members shall expire at the closure of the ordinary Meeting of the Parties following the one at which they were appointed.
- 2. Starting from 2025, all leading roles (i.e. Chair, Vice-Chair and Task Managers) shall have a maximum of two consecutive terms.

## MEETINGS

# Article 5

 The Chair shall (a) preside over the meetings of the Scientific Committee, (b) prepare the provisional agenda in consultation with the Secretariat taking into account Article VII.3 of the Agreement and instructions from the Meeting of Parties and (c) liaise with members between meetings of the Committee. The Chair may represent the Committee as required and carry out other functions as may be delegated to him/her by the Committee, within the limits of the Committee functions.

- 2. The Vice-Chair shall assist the Chair. He/she shall preside at meetings of the Scientific Committee in the absence of, or in the event of the Chair being unable to act. He/she shall on those occasions exercise the powers and duties prescribed for the Chair.
- 3. At its first meeting after the Meeting of Parties, the Scientific Committee shall assign specific topics for each Task Manager taking into account the priorities set up in the Work Programme for the triennium. Each Task Manager, in addition to his/her role as member of the Scientific Committee, shall coordinate the works of the Scientific Committee concerning the topics that he/she has been assigned by the Scientific Committee. Each Task Manager shall provide a report to the meetings of the Scientific Committee on the topics he/she is in charge of.
- 4. Regional representatives of each region shall assist the Co-ordination Units (see Article V 5 of the Agreement) in the preparation of a series of periodic international reviews or publications on:

a) the status and trends of populations, and gaps in scientific knowledge;

b) important areas for cetaceans; and

c) sub-regional directories of national authorities, research and rescue centres, scientists and nongovernmental organizations concerned with cetaceans.

## Article 6

- 1. The Scientific Committee may establish working groups as needed to deal with specific tasks. It shall define the terms of reference and composition of each working group. In accord with Article IV.4 of the Agreement this may be done in consultation with the Bureau and relevant Co-ordination units.
- 2. The meetings of the working groups shall be held, where possible, in conjunction with other events or intersessionally via remote tools.
- 3. The Scientific Committee may consider reports from other relevant meetings and working groups established under the Agreement, when necessary.
- 4. These Rules shall apply, *mutatis mutandis*, to the meetings of working groups.

## Article 7

- The Chair may decide to invite other experts, including experts in legal and socio-economic matters, to attend meetings (in person or remotely) as observers, with no additional cost for the Trust Fund, as deemed necessary. If their participation requires funding from ACCOBAMS, the Bureau will decide on their attendance, in consultation with the Secretariat.
- 2. ACCOBAMS Partners may participate as observers to the Meeting of the Scientific Committee.

#### Article 8

1. Notices of Scientific Committee meetings, including date and venue, shall be sent to all Parties, to the members of the Scientific Committee and to ACCOBAMS Partners, by the Secretariat at least 45 days in advance and, in the case of extraordinary meetings, at least 14 days in advance.

- 2. The Secretariat of the Agreement, with the support of the Sub-Regional Coordination Units, shall undertake secretarial tasks during the meetings of the Scientific Committee and of its working groups and shall provide administrative and logistical support.
- 3. A draft report of each Meeting shall be prepared by the Secretariat as soon as possible and circulated for finalization by the Scientific Committee. The final report and shall be communicated to all members and observers of the Scientific Committee, to all Parties and ACCOBAMS Partners.
- 4. The final report shall be posted promptly on the ACCOBAMS website.

## Article 9

- 1. Recommendations by the Scientific Committee shall be adopted by consensus.
- 2. If consensus cannot be reached regarding an issue, all positions expressed about it during the meeting shall be included in the meeting report.

#### Article 10

- 1. The Meeting of the Scientific Committee shall be convened once a year during the first two years of the triennium by the Secretariat of the Agreement in consultation with the Chair.
- 2. Extraordinary meetings may be convened if the Bureau so agrees.

#### COMMUNICATION PROCEDURE

#### Article 11

- 1. In application of Article II, paragraph 2, of the Agreement, when a Party asks for advice on exceptions to the prohibition on deliberate taking of cetaceans, the Secretariat shall immediately communicate the request to the Chair and to the members of the Scientific Committee for advice.
- 2. Within 30 days, the Chair takes a decision on the request also on the basis of the advice received from the other members of the Scientific Committee and communicates it to the Secretariat for immediate communication to the requesting Party.

#### Article 12

- 1. Between sessions, any member of the Scientific Committee or the Sub-Regional Coordination Units, through the Secretariat, or the Secretariat directly, may submit a written proposal to the Chair for a decision within the limits of the functions of the Scientific Committee.
- 2. The Chair shall forward the proposal to the Scientific Committee members. Comments shall be submitted within 30 days from the date of that communication to all members of the Scientific Committee and to the Secretariat.
- 3. If no comments nor objections on a proposal are received from a member of the Scientific Committee, the proposal shall be considered as adopted. Its adoption shall be notified to those who have made the proposal. If any member of the Scientific Committee objects to a proposal within the deadline, the proposal shall be referred to the next meeting of the Scientific Committee.

#### Article 13

When, in the opinion of the Scientific Committee, an emergency arises, requiring the adoption of immediate measures to avoid deterioration of the conservation status of one or more cetacean species, the Chair may ask the Secretariat to contact the relevant Parties urgently.

#### WORKING LANGUAGES

#### Article 14

- 1. The working languages of the Scientific Committee shall be English and French.
- 2. Simultaneous translation in English and French may be provided for the plenary sessions of the meetings of the Scientific Committee if funding is available.
- 3. Working documents shall be made available in English or in French and may be translated if funding is available.

## REPORT

## Article 15

The Chair of the Scientific Committee shall submit to each ordinary Meeting of the Parties and to each meeting of the Bureau a written report on the Scientific Committee's work since the previous ordinary Meeting of the Parties.

#### **FINAL PROVISIONS**

## Article 16

These Rules shall apply immediately upon their adoption by the Parties.

## Article 17

These Rules may be amended as required by a decision of the Meeting of the Parties.

#### Appendix

In order to ensure a balanced geographical representation in the Scientific Committee, the geographical scope of the Agreement is divided into four regions.

For the purpose of facilitating Scientific Committee members' nomination, the regional distribution of Parties is as follows:

Region	Parties	Max number of representatives
Western Mediterranean and contiguous Atlantic area	Algeria, France, Italy, Monaco, Morocco, Portugal, Spain, Tunisia	3
Central Mediterranean	Albania, Croatia, Greece, Italy, Libya, Malta, Montenegro, Slovenia, Tunisia	3
Eastern Mediterranean	Cyprus, Egypt, Greece, Lebanon, Syria, Türkiye	3
Black Sea	Bulgaria, Georgia, Romania, Türkiye, Ukraine	3

## ANNEX VIII - PRELIMINARY SCIENTIFIC COMMITTEE WORK PROGRAMME FOR 2026-2028

CONSERVATION ACTIONS (CA)

CA 1 a	Cetacean population estimates and distribution

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
Relevant SC16 Recommendation(s)	Rec 16.2 & Rec 16.3

Proposed Action(s)	SC16 Priority	Proposed Means of implementation 2026-2028 from the SC16
Promote the implementation of the Long- Term Monitoring Programme, taking into consideration monitoring and reporting obligations of countries (MSFD, Barcelona Convention, Bucharest Convention)	Main	<ul> <li>Secure funds for implementing ASI2, including investigating the existence of possible funding at national / regional levels</li> <li>Continue with the development and implementation of a simulation framework to examine the performance of different future survey strategies (synoptic, regional/national) - contract</li> <li>Undertake synoptic basin-wide surveys in the ACCOBAMS Area with a focus on abundance and trends in 2026/2027 (ASI2) with the support of an ASI Contact Group (ToR) and of the SC to review and update as necessary the field and analytical protocols</li> <li>Promote synchronization and standardization of existing monitoring efforts to contribute to LTMP purpose (coordination meetings at the sub-regional level, Working Group on cetaceans monitoring)</li> <li>Collaborate with relevant organisations, such as the UNEP/MAP Barcelona Convention System (EcAp/IMAP, QSR), the Bucharest Convention and the European Commission (MSFD)</li> <li>Utilize advanced statistical methods and machine learning techniques to integrate and analyze data from various sources, ensuring robust and accurate abundance estimates and distribution models.</li> </ul>
Promote the use of ASI 2 data by increasing the visibility of ASI 2 (and future) datasets and related results and encourage further analyses	High	<ul> <li>Implement a centralized data repository to facilitate data sharing and collaboration among different organizations and stakeholders.</li> <li>Use the NETCCOBAMS Activity on "ACCOBAMS Survey Initiative" to handle the sharing of ASI Data</li> <li>Promote ASI 2 data and results in relevant fora</li> <li>Share ASI 2 data following received requests in accordance with ASI Terms of use and archiving/monitoring of the requests</li> <li>Collect outputs of work and analysis conducted following ASI 1&amp; 2 full dataset requests to be used by the SC to give best scientific advice</li> <li>Submit ASI 2 results to the IWC SC</li> </ul>
Promote data collection at sub-regional and national levels (in coherence with ACCOBAMS survey methodologies)	High	<ul> <li>Continue facilitating exchanges and coordination between Parties on sub-regional surveys</li> <li>Continue organizing training activities on monitoring methods/protocols and data analysis for smaller-scale surveys (at local, national and sub-regional levels)</li> <li>Update handbooks on standardized monitoring methods (aerial surveys, boat-based surveys, acoustic surveys)</li> <li>Collaborating with relevant organisations, such as UNEP/MAP Barcelona Convention System (EcAp/IMAP, QSR), the</li> </ul>

		Bucharest Convention and the European Commission (MSFD)
Promote data collection from multidisciplinary surveys (such as fisheries / acoustic surveys), innovative technologies (UAV, satellite) and of platforms of opportunity (ferries, whale watching vessels, navy vessels, etc)	Medium	<ul> <li>Review results from activities in pilot areas to collect data using multidisciplinary surveys (such as fisheries/acoustic surveys), innovative technologies (UAV, satellite) and platforms of opportunity (ferries, whale watching vessels, navy vessels, etc) based on recommendations of previous studies</li> <li>Review collaboration with existing regional fisheries surveys (MEDITS, MEDIAS) and relevant organisations such as GFCM and ICCAT</li> <li>Review collaborations with relevant existing initiatives/projects/networks on platforms of opportunity</li> <li>Organise meetings/workshops to discuss possible synergies and shared methodology and data analysis - ToR</li> <li>Develop, update and standardize protocols for multidisciplinary surveys</li> <li>Review &amp; Update the "Guidelines for the Monitoring of the Range of Cetaceans, Abundance and Demographic Characteristics of Populations" in synergy with IMAP</li> <li>Regularly review « Best Available Technologies » and assess potential contribution to LTMP</li> </ul>

CA 1 b	Population Structure	
Expected outcomes	Improved knowledge on population structure in the ACCOBAMS Area and species conservation management plans completed	
	Exchange of samples is facilitated for joint analysis & Data exchange is facilitated for basin wide analysis	
Relevant SC16 Recommendation(s)	Rec 16.5	

Proposed Action(s)	SC16 Priority	Proposed Means of implementation 2026-2028 from the SC16
<ul> <li>Improve photo ID data collection and dissemination:</li> <li>Update and harmonize protocols on data collection for photo ID</li> <li>Share photo ID data</li> </ul>	Medium	<ul> <li>Organise experts meeting for best practices guide on how to collect data for comparison - ToR</li> <li>Organise regional experts' trainings on analysis on photo ID (including drone photo ID), including AI (Artificial Intelligence) – ToR</li> <li>Facilitate data sharing and the creation of large scale photo-id catalogues for in-depth analysis (see CMP actions) – ToR</li> </ul>
Improve data collection on cetacean populations genetic in the ACCOBAMS Area Development of genetical identification of population structure (particularly for Mediterranean), including e.g., eDNA	High	<ul> <li>Promote the ACCOBAMS Best practices on data collection on cetacean populations genetic</li> <li>Facilitate analysis of existing tissue samples (including those from biopsies) to address questions on stock structure and genetic diversity</li> <li>Harmonize procedures for samples exchanges among CITES scientific and forensic institutions in the ACCOBAMS area</li> <li>Collaborate with relevant organisations (CITES, ABS Nagoya Protocol)</li> <li>Promote the use of new technics such as genomics and proteomics</li> </ul>
Other ecological markers	Medium	<ul> <li>Organise a workshop on the incorporation of ecological markers in the definition of population structure (Ecological Management Units) for cetaceans in the framework of international scientific events or meetings, in collaboration with ICES, IWC – ToR</li> <li>Promote studies of age structure and population demography</li> </ul>

CA 1 c	Monitoring cetacean's status	
Expected outcomes	Regional conservation plans (Med and BS) for cetacean are promoted at the national level	
	Polovant Concernation Management Plans (CMP) are developed and implemented	

	Relevant Conservation Management Plans (CMP) are developed and implemented
	National Action Plans are developed and implemented in several Countries
Relevant SC16 Recommendation(s)	-

Proposed Action(s)	Sc16 priority	Proposed Means of implementation 2026-2028 from the SC16
Support in implementing Regional Conservation Plans for cetaceans (in Black Sea and in Mediterranean Sea)	Main	<ul> <li>Support the BSC in the revision of the Regional Conservation Plan for cetacean in Black Sea, taking into consideration the IWC/ACCOBAMS Conservation Management Plan framework.</li> <li>Support the SPA/RAC in the implementation, assessment and update of the Mediterranean Action Plan for Cetaceans adopted by Parties to the Barcelona Convention</li> </ul>
Develop/ revise/ implement relevant Conservation Management Plans for cetacean species	Main	<ul> <li>Organise Experts Workshops to develop Conservation Management Plans for sperm whales and Ziphius, taking into account all national conservation plans - ToR</li> <li>Organize stakeholders Workshops to finalize Conservation Management Plans for fin whales, Risso's, bottlenose and common dolphins, taking into account all national conservation plans - ToR</li> <li>Support the implementation of relevant actions of the approved Conservation Management Plans for cetacean species, emphasizing coordination actions</li> <li>Consider the development of killer whales CMP, taking into account the existing national conservation plans</li> </ul>
Facilitate the Development/ revision/ implementation of National Action Plans for cetaceans		Not applicable for SC

CA 1 d	Functional stranding networks and responses to emergency situation		
Expected outcomes	Official National Stranding networks are established and operating		
	Information on stranding events is regularly exchanged among national networks		
Relevant SC16 Recommendation(s)	Rec 16.6		

Proposed Action(s)	SC16 priority	Proposed Means of implementation 2026-2028 from the SC16
Set up /Reinforce official national stranding networks (with all national institutions concerned and relevant international agreements)	Main	<ul> <li>Disseminate studies on legal/institutional status of National stranding networks in order to assist experts in the establishment of official national stranding network when relevant - Parties</li> <li>Provide assistance in the preparation of a legislative framework to settle the national coordination network- Parties</li> <li>Organise trainings on necropsies, response to live strandings and emergency situations, including mass strandings, in the ACCOBAMS Area, and on the use of relevant databases – ToR</li> </ul>

Encourage collaboration among national networks of Parties	Main	<ul> <li>Disseminate the procedures on Best Practices on cetacean <i>post-mortem</i> investigation and tissue sampling resulted from the harmonization process in ACCOBAMS and ASCOBANS</li> <li>Update the Terms of Reference (ToR) for the ACCOBAMS Emergency Task Force for Stranding events (AETFS) by considering other existing initiatives, prioritizing support for capacity building requests and emergency responses.</li> <li>Maintain and Update List of existing stranding experts and stranding networks contact points/coordinators</li> <li>Update ACCOBAMS Documents related to strandings management and investigations (best practices, guidelines, and protocols) through regular meetings/workshops among experts.</li> <li>Promote Technologies for remote assistance during investigations</li> <li>Implement Capacity Building through training modules targeting veterinarians and biologists involved in post-mortem investigations using new technologies (e.g., virtual/augmented reality, metaverse, 3D printing) and tele-necropsy.</li> <li>Create an Emergency Fund through voluntary contributions by Parties, international organizations, and public and private donors.</li> <li>Enter relevant national data into relevant regional databases, such as MEDACES</li> </ul>
		<ul> <li>Create a network to exchange information on sampling though NETCCOBAMS Platform</li> </ul>

CA 2 a	Interactions with fisheries / aquaculture		
Expected outcomes	Impacts of cetaceans' bycatch and depredation are assessed and reduced		
	Ecotourism activities (whale watching and pescatourism) are proposed as an alternative income source to fishermen impacted by depredation		

Relevant SC16 Recommendation(s)

Rec 16.7 & 16.8

Proposed Action(s)	SC16 priority	Proposed Means of implementation 2026-2028 from the SC16
Support countries in monitoring and mitigating depredation and bycatch situations	Main	<ul> <li>Maintain and support the work of the ACCOBAMS/ASCOBANS Joint Bycatch Working Group</li> <li>Organize workshops to share experience and results, including from past projects on interactions with fisheries - ToR</li> <li>Improve data collection on interactions with fisheries (implementation of on-board observers' programs whenever it is possible and port questionnaires) and testing mitigation measures</li> <li>Use of stranding data to assess bycatch mortality (using drifting models and/or necropsy findings)</li> <li>Collaborate with relevant entities, in particular with GFCM, EC (DG MARE and DG Environment), UNEP/MAP Barcelona Convention System (EcAp/IMAP, QSR) and IWC BMI, ICCAT, ICES</li> <li>Support the network with EC, GFCM and BSC to address the critical issue of harbor porpoise bycatch in the Black Sea</li> <li>Implement active awareness-raising programs among fishermen to encourage reporting of bycatch events, improving data collection and assessing the extent of this threat more precisely</li> <li>Conduct training programs for local and regional stakeholders on advanced monitoring techniques, data analysis, and the use of new technologies</li> <li>Promote the importance of cetacean conservation in relevant international fora and policy discussions</li> <li>Establish a robust monitoring and evaluation framework to assess the effectiveness of implemented strategies and make necessary adjustments</li> </ul>

		<ul> <li>Regularly review and update guidelines and protocols related to bycatch monitoring and mitigation measures, as well as to safe release of bycaught animals, to incorporate the best available advice and practices</li> <li>Share with relevant stakeholders, as well as with researchers conducting similar studies, lessons learnt from the projects recently funded by GFCM on depredation and bycatch and coordinated by ACCOBAMS</li> </ul>
Provide support to Parties to promote the development of ecotourism activities as an alternative income to fishers (pescatourism and whale watching)	Medium	<ul> <li>Support the development of sustainable ecotourism activities in pilot sites, taking into consideration ACCOBAMS Cetacean Watching Guidelines</li> <li>Consider socio-economic aspects of alternative solutions</li> </ul>

CA 2 b	Anthropogenic underwater noise		
Expected outcomes	Main anthropogenic activities generating underwater noise are monitored in the ACCOBAMS Area		
	Use of mitigation measures for anthropogenic activities generating underwater noise		
Relevant SC16 Recommendation(s)	Rec 16.9		

Proposed Action(s)	SC16	Proposed Means of implementation 2026-2028 from the SC16
	priority	
Encourage the monitoring of anthropogenic activities generating underwater noise	Main	<ul> <li>Organize an in-person meeting of the CMS/ACCOBAMS/ASCOBANS JNWG</li> <li>Raise awareness amongst countries by organising an awareness &amp; consultation workshop at national level with different stakeholders, especially at ministerial level</li> <li>Invite Port authorities to develop incentive programmes to encourage the monitoring of and reduction in underwater noise emissions, and to report regularly all activities generating noise to improve the mapping for Noise Hotspots Report,</li> <li>Organise trainings for national entities on noise monitoring, including analyses of PAM collected data in some identified priority areas - ToR</li> <li>Keep managing the regional noise register</li> <li>Keep feeding data on impulsive noise generating sources from the entire ACCOBAMS Area into the regional noise register managed by ACCOBAMS</li> <li>Promote the use of NETCCOBAMS to gather data.</li> <li>Provide necessary data to update risk maps and generate maps for the Black Sea by considering relevant target species</li> <li>Complete the Noise Hotspots Report II,</li> <li>Revise and updating the ACCOBAMS Guidelines on underwater noise taking into account outcomes from recent projects, Prepare a study on the effects of underwater noise generated by the projected increase of wind farms in the ACCOBAMS Area - ToR</li> <li>Continue developing the concept of "quiet zones," updating noise models in NETCCOBAMS, comparing noise modelling results with in situ recordings, monitoring anthropogenic noise activities, and developing new mitigation measures</li> <li>Continue cooperation on underwater noise issue with other international Organisations, such as CMS, ASCOBANS, IWC, UNEP/MAP Barcelona Convention System (EcAp/IMAP, QSR), IMO, REMPEC and EU (MSFD) and collaboration with other regional projects on noise issues</li> </ul>

		Support investigation of impacts of underwater noise on health status and prey
Encourage the use of mitigation measures for anthropogenic activities generating underwater noise	Main	<ul> <li>Improve enhanced training of regulators on the appropriate application of the CMS Environmental Impact Assessments (EIAs) and ACCOBAMS Noise Guidelines</li> <li>Promote the ACCOBAMS Highly qualified MMO/PAM operators' certificate</li> <li>Support the development and update of the ACCOBAMS HQMMO/PAM training tools</li> <li>Revise and update the ACCOBAMS "Guide for Parties to use mitigation measures"</li> <li>Continue developing joint project/initiatives for simulating mitigation measures such as speed reduction and related benefits, as well as considering results</li> <li>Develop cooperation on underwater noise issues with other International Organisations</li> </ul>
Exchange of relevant information with competent authorities related to military activities / exercises	Main	<ul> <li>Regular information letter from the Secretariat to NATO and to national Navy forces to raise attention of impacts on noise on cetaceans and to propose mitigation measures</li> <li>Continue organizing regular joint ACCOBAMS/ASCOBANS workshops with national Navy forces and NATO members - ToR</li> <li>Support research backing demining activities in the Black Sea: development and implementation of the "Post-War Plan for Black Sea Cetaceans" with a focus on the removal of all types of underwater explosives, including mines, with the minimal impact on cetaceans and marine ecosystem.</li> </ul>

CA 2 c	Vessel strikes

Expected outcomes	Reduction of vessel strikes in high-risk areas
Relevant SC16 Recommendation(s)	Rec 16.10

Proposed Action(s)	SC16 priority	Proposed Means of implementation 2026-2028 from the SC16
Monitor / assess high-risk areas for ship strikes (CCH) in the Mediterranean Sea and adjacent Atlantic Area	High	<ul> <li>Create a joint Ship Strikes Working Group with the Pelagos Agreement</li> <li>Continue the entry of vessel strikes data in relevant databases, such as the IWC central database on vessel strikes</li> <li>Identify high risk areas for vessel strikes by encouraging studies that improve understanding of temporal and spatial distribution of shipping and of cetaceans (IMMAs), and supporting interactive map of areas with high risk of ship strikes for crews of relevant ships</li> <li>Enhance efforts to quantify ship strike occurrences through necropsies and photo-identification studies.</li> <li>Promote the use of the IWC ship strikes database and of NETCCOBAMS.</li> <li>Support efforts to improve access to the temporal and spatial distribution of shipping, particularly vessels that do not transmit AIS information</li> <li>Continue cooperation on ships strike issue with other International Organisations, such CMS, IHO, IWC, EMSA (EU) / REMPEC / IMO and Pelagos Agreement and contributing in any other relevant initiatives, projects and workshops in the ACCOBAMS Area</li> </ul>
Promote the use of mitigation measures	High	• Review the results of existing efforts and encouragement of the development of new real time cetacean localization projects, which are designed to be complementary tools in avoiding ship strikes; and review of the progress on the

development of a whale-safe certificate
Strengthen cooperation between countries that share marine areas with high risk of collision for cetaceans in order to
develop a joint and coherent management for these areas
<ul> <li>Foster the development of incentive systems to shipping compagnies adopting suggested mitigation measures</li> </ul>
<ul> <li>Support national or regional projects in order to reduce the risk of collision</li> </ul>
• Evaluate the effectiveness of implemented or proposed new mitigation measures (such as the APMs in the North West
Mediterranean PSSA)
• Support development of standards and accelerate the process for nautical charts to be updated and reflect the areas
crucial for the protection of marine life

CA 2 d	Cetacean watching

Expected outcomes	Cetacean watching activities are properly conducted in the ACCOBAMS Area
Relevant SC16 Recommendation(s)	Rec 16.11

Proposed Action(s)	SC16 Priority	Proposed Means of implementation 2026-2028 from the SC16
Monitoring status of whale watching activities in the ACCOBAMS Area and their potential adverse impacts on individual cetaceans and on populations	High	<ul> <li>Implement a pilot study to define the whale watching "carrying capacity" in a targeted geographical area where commercial whale watching is intensively practiced</li> <li>Conduct an analysis of existing national legislations related to cetacean watching to support the work of experts and coordinate with the Pelagos WG</li> <li>Collaborate with relevant organisations, such as CMS, IWC and Pelagos Agreement</li> <li>Update the list of WW operations</li> </ul>
Promote the use of whale watching vessels as platforms of opportunity	High	<ul> <li>Continue testing and updating the IlogWhales App that incorporates the common procedure for data collection by whale watching operators, making sure that there is compatibility with other similar programmes running on collaborative platforms (eg.: OBSenMER)</li> <li>Organise photo-ID and data collection training for whale watching operators, with the final goal of sharing the collected data</li> </ul>
Support the implementation of the HQWW certificate in the ACCOBAMS Area	High	<ul> <li>Promote the implementation of the HQWW certificate by Parties and in areas -based management measures in collaboration with relevant projects/organisations</li> <li>Organise Trainings on HQWW</li> <li>Revise the regulations governing the use of the collective certification mark "High Quality Whale Watching®" (HQWW) with the objective of simplifying the implementation at the national level and facilitate replication in other geographical areas"</li> <li>Liaise with relevant tourism organisations</li> </ul>

CA 2 e	Marine litter

Expected outcomes	Improved monitoring of marine litter in relation with cetaceans
Relevant SC16 Recommendation(s)	Rec 16.12

Proposed Action(s)	SC16 priority	Proposed Means of implementation 2026-2028 from the SC16
Monitor the impacts of marine litter (ingested marine litter / microplastics / entanglements in ghost nets) on cetaceans	High	<ul> <li>Support actions to implement the best practice guidelines for cetacean <i>post-mortem</i> investigation, including the assessment of ingested marine litter and entanglement in ghost nets</li> <li>Promote/support/liaise with projects and research activities to develop standardized methods to detect the occurrence and effects of marine litter, including micro-plastics, in cetacean species</li> <li>Standardize diagnostic methods to evaluate the presence of marine litter in marine mammals' gastrointestinal tracts, categorize and quantify identified marine litter, detect plastic additives and absorbed contaminants, and develop risk, impact, and mortality index</li> <li>Facilitate regional collaboration between tissue banks to exchange tissue samples for joint analyses and retrospective studies</li> <li>Identify hot-spot areas for marine litter accumulation and identify threat to cetacean species occurring in those areas</li> <li>Develop a proposal to use cetacean species as indicators of marine litter in the ACCOBAMS Area</li> <li>Collaborate with relevant organisations (ASCOBANS, IWC, MEDPOL, IMO, FAO) including through joint activities</li> <li>Promote campaigns on the ban of single-use plastics</li> <li>Promote cetacean species as indicators for microplastics and macro-litter pollution at the ACCOBAMS scale and encourage their inclusion as indicator species within the IMAP candidate indicator 24 and MSFD descriptor 10.</li> </ul>

CA 2 f	Chemical & biological pollution		
Expected outcomes	Improved monitoring of chemical & biological pollution on cetaceans		

	improved monitoring of chemical & biological politition on cetaceans	
Relevant SC16 Recommendation(s)	Rec 16.12	
Proposed Action(s)	SC16 Priority	Proposed Means of implementation 2026-2028 from the SC16
Monitor the impact of chemical & biolog pollution (such as pathogens, invasive species) on cetaceans	ical High	<ul> <li>Develop an inventory of institutions or laboratories within the ACCOBAMS Area able to analyze samples for legacy and emerging pollutants</li> <li>Establish a common database on diseases and chemical burdens</li> <li>Assess cumulative effects and multiple stressors, including chemicals, marine litter, climate change, and emerging pathogens, on cetaceans in ACCOBAMS Area – Ideally through a dedicated workshop - ToR</li> </ul>

Disseminate the best practices to assess the impact of chemical pollution on cetaceans with a focus on emerging contaminants
<ul> <li>Organise trainings on the best practices to assess the impact of chemical pollution - ToR</li> </ul>
• Collaborate with relevant organisations, initiatives and projects to better understand the toxicological effects of macro and micro-litter ingestion in cetaceans, considering chemical, ecotoxicological, and physical effects.
• Define and develop new methods to evaluate exposure to plastics and plastic additives in free-ranging organisms, using approaches like -omics to reveal exposure to various stressors and identify new endpoints.
• Develop new diagnostic techniques to understand the effects of cumulative stressors on cetaceans, both through the examination of stranded animals and in vitro experiments using new technologies.

CA 2 g	Climate change

Expected outcomes	ACCOBAMS cooperates with regional initiatives on climate change, taking into account cetacean conservation
Relevant SC16 Recommendation(s)	-

Proposed Action(s)	SC16 Priority	Proposed Means of implementation 2026-2028 from the SC16
Contribute to regional initiatives on climate change	Medium	<ul> <li>Receive and consider the report from CMS workshop</li> <li>Assess the carbon footprint of bottom trawl fisheries in the Mediterranean Sea in terms of their contribution to climate change, including both direct and indirect greenhouse gas emissions</li> </ul>

CA 2 h	Captivity related issues

Expected outcomes	All specimens held in captivity in the ACCOBAMS Area are listed
	Advisory Committee on captivity issues and semi-enclosed facilities is operational
Relevant SC16 Recommendation(s)	Rec 16.13

Proposed Action(s)	SC16 Priority	Proposed Means of implementation 2026-2028 from the SC16
Identify specimens held in captivity in the ACCOBAMS Area	High	<ul> <li>Continue the work of the ACCOBAMS Advisory Committee on semi-enclosed facilities</li> <li>Continue updating the overview of specimens held in captivity in the ACCOBAMS Area in collaboration with international organisations (such as CITES)</li> <li>Reinforce collaboration with NFP/NGO/ACCOBAMS Partners/CITES authorities in each country</li> <li>Implement the cetacean genetic passport process (see form and template in the SC Report), including genetic and biological data for cetaceans in aquaria and dolphinaria.</li> </ul>

	Disseminate Guidelines for Best Practices during the Installation and Management of Semi-enclosed Facilities for
	Cetacean Species in the ACCOBAMS area, as well as the Procedural Steps for Requesting Advice from the ACCOBAMS
	Advisory Committee on Semi-Enclosed Facilities when considering initiatives related to semi-enclosed facilities

CA3 a	Area-based measures for cetacean conservation

Expected outcomes	CCH are updated
	IMMAs are updated and new ones are identified
	Implementation of relevant measures are initiated in some pilot CCH
Relevant SC16 Recommendation(s)	Rec 16.14

Proposed Action(s)	SC16 priority	Proposed Means of implementation 2026-2028 from the SC16
Regularly update Cetacean Co-occurrence & Human activities (CCH) and Important Marine Mammal Areas (IMMAs), as appropriate, including by identifying priority areas for action to mitigate the known threats (bycatch) / area-based management measures	Main	<ul> <li>Strengthen links through meetings and workshops with Duke Marine Lab., MSP group or authorities, other relevant scientific groups working on SDM, human mapping and overlapping maps - ToR</li> <li>Organise workshops within the SC to review and revise existing maps of SDM modelling exercises or human pressure maps</li> <li>Organise workshop considering some trials in pilot areas of the overlapping process to identify CCH</li> <li>Participate/collaborate to the upcoming IMMA workshop</li> <li>Reinforce collaboration with the "Strategical Alliance among the Secretariats of ACCOBAMS, GFCM, IUCN-Med, UNEP/MAP through SPA/RAC and in collaboration with MedPAN" and the Pelagos Agreement for spatial-based protection and management measures</li> <li>Linico with INFO/PAC and PAP/PAC and their mapping platform KMAP and explore the facilities of the NETCCOPAMS</li> </ul>
Support implementation of relevant measures for adequate management in CCH		<ul> <li>Liaise with INFO/RAC and PAP/RAC, and their mapping platform KMAP and explore the facilities of the NETCCOBAMS network</li> <li>Identify and promote relevant management measures in pilot CCH, in collaboration with all stakeholders, including network of MPAs managers</li> <li>Collaborate with other Organisations, such as UNEP/MAP Barcelona Convention System (EcAp/IMAP, QSR), SPA/RAC (AGEM), BSC, IMO, IWC, GFCM, IUCN and the Pelagos Agreement</li> <li>Define threat based Ranking protocol of CCH</li> </ul>

CA 4 a	Information /Communication / Awareness about cetaceans
Expected outcomes	All ACCOBAMS Bodies, national focal/contact points, Partners and other relevant national institutions, Organisations and experts are familiar with activities implemented by or relevant for ACCOBAMS and share accurate information General public and other relevant stakeholders are aware about cetaceans and need for their conservation through activities supported by or linked to ACCOBAMS
Relevant SC16 Recommendation(s)	Rec 16.15

Proposed Action(s)	SC16 Prioriy	Proposed Means of implementation 2026-2028 from the SC16
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	Main	<ul> <li>Parties &amp; Sec: Implement the ACCOBAMS Communication Strategy,</li> <li>Development of NETCCOBAMS Platform (MA1a)</li> <li>Promote the use of ACCOBAMS certificate and all ACCOBAMS Best Practices</li> <li>Update ACCOBAMS Guidelines and promote them ToR</li> <li>Link conservation with human culture activities (UNESCO/Ocean decade) by initiating joint natural history exhibitions and offering expertise and knowledge e.g. identify heritage sites</li> <li>Promote knowledge about importance of museum collections</li> <li>Provide advice to the Sec on scientific aspects of the Communication strategy</li> <li>Organise a Conference on cetacean conservation in South Mediterranean Countries - CSMC - ToR</li> </ul>
Promote citizen sciences uses	High	<ul> <li>Provide and overview of initiatives and tools already in place/in order to mutualize efforts in particular at the level of young people</li> <li>Organise a Workshop on how to collect data and data exchanges through citizen science - ToR</li> </ul>
Introduce in a new Country / Disseminate the ACCOBAMS Teaching Module courses	High	<ul> <li>Promote updated ACCOBAMS teaching module in universities dealing with cetacean conservation - ToR</li> <li>Translation of the Teaching Module to national languages of ACCOBAMS Parties</li> </ul>
Promote and disseminate public awareness tools	High	<ul> <li>Disseminate public awareness tools in national languages</li> <li>Support publications by national experts in international journals</li> </ul>

CA5 a (new item)	Cetacean culture

Expected outcomes	The potential importance of social learning and culture for cetacean conservation in the ACCOBAMS region is considered
Relevant SC16 Recommendation(s)	-

Proposed Action(s)	SC16 priority	Proposed Means of implementation 2026-2028 from the SC16
Promote Cetacean culture	Medium	<ul> <li>Receive and discuss the report of the ACCOBAMS working group on Culture and Social learning</li> </ul>