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

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

Seventh Meeting of the Parties to ACCOBAMS

Istanbul, Republic of Turkey, 5 - 8 November 2019

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REPORT OF THE CHAIR OF THE SCIENTIFIC COMMITTEE AND RECOMMENDATIONS

REPORT OF THE CHAIR OF THE SCIENTIFIC COMMITTEE AND RECOMMENDATIONS

(Since the Sixth Meeting of the Parties of ACCOBAMS)

During the triennium 2017-1019, the ACCOBAMS Scientific Committee was composed by:

- 2 experts nominated by CIESM: Ayaka Amaha OZTÜRK and Aviad SCHENIN
- 3 experts nominated by IUCN: Ibrahim BEN AMER, Léa DAVID and Simone PANIGADA
- 1 expert nominated by IWC: Greg DONOVAN
- 1 expert nominated by ECS: Joan GONZALVO
- 1 expert nominated by CMS: Giuseppe NOTARBARTOLO DI SCIARA
- 4 Regional Representatives: Vincent RIDOUX, Hedia EL HILLI, Vasilios PETROPOULOS and Romulus-Marian PAIU

The new Scientific Committee at its 1st Meeting elected:

- A Chair – Simone PANIGADA
- A Vice-Chair – Ayaka Amaha OZTÜRK
- Four Task Managers (selected according to ACCOBAMS work plan and conservation priorities)

Each Task Manager is supported by a group of colleagues and mainly operates by email.
The nominated Task Managers for the current triennium (2017-2019) are:

- Interaction with fisheries: Ayaka Amaha OZTÜRK
- Species Conservation Management Plans: Greg DONOVAN
- Functional Stranding Networks and Responses to Emergency Situations: Aviad SCHENIN
- Protected Areas for Cetaceans: Léa DAVID

Two Scientific Committee Meetings were held during this triennium:

- the 11th Scientific Committee Meeting (Monaco, 7-9 February 2017)
- the 12th Scientific Committee Meeting (Monaco, 5-8 November 2018)

During the 12th Scientific Committee Meeting, 8 Recommendations have been approved by the Members. These Recommendations are presented in Annex 1.

This document also presents in Annex 2 a list of meeting where the Chair of the Scientific Committee or other members have participated, presenting and discussing issues related to the ACCOBAMS work-plan.
In several occasions the SC has envisaged collaborations and synergies to strengthen the conservation and mitigation effort at the ACCOBAMS level.

MANAGEMENT OF THE AGREEMENT (MA)

MA 1	INFORMATION AND COMMUNICATION		
MA 1 a	**Establish regular communication**		
Relevant Resolutions: -			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status[1]**
1- Maintain regular **communication** to inform about ongoing activities, cooperation possibilities, funding possibilities, project call of proposals and other relevant information	Active e-mailing list (regular exchange of information) New and updated information filled into NETCCOBAMS Link with the BSIS (Black Sea information system) prototype		
2- Maintain and regularly update **NETCCOBAMS**, including information about cetacean conservation scientists and experts operating in the region			
3- Continue organising **Regional Workshops** with the representatives of Parties and representatives of the Scientific Committee	Regional Workshops organised in 2018		
4- Continue organising **Biennial Conferences** for the Southern Mediterranean countries	Biennial conferences organised in 2017		
5- Regularly update **ACCOBAMS website**, and newsletter FINS. Link with the Black Sea bulletin	New and accurate information available on the website FINS regularly published		

[1] Done, Partially Done, Not Done, Not relevant

MA 2	INVOLVEMENT OF ALL KEY STAKEHOLDERS		
MA 2 a	**Strengthen involvement of all key stakeholders in ACCOBAMS's operations**		
Relevant Resolutions: 2.2/ 2.30 / 3.8 / 4.8/4.17/ 4.20 / 6.11/ 6.12			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Strengthen existing **partnerships**: CIESM, IUCN, GFCM, IMO, CMS and relevant CMS agreements such as ASCOBANS, the Barcelona Convention, RAC/SPA, the Black Sea Commission, IWC, EU Biodiversity Strategy, marine strategies in the ACCOBAMS area (MSFD[2]), CBD Strategy, SAP BIO, ECS, Pelagos Agreement, international, regional and local NGOs	• Joint activities/ projects with relevant organizations • Joint working groups on particular issues • Regular meetings of relevant Secretariats • Cetacean conservation activities included in all relevant regional strategic documents, such as in the Black Sea status environment report • Regular communication/meetings with representatives of the relevant NGOs participation in the process of fully developing the Companion Volume for the Strategic Plan for Migratory Species 2015-2023	Participation to meetings and conferences, presenting ACCOBAMS and related projects. Joint ACCOBAMS and ASCOBANS Workshop on harmonization of the best practices for necropsy of cetaceans and for the development of diagnostic frameworks, took place in Padova, Italy on the 24th-26th of June 2019.	
- Strengthen involvement of all riparian Countries: • Encourage accession of all riparian states to the Agreement • Develop activities with non-Parties	All riparian states are Parties to ACCOBAMS		Not relevant for the Scientific Committee
3- Establish collaboration with the EC jointly with ASCOBANS and as feasible with assistance from CMS.	• Participation in the relevant fora and Meetings • Contribution to the determination and		Not relevant for the Scientific Committee

[2] EC Marine Strategy Framework Directive

	monitoring of the GES (MSFD) and favourable conservation status (HD)		
4- Establish / strengthen collaboration with NATO – NURC, OGP, ICES, OSPAR	• Participation in the relevant fora and Meetings • Joint activities		Not relevant for the Scientific Committee
5- Establish connections with other relevant organizations (EBA, WTO…)			Not relevant for the Scientific Committee
6- Organise a **Workshop** of Partners	Reinforcement of synergy between Partners and harmonisation of activities		Not relevant for the Scientific Committee

MA 3	**ENSURE ADEQUATE FUNDING, IN PARTICULARLY FOR CONSERVATION ACTIVITIES**		
MA 3 a	**New funding possibilities**		
Relevant Resolutions: 1.7/ 3.6/ 5.16/5.5			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Develop a funding strategy	Funding strategy in particular for joint projects		Not relevant for the Scientific Committee
2 –L**aunch calls for proposals** for projects to be funded under the Supplementary Conservation Fund (SCF)	Conservation activities implemented through projects funded under the SCF		
3- Support development or develop **multilateral/ transboundary projects**	Project proposals prepared with assistance of ACCOBAMS bodies		

MA 4	IMPLEMENTATION OF AND COMPLIANCE WITH ACCOBAMS		
MA 4 a	**Improve the level of implementation of and compliance with ACCOBAMS resolutions as well as the monitoring of its progress**		
Relevant Resolutions: 5.4 / 6.8			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Evaluate the effectiveness of the ACCOBAMS Strategy (including evaluation of the work programme and level of resolutions implementation by Parties as a basis for new triennial work programme planning)	Mid-term evaluation of the effectiveness of the ACCOBAMS Strategy (including evaluation of work programme and evaluation of the implementation of ACCOBAMS by Parties)		
2- Propose remedy actions in cases of non-compliance with ACCOBAMS Resolutions and infringements	Proposal of remedy actions		

MA 5	ACCOBAMS EXTENSION AREA		
MA 5 a	**Ensure implementation of the ACCOBAMS's cetacean conservation standards in the adjacent areas**		
Relevant Resolutions: A/4.1			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Encourage **ratification** by Parties of the existing Amendment for geographical extension to the Atlantic	Amendment has entered into force		

CONSERVATION ACTIONS (CA)

CA 1	IMPROVE KNOWLEDGE ABOUT STATE OF CETACEANS		
CA 1 a	**Cetacean population estimates and distribution**		
Relevant Resolutions: 5.9/ 6.13			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Undertake a comprehensive **survey** of abundance and distribution of cetaceans in the **Mediterranean Sea** and in the Black Sea (based on 2013 survey and conclusions in the final report to EC DG MARE, 2014) using the most appropriate methodology	Distribution and abundance of cetaceans in the different parts of the Mediterranean Sea and Black Sea based on results of the survey	See ASI dedicated side-event.	Data collection completed, analysis ongoing.

CA 1	IMPROVE KNOWLEDGE ABOUT STATE OF CETACEANS		
CA 1 b	**Population Structure**		
Relevant Resolutions: 2.10/ 2.11/ 3.9/ 4.18/ 6.14			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- **Identify isolated populations** and improve description of population of several species	Characterisation of Mediterranean, Atlantic and or Black Sea sub populations Identification of isolated populations Exchanges of samples facilitated for joint analysis		
2- Investigate and implement modes for better **collaboration** between tissue banks and Countries to facilitate **exchanges of samples** for joint analysis.		This aspect will be addressed with the preparation of species-specific Conservation and Management Plans (CMP)	**ongoing**
3-In order to facilitate the exchange of samples, a list of tissue banks registered with the CITES Secretariat should be made available			

CA 1	IMPROVE KNOWLEDGE ABOUT STATE OF CETACEANS		
CA 1 c	**Monitoring cetaceans status**		
Relevant Resolutions: 2.22/ 3.19 / 6.15			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- **Monitor mortality trends** and cases of animals injured through human activities (e.g. ship strikes, bycatch, pollution, epidemic), using existing tools (such as MEDACES, IWC database on ship strikes,...)	Mortality trend reports	IWC database is constantly monitored and populated. MEDACES is available for those who are keen to use it.	**ongoing**
2- Assess **IUCN threat status** of cetaceans in the ACCOBAMS area and update it regularly, and more specifically: • Gather information to assess the Data Deficient species • Evaluate species within the region not previously assessed (e.g. the rough-toothed dolphin) • Consider killer whales in the Agreement area	Assessment of **IUCN threat status** of cetaceans in the ACCOBAMS area Updates available on the IUCN and, ACCOBAMS websites	Thanks to ASI results, IUCN status for Med and BS cetaceans will be re-evaluated and a new assessment will be done for those species needing it. Preliminary meeting scheduled during WMMC in Barcelona in December 2019, after ASI results will be presented. In 2018, an assessment process of the Gibraltar strait subpopulation of the killer whale was launched in view of its submission to be included in the Mediterranean IUCN Red List. The assessment document was presented to the 12th Scientific Committee of ACCOBAMS for review before submission to the IUCN Species Information Service (SIS) in August 2019.	**ongoing**
3- Prepare **Red Books of cetaceans** in the ACCOBAMS area and communicate with European Union. Coordinate with the Black Sea Red Data Book	Preparation of Red Books of cetaceans	To be addressed in the next triennium	

CA 2	REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO BYCATCH, HABITAT LOSS AND DEGRADATION (POLLUTION)		
CA 2 a	**Interaction with fisheries**		
Relevant Resolutions: 2.13/ 2.21/ 2.25/ 3.13/ 4.9 / 6.16			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Assess cetaceans bycatch and depredation impacts and propose **mitigation measures** through pilot actions in the framework of the joint ACCOBAMS/GFCM project	Gaining data on cetacean bycatch and depredation impacts in pilot areas in the Mediterranean Sea and adjacent Atlantic waters and on mitigation measures Contribution to GFCM DCRF	MAVA funded projects	ongoing
2- Assess the **bycatch levels in the Agreement area**, in connection with GFCM and EU regulations	• Gaining data on bycatch levels • Contribution to GFCM DCRF • Contribution to the implementation of the EU Policies	MAVA funded projects	ongoing
3- Investigate the establishment of connection with the **EU bycatch reporting system**	Contribution to the implementation of EU Policies	ACCOBAMS representative (Task Manager) participated the meetings related to EU bycatch regulation, which includes the EU reporting system.	ongoing
4- Investigate funding opportunities to address impacts of interaction between fisheries and cetaceans **in the Black Sea** through the identification of mitigation measures and the preparation of a draft Strategy for reducing cetacean bycatch	Improving knowledge on interaction of fisheries on cetaceans in the Black Sea (Coordinate with strategic action plan implementation report -SAPIR) Contribution to GFCM DCRF	CeNOBS, a project concerning the Black Sea cetaceans, started to examine the bycatch situation in the Black Sea.	Ongoing
5 - Develop a joint working group with ASCOBANS on bycatch, and explore opportunities for linking this to the Bycatch Initiative established under the IWC.	joint working group with ASCOBANS on bycatch	The ToR has been prepared and agreed. The dialogue has been started regarding the joint workshop.	Ongoing

CA 2	REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO BYCATCH, HABITAT LOSS AND DEGRADATION (POLLUTION)		
CA 2 b	**Anthropogenic noise**		
Relevant Resolutions: 2.16 / 3.10/ 4.17/ 5.15 / 6.17/ 6.18			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Pursue the identification of anthropogenic **noise**/cetaceans' interactions **hot spots** in the ACCOBAMS area	Overview of noise hot spots (Phase II III)		ongoing
2- Monitor all activities in the region including impulsive **noise component through the development of an** ACCOBAMS Common database	• Overview(s) of approved activities including impulsive noise component • National Noise databases • ACCOBAMS Common database	EU funded Project QuietMed and QuietMed2 (involvement of some Members of the JNWG)	ongoing
3- Develop a regional project to i**mplement** a monitoring of underwater noise, particularly in critical habitats and in interactions **hot spots**	Regional Project	EU funded Project QuietMed and QuietMed2 (involvement of some Members of the JNWG)	ongoing
4- Develop and update more detailed guidelines to mitigate impacts of anthropogenic noise (using the existing guidelines Res 4.17) and update the **guide** for Parties to use mitigation measures	Updated guide to use mitigation measures	Efforts initiated by experts from JNWG in 2018 and 2019 in order to present document to MOP7 (Guidelines and guide updated)	
5- Assess the feasibility to develop best practice guidelines for an EIA review process	Assessment of feasibility to develop best practice guidelines for an EIA review process		ongoing
6- Develop **cooperation** on noise issue with other **international Organizations** such as CMS Family, EC, OSPAR, ICES, the Barcelona Convention, Black Sea Commission, CBD, IWC, NATO and with relevant international NGOs	Joint activities Meetings Workshop	Meeting on sonar with National Navies was held in October 2019	ongoing
7- Develop certificate or deliver certification in existing MMO training centres and encourage Focal Points to make mandatory the use of MMO in their countries (under the MSFD "measure" programme for EU countries for example / EcAP process)	MMO certification	MMO Working Group provided, early July 2017, the Scientific Committee with titles of the training modules to allow it to review the scope of the training envisioned and to comment if any contents were considered missing The Chair of the MMO WG is an expert from the SC	ongoing

		She ensures the link between the WG and the SC. She was in particular involved in the organisation of the first training to become an « ACCOBAMS HQMMO/PAM operators ».	
8- Support the finalization of the CMS Family Guidelines on Environmental Impact Assessments for Marine Noise-generating Activities, encourage their adoption at CMS COP12	Implementation of CMS Family Guidelines on Environmental Impact Assessments for Marine Noise-generating Activities,		
9- implement the CMS Family Guidelines on Environmental Impact Assessments for Marine Noise-generating Activities			

CA 2	REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO BYCATCH, HABITAT LOSS AND DEGRADATION (POLLUTION)		
CA 2 c	**Ship strikes**		
Relevant Resolutions: 5.11 / 6.19			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Continue to monitor **high risk areas** for ship strikes in the Mediterranean Sea	Overview of high-risk areas for ship strikes	Monitoring is done on a regular basis	ongoing
2-Suggest and facilitate implementation of IMO or national mitigation measures (PSSA, TSS, ATBA) in selected areas	New shape files in NETCCOBAMS IMO or national measures in place	Discussed during a dedicated workshop in Greece in April 2019	
3- Promote use of **mitigation measures** to shipping companies in the region (speed restrictions, avoidance area) in particular in Cetacean Critical Habitats	Ships/boats in areas inhabiting large whales using the REPCET or other systems		
4- Encourage the use of tools such as REPCET in the Pelagos Agreement as a pilot area to facilitate statistical testing of the system	REPCET statistically tested	This will be addressed during the next 8 months	ongoing
5-Evaluate the relevance and the feasibility of a “whale-safe from ship strikes” certificate for shipping Companies	Decision on relevance of a “whale-safe from ship strikes” certificate for shipping Companies	Discussion ongoing with relevant potential partners who have been dealing with similar certificates in the US and New Zealand	ongoing
6- Facilitate and encourage reporting to and feedback from IWC database on ship strikes injuries and mortalities	Protocol for investigating and documenting ship strikes injuries and mortalities	IWC database is currently being assessed to verify each single data	ongoing

CA 2	REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO BYCATCH, HABITAT LOSS AND DEGRADATION (POLLUTION)		
CA 2 d	**Cetacean watching**		
Relevant Resolutions: 3.23/ 4.7/ 5.10 / 6.20			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Promote the use of the "High quality whale watching" **certificate,** including organisation of training for operators	Awareness campaign to adopt and establish HQWW® certificate Member States with intensive cetacean watching activities use the certificate		Not relevant for the Scientific Committee
2 - Provide a definition on the different types of whale watching operators (commercial, research, others)	Definition on the different types of whale watching operators	WW working group	
3- Test (i) the Guidelines for monitoring programmes aimed at maximizing the chance of detecting potential adverse impacts on individual cetaceans and on populations, (ii) the common procedure on the data collection in some pilot areas representing a variety of operation types (e.g. the Pelagos Agreement area, Gibraltar Strait, and south Portugal).	Guidelines for monitoring programs aimed at maximizing the chance of detecting potential adverse impacts on individual cetaceans and on populations, updated Common procedure on the data collection updated	WW working group	
4- Use (i) the Guidelines for monitoring programmes aimed at maximizing the chance of detecting potential adverse impacts on individual cetaceans and on populations, (ii) the common procedure on the data collection	Guidelines for monitoring programs aimed at maximizing the chance of detecting potential adverse impacts on individual cetaceans and on populations, used by Parties Common procedure on the data collection used by Parties	WW working group	
5- Compile the information collected from whale watching companies through the data collection forms annexed to the Resolution [6.20]	Specific entry created in NETCCOBAMS to compile the information collected from whale watching companies		Not relevant for the Scientific Committee
6- Revise, if necessary, (i) the Guidelines for	Guidelines for monitoring programmes		

monitoring programmes aimed at maximizing the chance of detecting potential adverse impacts on individual cetaceans and on populations, (ii) the common procedure on the data collection and report on this issue to the Seventh Meeting of the Parties	aimed at maximizing the chance of detecting potential adverse impacts on individual cetaceans and on populations, revised Common procedure on the data collection revised		
7- Strengthen collaboration with relevant organisations addressing cetacean watching initiatives, in particular the IWC 'Online Handbook' for whale watching (under development)	Collaboration strengthened with relevant organisations	Link with IWC and WW initiative established	

CA 2	REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO BYCATCH, HABITAT LOSS AND DEGRADATION (POLLUTION)		
CA 2 e	**Marine debris**		
Relevant Resolutions: 4.8			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Assess the impact of **ghost nets** on cetaceans in the ACCOBAMS area in collaboration with **MedPOL and GFCM,** with emphasis on the development of the removal methods	Assessment of ghost nets impacts on cetaceans	Workshop planned for December 2019	
2- Assess the impact of **plastic bags**, microplastic and other plastic materials ingestion on cetaceans in cooperation with existing initiatives, such as IWC : bibliographic synthesis and Scientific Committee recommendation	Assessment of plastic materials impacts on cetaceans by providing bibliographic synthesis	Workshop planned for December 2019	
	• Focus on secondary effects more than ingestion • Suggested mitigation measures	Workshop planned for December 2019	
3- Encourage cooperation with ongoing regional initiatives on marine litter.	Joint programmes at the Agreement level Synergies with EU MSFD	Workshop planned for December 2019	

CA 2	REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO BYCATCH, HABITAT LOSS AND DEGRADATION (POLLUTION)		
CA 2 f	**Climate change**		
Relevant Resolutions: 4.14			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Identify indicator species, in cooperation with existing initiatives, such as EU, CMS Family, Barcelona Convention/EcAp, BSC, IWC, IUCN, GFCM, and propose a monitoring system for these species	Proposed monitoring system for indicator species	Expert representing ACCOBAMS participated in the CMS workshop on climate change 20-21 February 2017	
2- Liaise with the relevant CMS Working Group to participate to its future activities	Joint activities		

CA 2	REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO BYCATCH, HABITAT LOSS AND DEGRADATION (POLLUTION)		
CA 2 g	**Species conservation plans**		
Relevant Resolutions: 1.8/ 1.12/ 3.7/ 3.11/ 4.6/ 4.13/5.12/ 5.13/ 5.14 / 6.21			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Revise regional **conservation plan for Black Sea cetaceans (prepared in 2014)**, in cooperation with relevant stakeholders	Revised and adopted regional conservation plan for Black Sea cetaceans and implementation at the national level in BS Parties	Revision was made but the adoption is pending. Further revision is needed for the adoption and implementation by all the riparian countries.	**Ongoing**
2- Complete the Conservation Plan for **Bottlenose dolphin**	Scientists in charge of relevant Conservation Plans identified Finalized Conservation Plan for **Bottlenose dolphin** Drafts of Conservation Management Plans for: ○ Fin whale ○ Cuvier's beaked whales ○ Killer whales ○ Long finned pilot whales List of other species of interest	Ongoing effort to prepare CMP for the selected species,	
3- Prepare the Conservation Plan for **Fin whale**, including investigation of the existing data to determine the efficacy of undertaking a spatial modelling exercise for fin whales in the Mediterranean for comparison with information on shipping traffic		Draft text presented during the SC12 and planned workshops for the next triennium	
4- Consider the preparation of regional conservation plans based on the IWC conservation and management plans for: • **Cuvier's beaked whales,** • **Killer whales** • **Long finned pilot whales** And Identify **other species of interest**			
5- Consider update existing conservation plans (*e.g*. short-beaked common dolphins)	Existing conservation plans updated and implemented	Draft text for Mediterranean Common dolphins, following IWC CMP template, presented during the SC12 and planned workshops for the next triennium	Ongoing
6- Implement existing conservation plans (*e.g*. short-beaked common dolphins)			
7- Develop or revise **National Action Plans**	National Action Plans in most of the ACCOBAMS Parties developed/revised and mostly implemented		Ongoing
8- Implement **National Action Plans**			Ongoing

CA 2	REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO BYCATCH, HABITAT LOSS AND DEGRADATION (POLLUTION)		
CA 2 h	**Captivity related issues**		
Relevant Resolutions: 5.14			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Update regularly the inventory of specimens of Black Sea bottlenose dolphins kept in the captivity	Updated inventory of BS bottlenose dolphins kept in the captivity	Regular update was made at the BS Commission expert meetings and presented to SC meetings	**Ongoing**
2- Encourage the implementation of the CITES decisions based on the draft Resolution prepared by ACCOBAMS on the identification of origin of cetaceans bred or kept in captivity	Identification of origin of cetaceans bred or kept in captivity		
3- Make Parties aware of new captivity issues: disseminate the document "Taking of cetaceans and dolphinaria: a legal analysis within the framework of ACCOBAMS" updated with the "quasi dolphinaria" together with the re-introduction issues	Relevant ACCOBAMS document on captivity and "semi-captivity" largely disseminated		

CA 2	REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO BYCATCH, HABITAT LOSS AND DEGRADATION (POLLUTION)		
CA 2 i	**Chemical & biological pollution**		
Relevant Resolutions: 5.14			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Assess the impact of chemical pollution on cetaceans (Focus on emerging contaminants, comparison between pristine areas and polluted ones)	Assessment of impacts of pollution on cetaceans in the ACCOBAMS area	Ongoing work by the University of Siena	
2- Review of existing work (literature review) and identify knowledge gaps	Updated bibliography of chemical pollution in cetaceans		
3- Suggest ad hoc research projects for targeted areas and species	Identify target areas and species for *ad hoc* projects		
4- Study the possibility/consequences of enhanced transfer of pollutants via ingested			

microplastics			
5- Encourage international or regional cooperation, such as UNEP/MAP, BSC, IWC, in sampling and analyses of chemical pollution		Link with IWC sub-committee on Environmental Concerns	

CA 3	**ENHANCE PUBLIC AWARENESS ABOUT CETACEANS**		
CA 3 a	**Public awareness**		
Relevant Resolutions: 2.21, 2.23, 4.9, 6.23			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1-Continue and facilitate **ACCOBAMS cetaceans day** and promote annual celebration, linked with existing dates for nature conservation	ACCOBAMS cetaceans day regularly celebrated in the area		Not relevant for the Scientific Committee
2- Create and disseminate **communication tools** targeted to future generations	Communication tools distributed to relevant subjects		
3-Promote ACCOBAMS activities using the social networks (such as Facebook, Twitter,..)			
4- Organise public awareness related survey (Opinion of public)	Survey format and instructions Survey report		Not relevant for the Scientific Committee
5- Promote cetacean conservation actions during different events at international and national levels (such as Black Sea day celebration, ECS/ACCOBAMS student award …)	Side events, exhibitions, website, public lectures, awareness material		Not relevant for the Scientific Committee
6- Establish a Partner Award for public awareness on Cetaceans Conservation	Project proposals selected among ACCOBAMS Partners for implementation with support from ACCOBAMS		Not relevant for the Scientific Committee
7- Evaluate the relevance of 'Citizen Science' input of cetacean sightings into a newly established, expert-supervised, database, before transferring to ObisSeamap	Decision on the relevance of 'Citizen Science' input of cetacean sightings into a newly established, expert-supervised, database, before transferring to		

	ObisSeamap		
8 - Implement specific national activities on public awareness	National specific public awareness activities implemented		Not relevant for the Scientific Committee

CA 4	**IMPROVE CAPACITIES OF NATIONAL ORGANISATIONS AND EXPERTS**		
CA 4 a	**Functional stranding networks and responses to emergency situation**		
Relevant Resolutions: 1.10/ 3.25/ 4.16 / 6.22 / 6.23			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Undertake **trainings on necropsies**, live strandings and response to emergency situation in the ACCOBAMS area	Participants from all Parties trained	Joint ACCOBAMS and ASCOBANS Workshop on harmonization of the best practices for necropsy of cetaceans and for the development of diagnostic frameworks, took place in Padova, Italy on the 24th-26th of June 2019.	Not relevant for the Scientific Committee
2-Maintain/ Establish **(sub)regional mailing lists** of participants in the stranding networks to facilitate exchange of information, particularly in the South Mediterranean region	• Identification and synthesis of subregional mailing lists • Regularly exchanged information on stranding events in particular on the occasion of Biennial Conference		Not relevant for the Scientific Committee
3- Develop a common operational stranding protocol, in collaboration with IWC, ECS and ASCOBANS	Common operational protocol implemented	ACCOBAMS expert has been working on this	ongoing
4- Encourage data / tissue exchanges through collaboration with relevant databases and tissue banks	Data / tissue exchanges facilitated for Basin wide analysis (list of tissue banks registered with the CITES Secretariat should be made available)	Funded projects in the BS under the Conservation Grants	

CA 4	IMPROVE CAPACITIES OF NATIONAL ORGANISATIONS AND EXPERTS		
CA 4 b	**Capacity to use cetaceans photo id and undertake aerial surveys**		
Relevant Resolutions: 2.28/ 5.9 / 6.13/ 6.23			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Undertake **trainings** on the use of photo-id (and theodolites)	Trained experts from all Parties with identified needs Selected trainers from Partners	• Participation of members of the SC to the 5 days training session for experts of the ACCOBAMS area on photo-identification and related database use (Lebanon, October 2018)	
2- Promote the use of, catalogue or web-based database of photo-IDs, such as **INTERCET** or analogue systems both in Mediterranean and Black Seas	Disseminate the use of INTERCET or other analogue systems	• Participation of members of the SC to the 5 days training session for experts of the ACCOBAMS area on photo-identification and related database use (Lebanon, October 2018)	
3- Provide photo-id equipment to the relevant organisations from Parties with least capacities (based on the scale of middle and low incomes, from the World Bank in [February 2015])	Provided relevant Parties with photo-id equipment (camera, lenses), upon funding availability (approach Companies for sponsorship)		

CA 4	IMPROVE CAPACITIES OF NATIONAL ORGANISATIONS AND EXPERTS		
CA 4 c	**Capacity building for other cetacean conservation issues**		
Relevant Resolutions: 6.23			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Identify protected areas **managers** from the areas within cetacean critical habitat and facilitate exchanges to suggest good management practices between neighbouring area (organising visits for example)	staff from protected areas within cetaceans critical habitats have participated in the exchange programmes (e.g. study tours and other types of visits)		Not relevant for the Scientific Committee
2- Train staff of Marine Protected Area to be updated on cetacean conservation issues	Staff from Marine Protected Areas trained by Parties in cetacean conservation		Not relevant for the Scientific Committee

3- Promote and facilitate exchange of expertise, such as participation of experts with less knowledge in the specific projects implemented by experienced researchers, etc...	Experts trained through participation in the specific projects		
4- Encourage exchanges between universities and laboratories for training on genetic and molecular biology, in Southern Mediterranean countries and Black Sea	Experts trained on genetic and molecular biology through exchanges between universities and laboratories		
5- Organize training sessions for national experts to fill databases (NETCCOBAMS, OBIS-Seamap, Medaces, Intercet,…)	Experts trained on relevant databases	Participation of members of the SC to the 5 days training session for experts of the ACCOBAMS area on photo-identification and related database use (Lebanon, October 2018)	

CA 4	**IMPROVE CAPACITIES OF NATIONAL ORGANISATIONS AND EXPERTS**		
CA 4 d	**Cetacean conservation and postgraduate programmes**		
Relevant Resolutions: 6.23			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Introduce **cetacean conservation modules** in all ACCOBAMS Countries	Post-graduate programmes with included cetacean conservation modules		Not relevant for the Scientific Committee
2- Translate existing **cetacean conservation modules** in other languages (such as Arabic, Russian, ...)	Cetacean conservation modules available in different languages of the Agreement		Not relevant for the Scientific Committee
3- Encourage Parties that have already introduced the module, to disseminate the module to others universities	Dissemination of cetacean conservation modules in universities		Not relevant for the Scientific Committee

CA 5	ENHANCE EFFECTIVE CONSERVATION OF CETACEANS CRITICAL HABITATS		
CA 5 a	**Protected areas for cetaceans**		
Relevant Resolutions: 3.22/ 4.15			
Action in the WP 2017-2019	**Expected Outputs in the WP 2017-2019**	**Achievement of the WP 2017-2019**	**Status**
1- Update regularly a **list of areas** containing habitats of cetaceans in the ACCOBAMS region	Lists of areas containing cetaceans habitats available on NETCCOBAMS	List regularly updated	**ongoing**
2- **Revise the existing Cetacean Critical Habitats (CCHs)**, taking into account (i) the **candidates IMMAs** proposed and the Areas of Interest identified during the first workshop on the Identification of Important Marine Mammal Areas (IMMAs) in the Mediterranean Sea , and (ii) the threat-based management approach	Updated lists and maps of critical habitats by species (including migration routes, biological corridors, breeding/calving and feeding areas) Identification of areas with the same threats for cetaceans (bycatch areas, harassment areas…) IMMAs in the ACCOBAMS area identified Establishment of links with the BSC CBD activities centre	Revised and new CCH are mapped, taking into account existing knowledge on species, human activities and threats up to date.	**ongoing**
3- Disseminate **tools for adequate management** of areas within CCH, including evaluation of management effectiveness and using examples of best practice	Adequate management of areas within CCH implemented, based on the ACCOBAMS document “Place-based conservation of cetaceans in the ACCOBAMS Area: a handbook on management effectiveness”		
4- Evaluate **effectiveness** of management of protected areas within CCH using existing initiatives (such as MedPAN endeavours in that context).	Evaluation of effectiveness of protected areas for cetaceans, foremostly their contribution to achievement/maintenance of favourable conservation status		
5-Promote the use of **Passive Acoustic**	Use of PAM in MPAs and in control sites		

Monitoring in MPAs and in control sites as a management effectiveness monitoring tool			
6- Revise and update the tools **for adequate management** of areas within CCH, after the evaluation of management **effectiveness** has been implemented	ACCOBAMS Document "Place-based conservation of cetaceans in the ACCOBAMS Area: a handbook on management effectiveness" updated		
7-Participate actively in a strategical alliance on Spatial-based Protection and Management Measures for Marine Biodiversity among ACCOBAMS, GFCM, IUCN-Med, UNEP/MAP through SPA/RAC and in collaboration with MedPAN	Joint Cooperation Strategy document		Not relevant for the Scientific Committee

ANNEX
RECOMMENDATIONS FROM THE TWELFTH MEETING OF THE ACCOBAMS SCIENTIFIC COMMITTEE

RECOMMENDATION 12.1 - GUIDELINES FOR REGIONAL REPRESENTATIVES CONCERNING THE PREPARATION OF THEIR REGIONAL REPORTS

The Scientific Committee includes four representatives of the ACCOBAMS Regions appointed by the Meeting of the Parties. According to the rules of the Scientific Committee (annexed to the Resolution on the Scientific Committee) each regional representative shall provide a report to the meetings of the Scientific Committee on the conservation status of cetaceans and relevant activities in the region he/she has the responsibility of.
In order to ensure harmonization and consistency in the information to be reported, the Scientific Committee stresses that the reports should be prepared bearing in mind that they are aimed at:

- Presenting a global picture of the activities carried out in the region considered
- Identifying hot topics and proposing recommendations
- Informing the Permanent Secretariat about "new" contacts in order to update the list of experts
- Providing information and feedback to national authorities.

For supporting the preparation of the reports, the Scientific Committee **recommends** that each Regional Representative contacts the ACCOBAMS Focal Points from the countries of the region he/she has the responsibility of, the national relevant experts listed by ACCOBAMS Parties (the list of national experts is updated on the occasion of each Meeting of the Parties by the Permanent Secretariat in consultation with the Parties) and ACCOBAMS Partners in order to collect information on the projects carried out in the region, the arising issues and the recommendations proposed. The Regional Representatives should initiate the request for information 2 months before the Meeting of the Scientific Committee.

The Scientific Committee **invites** the ACCOBAMS Permanent Secretariat to provide a letter of support to each Regional Representative to facilitate the collection of information.

The Scientific Committee **recommends** that the Regional Representatives also consider information included in the national reports as well as in NETCCOBAMS to prepare their report.

The Scientific Committee **recommends** the Parties to:

- Contribute to the preparation of the reports of the regional representatives by sharing any relevant information
- Share any relevant data through NETCCOBAMS
- Include as data providers, in the Resolution on Work Program, all national Experts designated by ACCOBAMS Parties.

On a practical point of view:

- The 1st Regional report (to be presented to the first Meeting of the Scientific Committee after the MOP) shall be based on the national reports presented by Parties during the MOP.
- The 2nd Regional report to be presented to the second Meeting of the Scientific Committee after the MOP) shall be based on the 1st Regional Report (presented to the first Meeting of the Scientific Committee after the MOP). It shall be an update in order to assist FP for their future national reports.

RECOMMENDATION 12.2 - **CETACEAN POPULATION ESTIMATES**

In 2003, the Scientific Committee first drew the attention of the ACCOBAMS Parties to the fundamental importance of obtaining baseline population estimates and distributional information of cetaceans within the Agreement area as soon as possible through a synoptic summer survey. At that time and subsequently, it was stressed that without such information (and a suitable subsequent monitoring programme) it is impossible to *inter alia* (1) determine whether ACCOBAMS is meeting its conservation objectives, (2) properly assess and prioritise risk from potential threats and (3) identify and evaluate appropriate mitigation measures and the associated determination of priority actions. This work was identified as the highest priority for research within the ACCOBAMS area and a number of workshops and iterations of the programme, known as the ACCOBAMS Survey Initiative (ASI), have taken place.

Thanks to the several resolutions supporting the ASI and great efforts by many people, the ASI was officially launched in November 2016 during the ACCOBAMS Meeting of Parties. The field-work was mainly carried out in summer 2018 and initial data analyses are underway. Not only is the ASI fundamental to allowing ACCOBAMS to meet its objectives and the ACCOBAMS strategy, but the results will also make a fundamental contribution to initiatives outside ACCOBAMS, including for example the MSFD of the European Commission and the EcAp process of the Barcelona Convention, the Aichi targets and UN SDG14.

In this context, the Scientific Committee makes the following additional and/or reiterated recommendations given below.

A. Administration, funding and communication

(1) The Scientific Committee **commends** the efforts of:

(a) the Secretariat to secure funding for the ACCOBAMS Survey Initiative, and for the implementation of the different activities carried out so far (in particular the macro regional survey conducted in the Mediterranean) and

(b) those Parties who facilitated the issuance of research permits within the Mediterranean in line with the actions presented in the ACCOBAMS work-plan.

(2) The Scientific Committee **recommends** that the Secretariat to continue its fund-raising efforts and **strongly urges** the Parties and others to contribute with financial or in-kind support (including facilitating the issuance of permits) to complete the ASI by implementing it in the remaining area, the Black Sea, as soon as possible.

(3) The Scientific Committee **recommends** that the Parties, Secretariat and Partners continue to actively promote the ASI, underlining its scientific, conservation, capacity building, educational and awareness raising components.

B. Scientific process, analyses and use in conservation

(4) The Scientific Committee **stresses** the importance of having standardised protocols for data collection and analysis and thus

(a) **re-endorses** the document 'Monitoring guidelines to assess cetacean's distributional range, population abundance and population demographic characteristics' (Annex xx)

(b) **recommends** that these guidelines be considered as a living document to be reviewed at least every triennium by the Scientific Committee and updated as necessary as methods and technology evolve and

(c) **recommends** that Parties and Range States ensure that any proposed national programmes on the study of abundance and distribution of cetaceans are compatible with the ASI and the guidelines

(5) The Scientific Committee **stresses** that the data collected under the ASI represent an unparalleled conservation resource for the region and thus every effort should be made to ensure that the data are used in the most efficient and robust way for conservation purposes in the Agreement area. To achieve this the Scientific Committee **recommends** that:

(a) in addition to the already agreed analyses of the cetacean data, additional in-depth analyses occur (including analyses of data on non-cetacean species, as well as data on anthropogenic activities including marine debris and acoustic mapping) are undertaken, in collaboration with other stakeholders as relevant;

(b) the Secretariat produces a summary of the available data for the website and develops a system to allow scientists to request the data with the provision of details of the analytical methods proposed for review and approval by the Scientific Committee;

(c) the analyses of the data are then used to develop recommendations to facilitate area- and threat-based conservation efforts to contribute to the objectives of ACCOBAMS and other targets such as the Aichi targets under the CBD framework;

(d) once the cetacean data are analysed, the Scientific Committee focusses on developing a suitable monitoring programme for the ACCOBAMS region to enable trends and potential distributional changes to be identified, and

(e) efforts are made to survey those additional regions that did not receive either aerial or vessel survey effort in 2018.

RECOMMENDATION 12.3 - CETACEAN INTERACTION WITH FISHERIES: BYCATCH, DEPREDATION AND PREY DEPLETION

The Scientific Committee **recognises** that that bycatch poses the main threat to cetaceans in the Black Sea and a significant threat also in the Mediterranean Sea, it reiterates that addressing the issue of bycatch requires collaboration with many stakeholders and in particular it encourages co-operation with the IWC (and its Bycatch Mitigation Initiative), CMS, ASCOBANS (through the joint working group) and GFCM and other relevant organisations.

The SC **stresses** the need to produce a realistic estimate of cetacean (and other megafauna species) bycatch for different types of legal fishing activities, for illegal unreported or unregulated (IUU) fishing and ghost net fishing. To undertake this challenging task, the SC recommends the use of a combination of methods, following guidelines included the Manual "Monitoring Incidental Catch of Vulnerable Species in the Mediterranean and Black Sea: Methodology for Data Collection" developed by GFCM in collaboration with other partners. It includes measures/ methods such as:

a. Trained observers on-board fishing vessels.
b. Fishermen interview surveys.
c. Self sampling by the fishermen (training may be necessary for the fishermen in order to collect accurate and robust data).
d. Strandings data collection.
e. Remote electronic monitoring.

In addition to the methods mentioned above to facilitate data collection, it is also suggested to consider how to integrates information from different media sources including social media channels.
A multi-taxa approach is to be followed in collaboration with other relevant national, regional and global initiatives, as well as liaising with other projects running in the region regarding bycatch and depredation (e.g. the MAVA Multi-taxa Bycatch Project).

The issue of cetacean depredation is another issue of importance in the region, given the economic impact that it may pose to local fishing communities. Hence, socio-economic studies on the extent of these interactions are also recommended, in order to elaborate possible compensation and mitigation measures, which may help to prevent retaliation actions by fishermen.

Finally, prey depletion is a potential threat to cetaceans in the region, and also affects the socio-economic situation of fishermen. Assessments to evaluate the sustainability of fish stocks, while securing prey availability for cetacean species, should be conducted in parallel to the aforementioned actions by competent bodies such as GFCM and FAO.

SC **recommends** that the Parties make every effort to support global and regional efforts to investigate the most appropriate measures to mitigate bycatch and depredation and implement them as necessary in close collaboration with the fishing communities and other relevant stakeholders.

RECOMMENDATION 12.4 - ANTHROPOGENIC NOISE

1- The Scientific Committee did endorse the Recommendations developed during a workshop hosted by OceanCare, NRDC and in collaboration and support by the Deutsche Bundesstiftung Umwelt (DBU) on 22 and 23.November 2017 in Split, Croatia, for mitigating the impact of underwater noise on marine biodiversity in the south eastern European waters in the Mediterranean Sea, as presented in the Annex of ACCOBAMS-SC12/2018/Doc17. To achieve consensus for such endorsement, the wish was expressed in context to Recommendation No.11 of the workshop to introduce the statement that "the integrated maps will depict a combination of IMMAs and MPAs and will have an advisory role since the nature in the mandate of the two areas differ. Thus, common ground on spatial and area based management on the integrated map areas could be achieved when we speak of the same nature of areas".

2- The Scientific Committee **reiterates** the threat posed by anthropogenic noise to cetaceans and **recognises** the continuing importance of ACCOBAMS-MOP6/2016/Res.6.17. the importance to further develop together in the next triennium with the JNWG the concept of "quiet zones" as outlined in Recommendation 10.5 of the Scientific Committee with a focus on a quantitative elaboration and evaluation of the scientific evidence for establishing such areas both in space and time.

3- The Scientific Committee therefore **recommends** that a project is undertaken, similar to that recommended for ship strikes and incorporating acoustic data from the ASI and other sources, that overlays acoustic noise mapping (including main shipping lanes and areas close to ports) and cetacean density mapping, to identify priority areas for mitigation, including consideration of the concept of 'quiet areas'. This effort should include consideration of information on impulsive noise (e.g. areas targeted by seismic surveys or military exercises).

4- Given the existing evidence for anthropogenic noise having an adverse on cetaceans, the Scientific Committee **encourages** Parties and other authorities to undertake mitigation actions as soon as possible including:
   - engaging in the development of incentive programmes to promote speed reduction as a measure by vessels to reduce noise and gashouse emission within the ACCOBAMS area;
   - Parties to apply the IMO *Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life* (circular MEPC.1/Circ.833).

5- Regarding the QUIETMED project, the SC **asks** the Secretariat:
   - to inform Parties about the deliverables of the QUIETMED project on guidance for underwater noise monitoring and assessment (http://www.quietmed-project.eu/deliverables/), and to encourage Parties to make relevant stakeholders of the private sector become aware of these developments.
   - to disseminate the results obtained especially on the establishment of an international register for impulsive noise sources in the ACCOBAMS area to Parties and relevant regional organisations, such as the RSC in the Agreement area.

6- Regarding the QUIETMED project, the SC also **encourages** Parties to contribute to the international noise register.

7- The SC **stresses** the importance to develop noise hotspot maps in the Black Sea.

8- The SC **reiterates** the importance for Parties to grant, in priority, permits for activities in their national area to industrial companies employing ACCOBAMS Highly Qualified MMOs/PAM operators.

9- The SC **encourages** the Secretariat and any stakeholder active in the ACCOBAMS region to promote "Tools ensuring Highly Qualified MMOs/PAM operators in the ACCOBAMS Area" to the private sector

10- Regarding PAM techniques, the SC **recommends** the Secretariat:

- to promote the undertaking of a project aimed at building a central repository (such as Netccobams), at the regional scale, as a tool to have an overview of monitoring programs using PAM techniques in marine protected areas and other area designated as important for cetaceans. The objective of this repository would be to monitor the number of PAM-based programs, the location and periods of execution, the objectives of the programs and target species and/or other environmental elements.
- to organise an expert workshop to examine the available PAM techniques and how they can be incorporated most effectively in the ACCOBAMS context with a view on fostering the implementation of PAM-based monitoring programs as a mean of contributing to conservation.

RECOMMENDATION 12.5 - SHIP STRIKES

The Scientific Committee **reiterates** that the issue of ship strikes, particularly affecting large whales such as fin and sperm whales, remains of concern within the ACCOBAMS region. These concerns span the issues of conservation, animal welfare and human safety.

The Scientific Committee therefore:

(1) **recognises** the present effective collaborative work with the IWC's Scientific and Conservation Committees on this issue and **recommends** that this continues, along with collaboration with CMS, IMO, ASCOBANS and other international Organisations;

(2) **advises** that the only effective measures to avoiding serious injury and death of cetaceans from ship strikes at present are (a) avoidance (including use of shipping lanes or closed areas) by ships of areas/times with high densities of whales, or (b) speed reductions (slowing vessels down to speeds below about 10-12 knots[3]) in high density areas/times;

(3) **advises** that speed restrictions can also reduce underwater noise and greenhouse gas emissions that can assist with meeting other international targets;

(4) **notes** that advice to ACCOBAMS range states on measures to avoid and reduce ship strikes will arise out of several forthcoming activities including (a) the drafting of a CMP for Mediterranean fin whales and (b) the holding of a joint IWC-IUCN-ACCOBAMS workshop on how the data and process used to identify Important Marine Mammal Areas (IMMAs) can assist in identifying areas of high risk for ship strikes and (c) the project to develop and evaluate mitigation strategies to reduce the risk of ship strikes to fin and sperm whales in the Pelagos Sanctuary; and any other relevant initiatives, projects and workshops in the ACCOBAMS Area

(5) **encourages** Parties to

(a) take note of the recommendations and advice coming out of the activities noted in (4);

(b) begin to integrate speed reduction of vessels into port policy strategies and within key areas (e.g. Marine Protected Areas, SPAMIs, IMMAs, etc.) at times of the year when large whales might be present;

(c) develop incentive programmes to promote the application of speed and gashouse emission reduction measures by vessels / operators within the ACCOBAMS region;

(d) develop a 'whale safe' certificate to be delivered to shipping companies adopting suggested mitigation measures to reduce ship strike risk;

(e) submit a proposal for Traffic Separation Schemes (TSS) where scientific evidences have demonstrated to be an effective mitigation measure, such as the Hellenic Trench, as recommended by the IWC Scientific Committee, by the ACCOBAMS Scientific Committee within Recommendation 10.6 and in Resolution 6.19 adopted by the Parties in 2016; and

(f) support the undertaking of a project within the next triennium identifying areas of potential conflict (CCH) where main shipping lanes / maritime traffic cross sensitive / important habitat for large cetacean species (sperm and fin whales) in the Agreement area following methods developed by the activities referred to under (4).

g) consider other IMO measures to mitigate ship strikes through the ACCOBAMS area.

[3] https://www.gpo.gov/fdsys/pkg/FR-2008-10-10/pdf/E8-24177.pdf

RECOMMENDATION 12.6 - COMMERCIAL WHALE WATCHING ACTIVITIES

The ACCOBAMS region is an important area for a great number of cetacean species, whether as a permanent habitat, a breeding or feeding ground or a migratory corridor. The presence of such a diversity of cetaceans has led, over the past decade, to the development of high number of commercial whale watching (that term is used to include all cetaceans) operators.

Recalling that commercial whale watching activities, if well managed and within a suitable management framework, can foster a valuable educational tool, create direct and indirect economic benefits for many countries and communities and can promote research on cetaceans and their conservation. However, it is also important to underline the potential negative impacts of commercial whale watching activities that have been documented in some cases including both short-term and long-term negative effects on cetaceans such as: changes in their swimming behaviour, fast changes in direction, a decrease in population size, or a movement of cetaceans away from the area targeted for tourism.

In addition, with reference to ACCOBAMS Resolutions 4.7 and 4.18[4], adopted by ACCOBAMS Parties (November 2010), it is also important to recall that harassment risk begins when a vessel is voluntarily closer than the minimum distance identified in common rules for commercial cetaceans watching as such it is obvious that swim-with dolphin activities which implies a proximity of the boat and the animals should be considered as harassment. Moreover, direct interactions between swimmers and animals is demonstrated as presenting risks of animal violent behaviour and transmission of diseases. The Scientific Committee is also concerned by the emergence of some dolphin-feeding mainly proposed during whale watching activities, which could change the behaviour of the animals, favouring confidence and proximity.

In an effort to minimize the risk of negative impacts of cetaceans and to ensure the sustainable development of such commercial activity, effective management strategies need to be reinforced. The Scientific Committee noted that the development of guidance for sustainable whale watching is also priority topic for the IWC and the CMS and as such is an item for further cooperation.

In light of the above, the ACCOBAMS Scientific Committee:

- **Welcomes** the online whale watching handbook developed by the IWC with CMS and **recommends** continued co-operation with those bodies on the evaluation of effects of whale watching on cetaceans and the review and update of guidelines for sustainable whale watching;
- **Urges** Parties to ensure the effective implementation of the existing ACCOBAMS Resolutions on whale watching;
- **Recommends** that Parties do not authorise/ grant any exception for direct interactions with cetaceans in particular while carrying out commercial whale watching activities (such as feeding and 'swim-with' cetaceans);
- **Recommends** that the Secretariat, Parties and partners continue to raise awareness and communication about the ACCOBAMS "High Quality Whale Watching ® Certificate (a) with official regional, national and international tourism Organisations; (b) with commercial whale watching operators, stressing the positive impact of the granting of the HQWW Certificate and the long-term benefits both from an economic and ecological sustainability of such commercial activity; (c) with the public at-large to promote awareness about participating only with certified responsible operators.

[4] http://www.accobams.org/documents-resolutions/resolutions/

RECOMMENDATION 12.7 - STRANDINGS AND MARINE LITTER

Marine debris (or marine litter) pollution is a global environmental concern, with the Mediterranean Sea being heavily affected. It can be a conservation concern for many marine species that may be harmed and/or killed. To help evaluate the actual and potential deleterious effects of marine debris (including entanglement in abandoned, discarded and lost fishing gear (ADLFG) and direct ingestion of both macro- and micro plastics) and other threats to cetaceans, common best practices for strandings have been drafted and discussed by several other Organisations (e.g. IWC, ASCOBANS and ECS).

The IWC has held two Expert Workshops (IWC, 2014 and 2015)[5] one science-oriented and the other policy oriented on this issue. Building upon these, a Joint ACCOBAMS/ASCOBANS/SPA-RAC Workshop on marine debris and cetacean stranding was held on 8 April 2018 in La Spezia (Italy) and a joint ACCOBAMS/ASCOBANS workshop will be organised between to harmonize the existing documents before the Seventh Meeting of the Parties to ACCOBAMS.
Joint ACCOBAMS and ASCOBANS Workshop on harmonization of the best practices for necropsy of cetaceans and for the development of diagnostic frameworks, took place in Padova, Italy on the 24th-26th of June 2019. The out come of the workshop will be an update best practice necropsy tool guide.

The Scientific Committee notes that evaluating and addressing threats such as marine debris is a key part of the ACCOBAMS objectives and it is relevant to past decisions related to *inter alia* the ACCOBAMS Conservation Plan, the 2017-2019 work programme and Resolutions 6.22 and 8.10. The Scientific Committee therefore:
(1) **reiterates** the importance of evaluating and addressing issues related to marine debris in the ACCOBAMS region;

(2) **recommends** that the Scientific Committee identifies pilot areas with an existing stranding network where the level 1 basic tiered guidelines on necropsies approach can be adopted and systematically implemented throughout 2019 to gather a *de minimis* set of data including presence/absence of ingested and entangling debris, species, sex and total length of the animals[6];

(3) **endorses** increased international co-operation on this issue with other bodies including those with an emphasis on cetaceans (e.g. IWC, ASCOBANS, ECS) as well as regional initiatives on marine debris (e.g. MSFD, ECAP and EU) and **supports** the proposal for a workshop on Marine Debris organised by IWC, preferably to coincide with the World Conference on the Biology of Marine Mammals in Barcelona in December 2019;

(4) **stresses** that a multi-disciplinary approach delivered across different spatial and temporal scales is necessary to tackle the issue effectively and **advises** ACCOBAMS and its Parties to liaise with other relevant bodies, Organisations and initiatives at the Regional scale to:

- support effective means to reduce marine debris in the environment (including voluntary and legislative initiatives to reduce production and consumption of single-use items, and investment in the collection, recycling and sustainable disposal of waste) and

5 International Whaling Commission. 2014. Report of the IWC Scientific Committee Workshop on Marine Debris. Journal of Cetacean Research and Management 15 (suppl.): 521-41.
International Whaling Commission. 2015.
Report of the IWC Workshop on Mitigation and Management of the Threats Posed by Marine Debris to Cetaceans. Report of the 65th Meeting of the International Whaling Commission 2014: 277-305

6 Refer to: R. Puig-Lozano, Y. Bernaldo de Quirós, J. Díaz-Delgado, N. García-Álvarez, E. Sierra, J. De la Fuente, S. Sacchini, CM. Suárez-Santana, D. Zucca, N. Câmara, P. Saavedra, J. Almunia, M.A. Rivero, A. Fernández, M. Arbelo. 2008. Retrospective study of foreign body-associated pathology in stranded cetaceans, Canary Islands (2000–2015). Environmental Pollution 243 Part A: 519-527. DOI: https://doi.org/10.1016/j.envpol.2018.09.012

- develop an implement educational and public awareness programmes related to marine debris and cetaceans and steps individuals can take to reduce marine debris; and

(5) **recommends** that work is undertaken under the auspices of the Scientific Committee to identify potential hotspot areas for cetacean entanglement and ingestion of marine debris, for example through ecological risk assessment methods or other mapping and modelling approaches.

In addition, recognising the importance of data from strandings in addressing this and other threats, the Scientific Committee:
(1) **endorses** the work and recommendations of ACCOBAMS, ASCOBANS, ECS and IWC towards the identification of standardised best practices and on this matter;

(2) **reiterates** the importance of effective strandings networks throughout the ACCOBAMS region and **encourages** ACCOBAMS and its Parties to assist in establishing or strengthening such networks through co-operation, capacity building and sharing of best practices;

(3) **recommends** the re-establishment of an ACCOBAMS expert panel on strandings to assist with emergencies and unusual mortality events as well as to assist in the establishment and strengthening for regional networks referred to under (2) above;

(4) with respect to data on marine litter in particular, **recommends** that:

- standard post-mortem protocols to support systematic collection of data on marine macrolitter ingestion/entanglement are disseminated throughout the region by the Secretariat;
- all stranding networks adopt at least the basic level of the tiered common best practices on macro-litter to collect *de minimis* information on marine debris;
- ingested and/or entangling marine macrolitter recovered during post-mortem examinations is collected and preserved for further identification analysis including retrospective studies;
- rates of debris ingestion and entanglements in stranded/bycaught cetaceans are collated and submitted via national progress reports and/or other reporting mechanisms;
- increase efforts to quantify the relevant contributions of ADLFG and active gear to cetacean entanglement following the approaches discussed in Bernaldo de Quirós *et al.* (2018)[7];

(5) **recognises** the benefits of a well-documented, searchable database on entities involved in stranding networks, databanks and tissues banks (NETCOBAMS) and calls upon the Scientific Committee and other scientists involved in stranding networks to provide the ACCOBAMS secretariat with relevant information using the templates available on NETCOBAMS; and

(6) **encourages** the development of new tools and the use of existing tools for citizen science participation in the ACCOBAMS Region having a potential for strandings early warning and/or preliminary action (e.g. OBSenMER, WhatsApp groups).

[7] Bernaldo de Quirós *et al.* (2018), Hartwick M, Rotstein D, Garner M, Bogomolni A, Greer W et al. (2018) Discrimination between bycatch and other causes of cetacean and pinniped stranding. Diseases of Aquatic Organisms 127: 83–95.)

RECOMMENDATION 12.8 - VALUE OF THE DESIGNATION OF IMMAs AND CCH TO ACHIEVE ACCOBAMS OBJECTIVES

Important Marine Mammal Areas (IMMAs)

IMMAs, are "discrete portions of habitat, important to marine mammal species, that have the potential to be delineated and managed for conservation", and are an initiative of the Joint IUCN SSC/WCPA Task Force on Marine Mammal Protected Areas (the "Task Force"). Identification is achieved through the application of IMMA criteria covering key biological and ecological considerations for marine mammal species (Tetley et al. 2016). These criteria were created through an expert process with additional public consultation with the wider marine mammal science and conservation community. The Convention on Migratory Species, with Resolution 12.13 adopted at COP12 in Manila in October 2017, acknowledged the IMMA process, and *inter alia* requested Parties and invited Range States to identify specific areas where the identification of IMMAs could be beneficial.

In October 2016, the Task Force joined efforts with ACCOBAMS to identify IMMAs in the Mediterranean Sea, with support from the MAVA Foundation. An expert workshop proposed the identification of 41 candidate IMMAs (cIMMAs), later reduced to 26 IMMAs, 5 cIMMAs and 39 Areas of Interest (AoI) by an independent Review Panel[8].

Cetacean Critical Habitat (CCH)

According to the Agreement's Conservation Plan (Annex 2 of the Agreement), Parties shall 'endeavour to establish and manage specially protected areas corresponding to the areas that serve as habitat of cetaceans'. To assist in the meeting of ACCOBAMS objectives, Resolution 3.22 was adopted in 2007 on the need for criteria for the selection of protected areas in the region. The concept of "Critical habitat" is commonly referred to in the context of MPAs. However, in the context of cetacean conservation and management in the ACCOBAMS region, it is important to incorporate within the concept of 'Cetacean Critical Habitat (CCH)', information on actual and/or potential threats at the population level; this will then form the basis for determining appropriate candidates for an MPA or network of MPAs. This can be best addressed on a case-by-case basis in the light of the available scientific knowledge. The spatial modelling approach is a powerful tool in this regard.

Criteria to identify potential sites for ACCOBAMS CCH may include:

- areas used by cetaceans for feeding, breeding, calving, nursing and social behaviour;
- migration routes and corridors and related resting areas;
- areas where there are seasonal concentrations of cetacean species;
- areas of importance to cetacean prey;
- natural processes that support continued productivity of cetacean foraging species (upwellings, fronts, etc.);
- topographic structures favourable for enhancing foraging opportunities for cetacean species (canyons, seamounts).

These criteria can be used to identify potential sites for evaluation of the occurrence of significant interactions between cetaceans and human activities, e.g.:

- reported conflicts between cetaceans and fishing activities (mainly due to depredation when cetaceans are taking fish from fishing gear);
- reported significant/frequent bycatch of cetaceans;
- intensive whale watching or other marine tourism activities occur (i.e. potential for harassment);
- intensive shipping that may lead to ship strikes (and noise);
- military exercises are known to routinely occur that may involve ship strikes and noise); and
- seismic activities are known to occur (primarily noise but the potential for ship strikes).

[8] These IMMAs have now been added to IMMAs from other regions in the world's oceans, accruing within the framework of a global process, and available to users and public scrutiny on the Task Force's website (www.marinemammalhabitat.org/imma-eatlas/).

The Scientific Committee stresses that the two tools are **different** and **complementary**:

	IMMA	CCH
Spatial scale	Global tool (not Black Sea for the moment)	Regional tool (Mediterranean Sea and Black Sea)
Baseline info given	Baseline info on marine mammal important areas	Cetacean important areas under threat
Role	Identify specific areas for marine mammals (biocentric)	Identify issues in specific areas for cetaceans and propose management measures (threat-based)
Species covered	All marine mammals	Cetaceans
Assessment	10 years	3 years
Link	The process of identification of CCH uses IMMAs, candidate IMMAs and Areas of Interest where they are in place (along with other baseline data on cetacean distribution, abundance). CCH can be one of the sources for consideration of IMMA identification.	

The Scientific Committee **recommends** that in providing advice to the Parties under the ongoing ACCOBAMS threat-based management approach, it incorporates the concepts of both IMMAs and CCH. IMMAs provide an initial biocentric process (through the spatial definition of the animals' most important habitats) to be followed by use of the CCH, in which the spatial distribution of threats is identified. Management advice is then based upon an integration of the two approaches and the prioritization of mitigation approaches on a case-specific basis. This will assist in providing the parties with advice on targeted and effective conservation measures (where appropriate on a seasonal basis) including:

- designation of new (or the extension of existing) MPAs with appropriate focused management actions
- zoning within existing MPAs
- corridors between MPAs
- threat-specific mitigation measures for application throughout the region (e.g. shipping or noise guidelines, e.g., through CMS, IMO)
- during marine spatial planning processes.

Using both the IMMA and CCH concept in the ACCOBAMS region will have significant added value, since these two concepts reinforce each other. Indeed, the global scope of IMMAs will help in promoting recognition and visibility at the international level, while CCHs provide a tool to foster the regional commitment and to provide the possibility to revise, on a more frequent basis (every 3 years), the list of areas of special concern for cetaceans in the ACCOBAMS region, as well as supporting the related conservation and management measures.

The Scientific Committee **encourages** Parties to use both tools in order to feed other initiatives in the region.