

Agenda Item 5

Review of New Information on Threats to
Small Cetaceans (reporting cycle 2016 only)

Disturbance

Underwater Noise

Document Inf.5.1.1.c

**Report of the Joint
CMS/ACCOBAMS/ASCOBANS Noise
Working Group (Joint NWG)**

Action Requested

- Take note
- Comment

Submitted by

Joint Noise Working Group Chairs



**NOTE:
DELEGATES ARE KINDLY REMINDED
TO BRING THEIR OWN COPIES OF DOCUMENTS TO THE MEETING**

Secretariat's Note

The Rules of Procedure adopted at the 19th Meeting of the ASCOBANS Advisory Committee remain in force until and unless an amendment is called for and adopted.

Report of the Joint CMS/ACCOBAMS/ASCOBANS Noise Working Group (Joint NWG)

August 2017

Joint NWG Co-Chairs: Sigrid Lüber and Yanis Souami

Working group history

1. In 2011 the Working Group on Noise became a joint ACCOBAMS/ASCOBANS Noise Working Group, and then in 2013 the ASCOBANS Advisory Committee and ACCOBAMS MOP agreed to evolve it further to become a Joint CMS/ACCOBAMS/ASCOBANS Noise Working Group (Joint NWG) reflecting that the CMS Family was addressing this issue with more seriousness.
2. A broadened Terms of Reference for the Joint Noise Working Group was adopted by ASCOBANS and ACCOBAMS, reflecting the natural evolution of this group and the important work that it needs to address on behalf of these bodies: ACCOBAMS, ASCOBANS and CMS.
3. The invitation to join the Working Group was accepted by the CMS Scientific Council in July 2014.

Report focus and report period

4. The Joint NWG continues to work to the work programme as revised by both ASCOBANS and ACCOBAMS processes.
5. This report provides details on working group activities for 2017.

Drafting key area statements for key regions of the Mediterranean

6. The Joint NWG developed an advisory statement about offshore exploration activities in sensitive areas in the Mediterranean Sea. The statement overlays information about the current Mediterranean Sea EBSA areas with ACCOBAMS science vulnerability as provided by the ACCOBAMS Scientific Committee. It reflects the ACCOBAMS, Pelagos Agreement, CMS, CBD and EU commitments on marine noise, recounts the relevant aspects of the ACCOBAMS Noise Guidelines and provides Joint NWG Recommendations for offshore exploration activities in the Mediterranean Sea, including that:
 - a. Environmental Impact Assessments should conform to the ACCOBAMS Noise Guidelines and ACCOBAMS Scientific Committee Recommendation 10.5, and should be based on appropriate data including characteristics of the specific survey being conducted; and professional modelling, as determined by government regulators, of sound transmission of the area to be surveyed.
 - b. Environmental Impact Assessments should include assessments of the seasonal distribution patterns of vulnerable species and likely seasonal changes in sound propagation conditions such that the timing of any survey could be chosen to minimise impacts.
 - c. The modelling should be used to assess the potential impact on all cetaceans likely to be exposed, and to define exclusion zones, and presented to the regulators. The results should be validated in the field with empirical measurements to allow plans to adapt accordingly (as indicated in the ACCOBAMS Noise Guidelines and ACCOBAMS Scientific Committee Recommendation 10.5).
 - d. Transmission of noise into any EBSA or protected areas within the region should also be considered.
 - e. Engaging an independent review of Environmental Impact Assessment before approvals are given is highly recommended.
 - f. Marine Mammal Observer and Passive Acoustic Monitoring reports should be made transparently available at the end of exploration surveys (within 2 months) by submission to the ACCOBAMS Secretariat for circulation through an agreed means.

Noise hotspots in the ACCOBAMS area

7. JNWG members contributed to an ACCOBAMS project “Overview of the noise hotspots in the ACCOBAMS area”, which contributes to meet the objectives of noise-related Conservation Actions of the ACCOBAMS Working Programme 2014-2016. The project produced a first inventory of noise-producing human activities, identified are as where such activities are carried out, and obtained cumulative maps of noise-producing human activities and proposed a first identification of noise-cetacean interaction hotspots. Finally, the project proposes a methodology for implementing an international noise registry, based on the experience gathered during the data collection phase.

Mediterranean noise monitoring strategy

8. JNWG members contributed to an ACCOBAMS investigation into the Mediterranean noise monitoring strategy, based on TG-Noise guidance for Descriptor 11. Two indicators have been proposed, one for impulsive noise and one for ambient noise. The recommendations from ACCOBAMS ScC is to have an inventory of impulsive noises to understand their distribution in space and time, with a spatial grid of 20x20 km to locate and count noise events during a calendar year. Environmental status can be assessed after establishing a spatial and a temporal threshold for impulsive noise distribution. For ambient noise the proposal is to monitor levels and trends in selected 1/3 octave bands (centred at 20, 63, 125, 250, 500 and 2000 Hz), and to identify and use a threshold in dB for environmental status assessment.
9. The JNWG Co-Chairs will be supporting the ACCOBAMS Secretariat by participating in the Quietmed Proposal: Joint programme on noise (D11) for the implementation of the Second Cycle of the Marine Strategy Framework Directive in the Mediterranean Sea

CMS Family Environmental Impact Assessment Guidelines for Marine Noise-generating Activities

10. The JNWG members have had the opportunity to input to the development of CMS Family Environmental Impact Assessment Guidelines for Marine Noise-generating Activities.

Online workspace

11. Provision has been made for the Joint NWG to operate through the ASCOBANS online workspace. The ASCOBANS Secretariat has kindly established the space and the discussions are being channelled to it, but it has taken some time to transfer the group across to the workspace fully.

Terms of Reference and Operational Procedures

12. In early 2017, the co-chairs requested the three Secretariat review the Terms of Reference and Operational Procedures for the working group. New Operational Procedures are in development and will be circulated by the Secretariats in the coming period.

Annex

13. To support this report one Annexe is also provided:
 - a. Annex A – Work Program of the Joint CMS, ASCOBANS and ACCOBAMS Noise Working Group, progress update 17 August 2017

Annex A – Work Program of the Joint CMS, ASCOBANS and ACCOBAMS Noise Working Group

This work program represents a range of activities for the Joint NWG from 2016-2018. These activities have been prioritized by ACCOBAMS SC and

ASCOBAMS AC to meet both the timing requirements of ASCOBANS and ACCOBAMS processes as well as the volunteer capacity of the Joint NWG.

Progress update: August 2017

<p align="center">Joint NWG ToR</p>	<p align="center">Activities</p> <p align="center">Priorities assigned by ASCOBANS or ACCOBAMS are <u>underlined</u>.</p> <p align="center">Priorities identified by both are <u>underlined</u>.</p> <p align="center">Completed work is strikethrough or <u>strikethrough</u></p>	<p align="center">Activities completed</p> <p align="center">Details of completed work are provided with corresponding numbers</p>
<p>I. Update and complete information on:</p> <p>a) Relevant activities and developments in other international bodies (both regional and global) and under the EU Marine Strategy Framework Directive</p>	<p>1) Develop a list of forthcoming meetings of relevance to the Joint NWG</p>	<p>#1, this was completed for 2014. It needs to be done again for 2018.</p>
<p>b) Relevant developments and new literature especially with respect to technologies aimed at mitigating the propagation of marine noise and noise sources that may present a threat to marine life and how cetaceans are affected</p>	<p>2) Contact the Secretariats, sending recent information as appropriate, requesting them to add the information to Conf. docs or Inf. docs or to make the information available to Parties in appropriate way</p> <p>3) Develop a summary document that presents quick and accessible information about technologies aimed to mitigate noise on marine mammals and noise sources; engage in workshops with the industry</p>	<p>#2, the co-Chairs circulate information to the Secretariat as becomes available.</p>

<p>c) Parties' progress in implementation of:</p> <ul style="list-style-type: none"> - CMS Res.9.19: Adverse Anthropogenic Marine/Ocean Noise Impacts on Cetaceans and other Biota - CMS Res.10.24: Further Steps to Abate Underwater Noise Pollution for the Protection of Cetaceans and other Migratory Species - ACCOBAMS Res.3.10: Guidelines to Address the Impact of Anthropogenic Noise on Marine Mammals in the ACCOBAMS Area - ACCOBAMS Res.4.17: Guidelines to Address the Impact of Anthropogenic Noise on Cetaceans in the ACCOBAMS Area - ACCOBAMS Res.5.13: Conservation of Cuvier's beaked whales in the Mediterranean - ACCOBAMS Res.5.15: Addressing the impact of anthropogenic noise - ASCOBANS Res.6.2: Adverse Effects of Underwater Noise on Marine Mammals during Offshore - Construction Activities for Renewable Energy Production - ASCOBANS Res.7.2: Activities of the ASCOBANS Advisory 	<p>4) With the assistance of the Secretariats, collect information from Parties about their progress and the effectiveness in implementing the listed Resolutions.</p>	
--	--	--

Committee and Work Plan And any relevant Resolutions still to be passed.		
--	--	--

<p>II. Improvement of existing guidelines based on new scientific findings, detailing available mitigation measures, alternative technologies and standards required for achieving the conservation goals of the treaties, in particular by:</p> <ul style="list-style-type: none"> d) Updating and structuring the recommendations in the ACCOBAMS and ASCOBANS noise guidelines and making them applicable globally e) Updating the guidance on relevant mitigation technologies and management measures, and their effectiveness and cost f) Continuing to consult stakeholders for advice on operational constraints to take into account g) Recommending appropriate biological indicators and thresholds 	<ul style="list-style-type: none"> 5) Request an update from the CMS Secretariat about progress on communications with Parties and any information received, as well as any additional information that might be presented to CBD SBSTTA18 and then also CBD CoP12 6) Develop a matrix of noise guidelines in use around the world (including the ACCOBAMS guidelines) for discussions by the Joint NWG 7) Once discussed, develop draft CMS noise guideline advice for presentation to the CMS Scientific Council – the emphasis of this should be to prepare something that is simple and short 8) <u>Develop a Standard for geophysical surveys (seismic, multi-beam research activities,...) in the Mediterranean Sea (GNCC/ACCOBAMS Guidelines Doc. 22 provides a basis for this work) To develop this standard, collect information on :</u> <ul style="list-style-type: none"> – <u>which guidelines are applied in Mediterranean Sea; look at the effectiveness of the measures.</u> – <u>what are the best practices of industries ?</u> – <u>what are the geophysical activities in the area ?</u> – <u>what need to be included in the standard (certified training of MMO, PAM, etc.)</u> – <u>organise a workshop with the industry</u> <p>[For II (d) Please refer to the item IV regarding</p>	<p>#5, a request was sent in late 2014. This is awaiting further communication from CMS</p>
---	---	---

	collaboration with UNEP/MAP]	
III. Further develop the documents: h) ACCOBAMS-MOP5/2013/Doc.22 on Anthropogenic noise and marine mammals: review of the effort in addressing the impact of anthropogenic underwater noise in the ACCOBAMS and ASCOBANS areas, i) ACCOBAMS-MOP5/2013/Doc.23 on Implementation of underwater noise mitigation measures by industries: Operational and economical constraints, and j) ACCOBAMS-MOP5/2013/Doc.24 Methodological Guide: “Guidance on underwater noise mitigation measures” according to available knowledge and to report about progress made to the next Meeting of Parties to ACCOBAMS	9) <u>Develop further comments on :</u> a) <u>ACCOBAMS-MOP5/2013/Doc.22;</u> b) <u>ACCOBAMS-MOP5/2013/Doc.23 and</u> c) <u>ACCOBAMS-MOP5/2013/Doc.24</u> <u>Continue to update these three documents</u>	
IV. Provision of advice on: k) Collaboration with other international bodies, such as OSPAR, HELCOM, CBD, IMO and IWC	10) <u>Collaborate and engage with IMO on the next work plan related with the Sub-Committee on Ship Design and Construction</u> 11) <u>Write to OSPAR for additional information and update on their noise mitigation considerations</u> 12) <u>Pursue the ACCOBAMS collaboration with UNEP/MAP to develop specific indicator related to EO11</u> 13) <u>Pursue relevant collaboration activities with CBD</u>	#11, contacts has been made with the IGC Noise Group of OSPAR #12, Joint NWG members provided further support to ACCOBAMS directly for indicator EO11 #13, Joint NWG provided an expert paper to the CBD workshop, and members provided update information directly to CBD following their recent call. At this stage the Joint NWG is waiting for further advice from the CMS Secretariat in relation to #5

<p>l) Requirements of the relevant other bodies that countries have elected to adhere to with respect to underwater noise, such as European Directives (i.e. the Marine Strategy Framework Directive and the Habitats Directive)</p>	<p>14) Give recommendations on a development of an indicator on noise, with the overall aim of updating the list of the COP18 agreed GES, targets, indicators by COP19 in 2015 (UNEP/MAP).</p> <p>15) Further develop table presented during the COR-GEST Meeting regarding EO11 for adoption of noise indicator by COP19 (UNEP/MAP)</p> <p>16) With the assistance of the Secretariats, collect information from Parties about their progress and the effectiveness in implementing the Habitat Directive</p> <p>17) With the assistance of the Secretariats, collect information from Parties about their progress and the effectiveness in implementing the MSFD (descriptor 11)</p>	<p>#14 The timing for this opportunity passed</p> <p>#15, Joint NWG members provided further support to ACCOBAMS directly for indicator EO11</p>
--	---	--

<p>m) Opportunities for influencing decisions of other relevant bodies in order to achieve more effective protection of marine life from impacts of underwater noise</p>	<p>18) Develop a draft advisory note for governments about factors to consider for effective mitigation of noise propagation into MPAs or other protected areas, and seeking comment from the:</p> <ul style="list-style-type: none"> a) IUCN SSC/WCPA Marine Mammal Taskforce b) IUCN WCPA Transboundary Conservation Specialist Group c) IUCN SSC Cetacean Specialist Group, Pinniped Specialist Group, Sirenian Specialist Group, Polar Bear Specialist Group, Shark Specialist Group and CMS ScC Aquatic Mammals Working Group <p>19) With comments incorporated, present the advisory note to the CMS Scientific Council, ASCOBANS Advisory Committee and ACCOBAMS Scientific Committee for comment and forward recommendation</p> <p>20) <u>Engage industries, Parties, NGO with implementing ship quieting guidelines</u></p>	<p>#18 a general statement has been developed as first draft, and can be circulated to the working groups for their comment</p>
--	---	---

<p>V. Design, and help implement as appropriate, pilot projects to test and improve the existing noise guidelines (ACCOBAMS Res. 4.17 and ASCOBANS AC17/Doc.4-08) and mitigation measures for their application in the field</p>	<p>21) <u>Define 2 or 3 priorities of pilot project (ex.: define save levels (at least for MPAs), test quieting technologies, etc.)</u></p> <p>22) Propose 2 or 3 pilot projects to ASCOBANS/ACCOBAMS/CMS</p> <p>23) Engage with Gvmt and non Gvmt Parties in implementing the IMO ship quieting Guidelines within the region.</p> <p>The new guidelines:</p> <ul style="list-style-type: none"> – recognize that shipping noise can have short-term and long-term impacts on marine life; – call for measurement of shipping noise according to objective ISO standards, which are themselves on the verge of adoption; – identify computational models for determining effective quieting measures; – provide guidance for designing quieter ships and for reducing noise from existing ships, especially from propeller cavitation; and – advise owners and operators on how to minimize noise through ship operations and maintenance, such as by polishing ship propellers to remove fouling and surface roughness. <p>While these (as yet) are voluntary guidelines, not mandatory code, they put the IMO’s imprimatur on noise reduction.</p>	
---	---	--

<p>VI. Follow up activities specified by ACCOBAMS Parties related to conservation of Cuvier's beaked whales in the Mediterranean, by:</p> <p>n) Developing, in collaboration with Parties, non-Parties, as well as NATO and other stakeholders as necessary, implementable measures to reduce impacts of intense noise activities within areas identified as of special concern for Cuvier's beaked whales for consideration by the next Meeting of the Parties of ACCOBAMS</p>	<p>24) Create dialogue with stakeholders and other potential organisation to reduce impacts</p> <p>25) Review of existing measures and if they could be applied in other regions</p> <p>26) Extend this activities to other regions than ACCOBAMS</p> <p>27) <u>Establish dialogue with stakeholders to develop implementable measures.</u></p> <p>28) <u>Dialogue needs to go through the secretariats and will need to be reviewed by Scientific Committee, Advisory Committee and Scientific Council</u></p> <p>29) <u>Attend September Meeting in Amsterdam, which focuses on military noise and organise a meeting around that workshop on which most NATO countries attend.</u></p> <p>30) <u>Develop a review of what the Navy does in EU waters</u></p>	
<p>o) Supporting the ACCOBAMS Scientific Committee over the study on the extent and temporal variability of the habitat of species that are known to be particularly vulnerable to man-made noise (eg <i>Ziphius cavirostris</i>), in order to ensure that more data are made available, to increase the model's robustness and to compare different algorithms for best results</p>	<p>31) Define the process of exchange and communication with the Scientific Committee</p> <p>32) Propose a technical presentation of models (methodology, advantage/disadvantage, performance/limit, etc.) both for scientific and non-scientific</p> <p>33) Develop the models in other area</p>	

<p>VII. Responding to relevant Resolutions and priorities of CMS, ACCOBAMS and ASCOBANS</p>	<p>34) <u>Further develop contacts with the industry, including writing to industry about the ACCOBAMS guidelines. Develop a summary document that present quick and accessible information about measures to mitigate noise on marine mammals: rules, tools and procedures</u></p> <p>35) Organize workshop with different industries (i.e. special workshop for geophysical Industry) and develop a standard.</p> <p>36) Aquatic mammal conference 2015 will dedicate one day on policy. Attend and establish and improve dialogue with member states.</p> <p>37) Attend 2015 Barcelona Conference on ONP. Host an Noise and Environmental Impact Assessment workshop at the ECS meeting (Remark: Risk assessment is a different audience, how to bring all people related to risk assessment in the process?)</p> <p>38) Develop CMS level guidelines (i.e. broader than European context) for EIA relating to marine noise for the CMS Scientific Council to consider, and possibly recommend to the CMS Conference of the Parties</p> <p>39) Develop European level guidelines for EIA relating to marine noise for ASCOBAMS and ACCOBAMS to consider</p> <p>40) <u>Identify and map anthropogenic noise/cetaceans interactions hot spots in the ACCOBAMS area</u></p> <p>41) <u>Identify and map anthropogenic noise hot spots</u></p>	<p>#37, An Environmental Impact Assessment workshop was held in the margins of the ECS meeting</p> <p>#38, a member of the Joint NWG brought a discussion paper, based on the Joint NWG expert advice to CBD, to the CMS ScC. This needs to be pursued again.</p> <p>#38, JNWG members provided detailed comments on the proposed Guidelines</p> <p>#40, Joint NWG members provided support to ACCOBAMS directly to identify and map anthropogenic noise/cetaceans interactions hot spots in the ACCOBAMS area</p> <p>#42, members of the JNWG worked with the ACCOBAMS Secretariat to develop a map of cetacean hotspots in the Mediterranean Sea</p>
--	---	--

<p>Other) Increasing the Joint NWG Profile in coordination with the Secretariats</p>	<p>42) Identify and map cetacean hot spots</p> <p>43) <u>Prepare general presentation about the Joint NWG for use in meetings with other organisations</u></p> <p>44) Prepare the Joint NWG online workspace, and launch it to the whole Joint NWG</p> <p>45) Invite international bodies to join the Joint NWG and exchange information where possible (including seeking to have Joint NWG document distributed to member States of key organisations)</p> <p>46) Invite additional expert members to participate in the Joint NWG</p> <p>47) <u>Host a Joint NWG meeting in the margins of the ECS meeting</u></p> <p>48) Further develop contacts with the industry, including writing to industry about the ACCOBAMS guidelines</p> <p>49) Recirculate list of participants/members and reconfirm the aim and purpose of the NWG (i.e. to serve the ACCOBAMS SC, ASCOBANS AC and CMS SC as advisory group with the purpose to ensure cetacean conservation from ONP) into the work program.</p>	<p>#44, the online workspace has been developed and is now in use</p> <p>#45, key international bodies have been invited to participate as members of the Joint NWG. This needs to be pursued further to complete the activity fully</p> <p>#46, additional experts are periodically added to the members of the Joint NWG</p> <p>#47, a Joint NWG meeting was held in the margins of the ECS meeting</p> <p>#49, the aims and purpose of the Joint NWG were circulated and further discussed with all Joint NWG members.</p> <p>#49, the members table is regularly updated and appear as Annex C to this report</p>
<p>Other) General</p>	<p>50) Define what is to be produce for each meeting (ACCOBAMS, ASCOBANS, CMS)</p> <p>51) Clarify the organisation of the Joint NWG</p> <p>52) Organise more meetings of the Joint NWG</p>	<p>#51, Operational Procedures for the Joint NWG were developed and circulated to the Joint NWG by the three Secretariats</p> <p>#51, revised Operational Procedures for the Joint NWG are being developed and circulated to the Joint NWG by the three Secretariats</p>

Reference documents:

- Report of the 21st ASCOBANS Advisory Committee Meeting. Annex 11 Priorities of the Joint Noise Working Group.
- Report of the 9th ACCOBAMS Scientific Committee Meeting. Paragraph 4.2.2. Anthropogenic Noise