

RESOLUTION 6.18

IMPLEMENTATION OF AN ACCOBAMS CERTIFICATION FOR HIGHLY QUALIFIED MARINE MAMMALS OBSERVERS

The Meeting of the Parties to the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area:

Recognizing that marine noise generated by humans is a form of pollution caused by the introduction of energy into the marine environment which may have an adverse impact on marine life, from disruption to injury and death,

Conscious of and concerned by the negative impact of anthropogenic underwater noise on cetaceans, particularly noise due to seismic activities, pile driving, dredging, explosions, drilling, etc.,

Conscious that several anthropogenic activities, in particular seismic activities, are increasingly common in the ACCOBAMS region,

Recognizing that According to the Guidelines of the Joint Nature Conservation Committee (JNCC) for minimizing the risk of injury and disturbance to marine mammals from seismic survey, a Marine Mammal Observer (MMO) is “an individual responsible for conducting visual watches for marine mammals, and that for some seismic surveys it may be requested that observers are trained, dedicated and / or experienced. The MMO may also be a Passive Acoustic Monitoring (PAM) operative if sufficiently trained”,

Taking into account Resolution 4.17 “Guidelines to address the impact of anthropogenic noise on cetaceans in the ACCOBAMS Area”, and more particularly the following specific points:

Guidelines for seismic surveys and airgun use

g) Continuous visual and passive acoustic monitoring with a specialized team of cetacean observers and bio-acousticians to ensure that cetaceans are not in the Exclusion Zone before turning on the acoustic sources and while sources are active,

General guidelines

l) Mitigation should include monitoring and reporting protocols to provide information on the implementation procedures and their effectiveness, and to provide datasets to be used for improving existing cetacean databases,

q) Trained and approved Cetacean Observers (visual observers and/or acoustic monitors where appropriate) should be employed for the monitoring and reporting programme, including overseeing the implementation of the mitigation rules,

r) Cetacean observers and bio-acousticians in charge of the monitoring programme must be qualified and experienced, with suitable equipment,

t) Marine mammal observers should report to the National Focal Point, who will inform the ACCOBAMS Secretariat using a standardized reporting protocol. Any unexpected condition and/or change in applied protocols should be discussed with the Secretariat in collaboration with the Scientific Committee,

Considering that Bureau Members, during the Ninth Meeting of the ACCOBAMS Bureau (Paris, 9-10 December 2014) confirmed to the Permanent Secretariat the need of working on the “Marine Mammals Observers” (MMOs) issue,

Recognizing the existence of different MMOs training centres, with different theoretical and practical courses levels, in the ACCOBAMS Area, and *aware* that there is a need to establish a standard of legitimacy and credibility for such training centers,

Aware that the implementation of an ACCOBAMS certification on this issue will:

- ensure the recognition of the ACCOBAMS Highly Qualified MMOs/PAM operators at the international level,
- improve the effectiveness of conservation measures to limit the impact of noise on cetaceans,

Welcoming the Report of the ACCOBAMS Workshop “Developing Tools to Ensure High Quality MMOs in the ACCOBAMS Area”, held during the 30th ECS Conference (13th March 2016, Funchal, Madeira, Portugal), and co-funded by the Regional Activity Centre for Specially Protected Areas (RAC/SPA -MAP-UNEP),

1. *Recognizes* that a certification for entities to train MMOs and PAM operators in the ACCOBAMS area will guarantee throughout the Agreement area:
 - a high quality training of MMOs/PAM;
 - the standardization of training contents, regardless of the country;
 - the standardization and quality of the data collected, which may also be made available to scientists;
2. *Adopts*:
 - the Tools ensuring Highly Qualified MMOs/PAM operators in the ACCOBAMS area, as presented in [Annex 1](#) of the present Resolution;
 - the Rules and criteria for entities requesting the certification to become Trainers (including commitments) as presented in [Annex 2](#) of the present Resolution;
 - the Rules and criteria for candidates to integrate a training to become a Highly Qualified MMOs/PAM operators (including commitments, certificate and template for the mission report) as presented in [Annex 3](#) of the present Resolution;
 - the ACCOBAMS accredited training for MMO/PAM operators - Content and duration as presented in [Annex 4](#) of the present Resolution;
3. *Requests* the Permanent Secretariat to inform all relevant international organizations, as well as entities generating noise in the ACCOBAMS area about the tools ensuring Highly Qualified MMOs/PAM operators in the ACCOBAMS Area;
4. *Encourages* Parties to:
 - implement the tools ensuring Highly Qualified MMOs/PAM operators in the ACCOBAMS Area;
 - give, in priority, permits for activities in their national area, to industrial companies employing Highly Qualified MMOs/PAM operators or at least other internationally agreed certifications;
 - whenever possible provide the Permanent Secretariat with a copy of the MMO/PAM report and data
5. *Encourages* industrial companies and public entities engaged in noise-producing activities that may have negative impacts on cetaceans to use the “Tools ensuring Highly Qualified MMOs/PAM operators in the ACCOBAMS Area” in order to prove their commitment at reducing these impacts; further encourages international associations of oil and gas producers to promote such steps;
6. *Requests* the Scientific Committee, as well as the Working Group on MMOs, whose composition and Terms of Reference are presented in [Annex 5](#) of the present Resolution, to :
 - pursue collaboration with other relevant entities for the improvement of the implementation of the Tools ensuring Highly Qualified MMOs/PAM operators in the ACCOBAMS Area;
 - revise accordingly, if necessary, the tools ensuring Highly Qualified MMOs/PAM operators in the ACCOBAMS area and report on this issue to the Seventh Meeting of the Parties.

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ANNEX I – TOOLS ENSURING HIGHLY QUALIFIED MMO¹/PAM² OPERATORS IN THE ACCOBAMS AREA

Role and links of the different actors of the tool

The Permanent Secretariat will:

- Give the accreditation/renewal to organizations asking to become “trainer”, based on requirements set up by the Working group;
- Establish the commitment with the accredited MMO/PAM (receive the signed commitment of MMO from the trainer organizations or the ACCOBAMS school in the same time as the list of accredited MMO);
- Assist the MMO working group;
- Feed NETCCOBAMS with relevant information and moderate the dedicated works space;
- provide the Focal Point with an updated list of accredited MMO/PAMs operators in the country
- Set up and manage a repository for MMO/PAM mission reports;
- Receive sighting forms with data from the most appropriate national entity (when possible if there is a period of confidentiality).

The MMO Working group will:

- set the requirements that have to be fulfilled by organizations asking for trainer’s accreditation/renewal;
- set the requirements that has to be fulfilled by people to integrate a training to become a MMO/PAM;
- set the standards, content, duration, etc.... of the training module;
- set the updates, news, actualization that has to be integrated in the training;
- identify experts for the ACCOBAMS School;
- feed the NetCCOBAMS webpage on the MMO/PAM subject.

The ACCOBAMS School will:

- be composed by experts (e.g. from the research, academic sectors, and relevant stakeholders) operating in the ACCOBAMS Area in cetacean ecology, underwater acoustics and bioacoustics, impacts on marine mammals, mitigation measure in the ACCOBAMS regions, identified by the MMO working group;
- select the future MMO/PAM candidates in accordance to the terms of references;
- train and certificate MMO/PAM;
- provide the support for the standard training to all accredited “trainer” organizations under the directives and/or validation of the MMO working group;
- provide the support for the updates to be integrated in the training, following MMO working group directives;
- update regularly the list of certificated MMO/PAM and inform the Permanent Secretariat;
- Submit to MMO/PAM-trainees the commitment agreement between them and ACCOBAMS for signature;
- Send the commitment agreement to the Permanent Secretariat.

The “TRAINER” organizations will:

- ask for accreditation/renewal to the Permanent Secretariat;
- use standard support of training provided by the ACCOBAMS School;
- train and certificate MMO/PAM that fulfil the requirements to be candidate;
- update regularly the list of certificated MMO and inform the Permanent Secretariat;

¹ MMO : Marine Mammals Observers

² PAM operators: Passive Acoustic Monitoring operators

- Submit to MMO/PAM-trainees the commitment agreement between them and ACCOBAMS for signature;
- deliver the template report and a standard sighting form to be used in the field;
- participate in a working group or a group on NetCCOBAMS (<http://www.netccobams.com>) relating to MMOs or PAM operators.

The MMO/PAM operators will:

- have to fulfil requirements established by the MMO Working Group, to apply for the training;
- attend a standard training from an accredited organism or from the ACCOBAMS school;
- receive a certificate stating that they can act now as MMO/PAM;
- sign a commitment (through the trainer organism or through the ACCOBAMS school) with the Permanent Secretariat to engage themselves in using standards;
- elaborate a report after each mission at sea that will be forwarded to the relevant national authority ;

- To submit to certified MMOs and PAM operators a commitment agreement to be signed.;
- Send the commitment agreements to the ACCOBAMS Permanent Secretariat.

The coordinating organization (ACCOBAMS) commits itself:

- To increase the standing of organizations committed to the common quality system within the ACCOBAMS region;
- To keep accredited organizations informed of any changes to the specifications (protocols, standard forms, manual, etc.).

Article 1.1. Subject

Agreement on the accreditation designed to standardize and certify training for MMOs and PAM operators in the ACCOBAMS region and use the training kit tool given by the ACCOBAMS School.

Article 1.2. Conditions of access to accreditation

The applicant organization must be an ACCOBAMS' Partner and be involved in cetacean research or conservation and provide proof of experience in training operational staff and being a MMO and/or a PAM operator onboard a seismic vessel.

The applicant organization must submit a written application to the ACCOBAMS Permanent Secretariat explaining its reasons for applying and describing its experience of training operational staff.

Article 1.3. Identification



Article 1.4. Length of agreement and renewal of accreditation

The accreditation is valid for two years. Following the submission of a report summarizing activity at the end of the accreditation period to the coordinator (ACCOBAMS Permanent Secretariat), the coordinator shall assess compliance with the specifications. In the event that the specifications have been complied with, the coordinator shall renew the accreditation; if the specifications have not been complied with, the accreditation shall not be renewed.

Article 1.5. Procedures for assessing compliance with the accreditation specifications

The activity report shall describe the training carried out, provide evidence that the specifications have been properly complied with, list the names of the MMOs and/or PAM operators trained and include copies of the commitments signed by MMOs/PAM operators regarding the submission of field reports.

Template of the activity report in the ANNEX: Activity report for renewal of the accreditation agreement between the “ACCOBAMS Highly Qualified MMOs/PAM operators” Trainer and the ACCOBAMS Permanent secretariat

Prepared in two copies the (date):

Location (city, country):

<p>Recipient: Signature and stamp, preceded by the words: <i>“I agree to fully comply with the provisions of the accreditation and these specifications”</i></p>	<p>For ACCOBAMS: Signature and stamp, preceded by the note: <i>“MMO/PAM accreditation agreed”</i></p>

Initial each page of the specifications and annexes.

c : Activity report for renewal of the accreditation agreement between the “ACCOBAMS Highly Qualified MMOs/PAM Operators” Trainer and the ACCOBAMS Permanent secretariat

- Name of the organization:
 - Name of the responsible of the training:
 - First date of accreditation:
 - Date of the report:
- 1) Description of the training(s) carried out
 - i. Report the training location (for both theoretical and practical session);
 - ii. Report the training duration (for both theoretical and practical session);
 - iii. Report the trainers name and qualification;
 - iv. Specify a detail list of the training subjects/course work (for both theoretical and practical session);
 - v. Report the list of education material provided;
 - vi. Specify the overall number of attenders (within the 2 years).
 - 2) Report the overall list of the MMOs and/or PAM operators certified;
 - 3) Provide evidence of the specifications fulfilment including:
 - i. the use of NETCCOBAMS webpage;
 - ii. the active collaboration with the ACCOBAMS School as support of the training (adoption of any updates provided by the School);
 - iii. the utilization of the standardized material provided by the ACCOBAMS School (e.g. delivery to the certified MMO of the standard sighting forms, the manual and tool kit,...);
 - iv. Accreditation request of renewal or Non-renewal for the accreditation (or not). In case of non-renewal specify the reason.

ANNEX 3: INFORMATION ON HOW TO BECOME AN ACCOBAMS HIGHLY QUALIFIED MMOS/PAM OPERATOR**a: Rules and criteria for candidates to integrate a training to become an ACCOBAMS Highly Qualified MMO/PAM operator**

To integrate a training to become an ACCOBAMS highly qualified MMO/PAM operator, the candidate should, at least, be graduated in biology or ecology, **or** demonstrate a commitment to environment and its conservation. Personal path should demonstrate a minimum of 30 days-at-sea as observer (real spent in favourable condition at sea at work), and the candidate should be able to recognize the different species and understand the behaviour of animals at sea. Period could be continuous or cumulative.

The candidate should provide all necessary information to the trainer organism (dates, places, species encountered, type of work done at sea).

b – Commitment between an ACCOBAMS highly qualified MMO/PAM operator and the ACCOBAMS Permanent Secretariat

I, the undersigned, (full name).....
in my role as an MMO/PAM* operator, having completed an ACCOBAMS accredited training course
delivered by (organization)
in (location)
(dates) between and

Agree that:

- no later than one month after each mission relating to activities generating noise in the ACCOBAMS region on which I have embarked as an MMO/PAM operator, I will **submit a mission report** as stipulated in the standard documents.
- during these missions, I will **implement** the procedures explained in the manual and which I learned during the training course, and I will **use the standard forms** provided by ACCOBAMS.
- I will stay in **relation** through NETCCOBAMS on the MMO issue.

In case of noncompliance, I know that my accreditation will be withdraw.

**Delete where appropriate*

Location (city, country):

Date:

Signature:

c: Training certificate of an ACCOBAMS “Highly Qualified MMOs/PAM operators”

We certify that (surname, first name).....
completed an ACCOBAMS accredited training course as an:

- MMO*
- PAM operator*
- MMO and PAM operator*

(* Delete where appropriate)

Issued by (name of “trainer” organization):

In (location):

(Date) from:.....to.....

This certificate qualifies the holder to work as an MMO and/or PAM operator during activities generating noise at sea in order to minimize the impact on cetaceans, by applying the knowledge, expertise and skills taught during the training course and to use the standard procedures, forms and manual, in accordance with the ACCOBAMS principles.

Location

Date

Signature of certificate holder:

Signature of training manager:

d: Model of report for ACCOBAMS “Highly Qualified MMOs/PAM operators” after a mission at sea

(To be sent within one month after the mission)

Contact details: Name; email; phone number

Content

1. Area and characteristics of the survey
 - Date and location (including mapping*) of survey
 - Objectives of the survey
 - Number and types of vessels involved in the survey
 - Contact details of all MMO and PAM operators aboard the vessel(s)
 - Material and method used as MMO/PAM
 - Total number and volume of the airguns used
 - Nature of airgun array discharge frequency (in Hz), intensity (in dB re. 1µPa or bar metres) and firing interval (seconds), and / or details of any other acoustic energy used

2. Records

- A record of all occasions when the airguns were used (copy of the forms*)
- A record of the watches made for marine mammals, including details of any sightings and the seismic activity during the watches (copy of the forms and/or excel filled if possible*)

3. Details of any problems encountered during the seismic survey including instances of non-compliance with the ACCOBAMS guidelines (Resolution 4.17)

Annexes*:

The excel file filled* (example Marine Mammal Recording Form from the Joint Nature Conservation Committee) - Cover page, Operations, Effort and Sightings

Date

Signature

** in case of data confidentiality, please send a copy of the paragraph specifying the terms of confidentiality and the delay, and send the data after the period of confidentiality.*

ANNEX 4 – ACCOBAMS ACCREDITED TRAINING FOR MMO/PAM OPERATORS - CONTENT AND DURATION

The training should comprise two parts: theoretical and practical.

The content of the **theoretical training** must cover the subjects listed below, and should be drawn primarily from the ACCOBAMS manual based on the JNCC one.

1. Introduction to the “life style” onboard

- 1.1. Offshore survival and safety
- 1.2. Tasks of a MMO/PAM
- 1.3. Ethics, conflicts of interest and standards of conduct
- 1.4. MMO medical condition requirements
- 1.5. Data confidentiality
- 1.6. Field communication/support; communication and support with appropriate personnel; and using communications devices (i.e., two-way radios, satellite phones, Internet, email, etc.)
- 1.7. Conflict resolution

2. Introduction to marine mammals and acoustics

- 2.1. Marine mammal biology and behaviour
- 2.2. Marine mammal identification
- 2.3. Marine mammal vocalizations
- 2.4. Marine mammal distribution and critical habitats

3. Introduction to regulations and ACCOBAMS guidelines

- 3.1 International regulations
- 3.2 National regulations
- 3.3 ACCOBAMS guidelines

4. Introduction to the different components of a survey

- 4.1 Transects
- 4.2 Observation periods
- 4.3 Sightings
- 4.4 Practical issues: equipment needed for observation

5. Introduction to seismic survey

Overview of types of seismic survey and sound source technology and equipment (e.g., site, two-dimensional, three-dimensional, four-dimensional, four components, ocean bottom cable, ocean bottom surveys, high resolution, electromagnetic, airguns, sparkers, boomers and echo-sounders).

- 5.1. Background on underwater sound
- 5.2. Overview of oil and gas industry use of sound-active exploration
- 5.3. Environmental impacts of seismic survey
 - 5.3.1. Masking
 - 5.3.2. Behavioural impact
 - 5.3.3. Auditory and physical impacts
 - 5.3.4. Stress

- 5.3.5. Cumulative and population-level impacts
- 5.3.6. Effects on fish and other marine life

6. General restrictions and data management

- 6.1. Pre-survey phase
 - 6.1.1. Regional restrictions
 - 6.1.2. Seasonal restrictions
 - 6.1.3. Gather information
 - 6.1.4. Survey design
 - 6.1.5. Array configuration
 - 6.1.6. Selection of visual observers
 - 6.1.7. Monitoring method
- 6.2. Survey phase
 - 6.2.1. Ramp-up
 - 6.2.2. Search method for marine mammals
 - 6.2.3. Safety zone
- 6.3. Post-survey phase
 - 6.3.1. Data entry and reporting
 - 6.3.2. Reporting violations, non-compliance, etc.

7. Elements specific to other activities generating noise and requiring MMO or PAM, such as pile driving for construction, dredging, explosives, drilling, etc.

The *practical training* (conducted on a boat out at sea) should enable future MMOs/PAM operators to test and gauge their skills and master the detection and identification of species and the use of the equipment (binoculars, stick, angleboard, acoustic software, completion of forms, etc.).

Duration: The training must be **at least three** full days in length for the theory section and cover all of the subjects listed above. This should be followed by **at least one** day session at sea where the theoretical protocols should be applied and also a simulation of real conditions onboard with a shutdown call and non-compliance with ramp up for example.

ANNEX 5 - COMPOSITION AND TERMS OF REFERENCE OF THE WORKING GROUP ON MMO/PAM

This WG will address these items:

- Examine possibilities for the promotion of mandatory involvement of MMO/PAMs in any impulsive noise-generating activities (e.g. seismic exploration, pile driving, training course of seismic acquisition and processing, testing of seismic instruments);
- Review of existing training schemes and best practice guidelines and participation to their actualization;
- Review of different ways of implementing MMO/PAM trainings and development of an ACCOBAMS MMO scheme (e.g. ACCOBAMS MMO label, ACCOBAMS school);
- Development of strategy to involve industrial stakeholder into the process;
- Assessment of MMO/PAM accreditation conditions;
- Presentation of a consolidated proposition to the SC of ACCOBAMS about the MMO/PAM training issue.

First members of the WG:

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The composition of the Working Group will evolve by adding other experts to benefit of their skills