
REPORT OF THE FOURTH MEETING OF THE SCIENTIFIC COMMITTEE

Monaco 5-8 November 2006



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OF THE SCIENTIFIC COMMITTEE OF ACCOBAMS¹**
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Introduction

1. The Fourth Meeting of the Scientific Committee of ACCOBAMS was convened in Monaco at the *Centre des Congrès et Auditorium de Monaco* from 5 to 8 November 2006. It was attended by 11 members of the Scientific Committee, one representative from the Mediterranean Sub-Regional Coordination Unit, 11 invited experts and the representatives of the following organisations: UNEP-MAP RAC/SPA, Morigenos, Nature Trust, Ocean Care and WDCS.
2. The full list of participants appears as Annex 1 to this Report.

Agenda Item 1: Opening of the Meeting

3. The Chair (Giuseppe Notarbartolo di Sciara) opened the Meeting at 2.30 p.m. on Sunday 5 November 2006. He welcomed the participants and invited the Executive Secretary to address the meeting.
4. The Executive Secretary (Marie-Christine Van Klaveren) welcomed the participants in Monaco recalling that the meeting is taking place in the same room where the Agreement was signed ten years ago.

Agenda Item 2: Adoption of the Agenda

5. The Chair presented the proposed Agenda for the Meeting, appearing in Document SC4/Doc 1 and annotated in the Document SC4/Doc 2 Rev.1 and invited the Meeting to review it.
6. The Meeting adopted the proposed Agenda with slight changes as to the timetable and the inclusion of the following item as “Other business”: Ensuring more balanced regional representation in the Scientific Committee.
7. The adopted agenda appears as Annex 2 to this Report.

Agenda Item 3: Information from the Secretariat

8. The Executive Secretary informed the Meeting about the status of ratification of the Agreement as per 1st September 2006. In this context she emphasised that following the deposit of the instrument of ratification by Slovenia, the number of Parties to the Agreement has risen to 20.
9. She also informed the Meeting about the main activities undertaken by the Secretariat since the last Meeting of the Scientific Committee. These included the organisations of the following meetings/workshops:
 - Joint ACCOBAMS/Pelagos Workshops on “Mediterranean fin whales” and on “the issue of ship strikes in the ACCOBAMS region”.
 - A seminar on cetacean conservation in the South Mediterranean Countries, organized in collaboration with the RAC/SPA, the ISPA and the INST

¹ During the afternoon of 8 November a small fin whale was sighted from the meeting room windows, overlooking the Ligurian sea, and a coffee break was soon declared to allow participants to observe this serendipitous and rare event (see photographs).

- The ACCOBAMS-IUCN workshop for the establishment of a "Red List" of Mediterranean and Black Sea cetaceans.
- A Round Table on the Conservation Plan of Black Sea cetaceans organised in Istanbul at the occasion of the 1st Biannual Scientific Conference of the Black Sea Commission.
- A Workshop on the Establishment of a joint ACCOBAMS/CIESM/PELAGOS Cetacean Sighting database.

10. The Executive Secretary also presented the activities undertaken within the framework of (i) the collaboration with other organisations (GFCM, UNEP/MAP, CMS, IWC, Pelagos, Ocean Alliance), (ii) the celebration of the Tenth anniversary of ACCOBAMS and (iii) the ACCOBAMS contribution to achieving the 2010 targets.

11. Detailed information about the activities presented by the Executive Secretary is given in Annex 3 to this report.

12. C. Fortuna presented further details about the collaboration with the IWC Scientific Committee and the GFCM's Scientific Advisory Committee. She emphasized that the GFCM was very pleased about the cooperation between ACCOBAMS and the SCME, in particular the joint workshop on interactions between fisheries and cetaceans. She pointed out that ACCOBAMS, jointly with the GFCM started a survey about the interactions between fisheries and cetaceans using a questionnaire prepared in collaboration with the GFCM's SCME. At its last Meeting the GFCM's Scientific Committee decided to further support the survey and to extend it to other endangered and sensitive species. She also informed the meeting that GFCM is willing to collaborate with ACCOBAMS in (i) the ByCBAMS and the ACCOBAMS Survey Initiative and (ii) organising two of the workshops it is planning to hold in 2007: a workshop on the Ecosystem approach to fisheries and a workshop on fishery reserves, and in the newly established GFCM Transversal Working Group on by-catch.

13. The Chair welcomed the strengthening of the collaboration with GFCM which contribute in better linking ACCOBAMS with the fishing sector.

14. One member recommended to approach the International Maritime Organisation (IMO) with the view of establishing collaboration with its relevant bodies, especially concerning the issue of cetacean collisions with ships.

Agenda Item 4: Cetacean Conservation Status in the Sub-regions

15. The Executive Secretary informed the Meeting that the Secretariat sent a questionnaire to the National Focal Points of ACCOBAMS to collect information on the activities undertaken at national level to implement the Agreement provisions. She stressed that only few replies were received.

16. The Chair invited the regional representatives to present a synthesis of the information received from the questionnaires.

17. The Scientific Committee Member representing the Central Mediterranean (G. Lauriano), informed the meeting that he received no official information from the countries and the synthesis he is presenting was prepared on the basis of documentation he has at hand. He emphasised that the major concerns are ship collisions with fin whales and interactions between cetaceans and fisheries. He mentioned that the issue of ship collision is being addressed within the framework of IMO and it is among the priorities issues of the work plan of the Pelagos Sanctuary. Concerning by-catch he stressed that this is still occurring in large part of the Mediterranean and that there is no significant achievements in mitigating the impacts of interactions between cetaceans and fishing activities.

18. A. Birkun suggested that the ACCOBAMS network of National Focal Points be improved in order to secure proper responding on requests of the Secretariat. Some Parties (for instance, Ukraine and Italy) have no Focal Point at the moment. Some others designated their Focal Points without the consideration of their professional preparedness in the field of cetacean research and conservation. Some kind of guidelines prepared for the Focal Points could be helpful.

19. The representative from WDCCS pointed out some inaccuracies in the document, especially referring to wrong or not updated information to certain conservation status within other Agreements and/or Conventions (E.G. CMS).

20. Following a remark by one observer who questioned the interest of having such reports since for the most part the countries are not providing information, the Scientific Committee invited the Secretariat to give further consideration to how improve these reports. The option of posting these reports on the website of ACCOBAMS was also evaluated and the Scientific Committee concluded that this could be done, however a minimum screening is needed to ensure the quality control of the data and the information provided in these reports.

Agenda item 5: Implementation of the ACCOBAMS work plan

5.1 Comprehensive cetacean population estimates and distribution in the ACCOBAMS Area

21. A. Birkun informed the meeting about the progress made in the development of the project for the survey for the evaluation of absolute abundance of cetaceans in the Black Sea making reference to Document SC4/Doc 8 containing an updated version of the project.

22. He emphasised that the project cost was estimated at 247,000 euros and that funding requests were made to the Regional Seas Programme of UNEP, UNDP and European Commission. So far only an amount of 50,000 US\$ was secured, thanks to the contribution from a private Russian company and the UNEP Regional seas Programme. He also indicated that bilateral cooperation channels are being investigated and the Secretariat of the Black Sea Commission started consultations with the Black Sea States to solicit their contributions to the project.

23. He stressed the importance of having the Project on the agenda of the next meetings of the Black Sea Commission and he suggested that the Executive Secretary contact the Black Sea Commission to persuade it to include the survey as an Agenda item of its forthcoming meeting.

24. He informed the meeting that the project could be divided into three phases. The first phase would be devoted to further elaborate the project and to finalise the project design. The first phase would be conducted using the amount already available (50,000 US\$). He also suggested that the Secretariats of ACCOBAMS and of the Black Sea Commission identify an implementing organisation.

25. Following the discussion on this point and considering the funding difficulties, the Scientific Committee recommended to start with the first phase of the project as proposed by A. Birkun and where necessary merge the effort of funding and organising the survey in the Black Sea with that in the Mediterranean.

26. G. Donovan briefed the meeting about the progress made so far in developing the project on the Mediterranean survey. He emphasised that many organizations were consulted, in particular the IWC and the GFCM.

27. He indicated that it is a two stage project: the first phase will be to collect the baseline abundance and distribution data and the second will be to develop a long-term monitoring programme to track changes in abundance and shifts in distribution of the different species in the agreement area. Work on stock structure

will continue in parallel with the baseline survey work. The aim of the monitoring programme is to try to design a simple and cost-effective framework. Where possible, it will attempt to utilise existing research programmes throughout the Agreement area waters. The ultimate objective of the proposed survey is to obtain baseline information on abundance, distribution and, to the extent possible, stock structure for all species throughout the region. All areas of the ACCOBAMS area will be covered i.e. the Mediterranean Sea, the Black Sea and the 'Atlantic contiguous waters'.

28. C. Fortuna informed the meeting that the Secretariat sent emails to all Parties to collect information about the required procedures to obtain permits to carry out the survey in their national waters. The Secretariat also invited the Parties to provide lists of the research institutes and organisations (including NGOs) that could participate in the project. Considering that only four countries replied, she proposed to reiterate the request and where necessary envisage identifying national contacts using non-official channels.

29. A. Cañadas informed the meeting about the contacts made with the officers of the European Commission in charge of the Habitat Directive and those working on the development of the Life + system. The aim of these contacts was to evaluate the prospects of obtaining financial support from the EC to the Project. She indicated that the EC officers met were quite interested by the project, especially because they see close links between the project activities and the EU marine strategy.

30. She also informed the meeting that according to contacts made with the Spanish Office of Science and Technologies, funding possibilities could be envisaged in 2008 within the 7th framework programme of the European Community through DG Research.

31. Following the discussion on this item, the Scientific Committee recommended endeavouring to keep the momentum and further develop the contacts with the European Commission and other possible donors to secure the funding needed for the project. To this end the Scientific Committee recommended that a budget be allocated to the experts working to develop the project, since till now they were working on a voluntary basis.

32. The Scientific Committee also agreed that the next step for the Mediterranean survey should be to convene a second workshop in spring 2007 to finalise the project document and to develop strategy for fund-raising and for obtaining the support of national authorities. The Workshop will be preceded by a pre-workshop meeting in mid December to address the following items:

- Review and refine survey blocks in light of most recent information
- Platform characteristics (aerial and shipboard)
- Minimum effort required per block and preliminary transect design
- Observer requirements and budgetary implications
- Equipment requirements and budgetary implications
- Pilot survey (where, how, etc.)
- Implications of spatial analysis at such large scale
- Ownership of data (example from SCANS-II)

33. The Scientific Committee also recommended that the Secretariat, with the help of the involved experts, starts communicating with countries about the project; and to this end (i) prepare a document aimed at providing to the countries a short description of the project and clear information about its objectives and the surveying techniques to be used and (ii) organise at the occasion of the next MOP a special event to formally present to officials of the Parties the survey objectives and methodologies, and seek information from the country representatives on further details about the needed steps and authorisations for carrying out the field work of the survey in the waters under their jurisdiction. The main conclusions of the discussion under this agenda item are reflected in the Recommendation SC4.4.

5.2 Conservation Plans

5.2.1 Mediterranean Common Dolphin

34. The Chair briefly recalled the steps that led to the official adoption of the Conservation plan and stressed that the main challenge for its implementation is to establish appropriate links with the fishing sectors and influence the fishery policies. He emphasised that enforcement of the already existing regulations would solve a good part of the problems faced by the common dolphin in the Mediterranean.

35. G. Bearzi reiterated some of the ideas contained in the ACCOBAMS common dolphin Conservation Plan, stressed that the situation is clearly deteriorating in portions of the Agreement area, and presented the priority actions for the conservation of the species making reference to Document SC4/Doc 10.

36. The Scientific Committee while reiterating that the implementation of the Common Dolphin Conservation Plan should proceed as soon as necessary resources can be allocated, decided to proceed according to its previous decision made in Cairo concerning the steps for implementing the Conservation Plan. To this end the Scientific Committee recommended that a small Steering Committee be created immediately to facilitate the implementation of the priority actions of the plan and to coordinate with the relevant authorities, also recommending that seed funding be allocated to the experts working to develop such activities.

37. An extensive discussion followed the presentation by G. Bearzi. The main conclusions of the discussion under this agenda item are reflected in the Recommendation SC4.1.

5.2.2 Mediterranean Bottlenose dolphin

38. C. Fortuna recalled that during its Third Meeting in Cairo, the Scientific Committee recommended that as part of the strategy for bottlenose dolphin conservation, a series of 5-10 regionally defined working groups be established to draft local/regional Action Plans for bottlenose dolphins in their respective local areas. The Scientific Committee also recommended compiling a list of individuals and teams who are involved in *Tursiops* research and conservation in the Mediterranean region and the contiguous Atlantic area. This list will be used to identify regional clusters as the basis for defining the working groups. She informed the meeting that a provisional list has been elaborated on the basis of published literature and relevant ongoing projects. It included 74 scientists from 15 countries.

39. A series of sub-regional action plans was presented as example of small scale Action plans. In this context:

- i. A. Cañadas presented Document SC4/Inf 01 containing the Proposal for conservation plan for bottlenose dolphins in Andalucía and Murcia, developed within EC Nature Life Project. R. Sagarminaga presented the Project's strategy for funding and the planned next steps to implement the actions of the conservation plan, underlining the great interest about the project showed by the fishermen. He suggested using the umbrella of ACCOBAMS to enter into contact with the relevant authorities in Algeria and Morocco to propose the whole Alborán Sea as a SPAMI.
- ii. C. Fortuna presented the Bottlenose Dolphin Conservation Plan in Croatia and indicated that for the southern part of the Mediterranean so far there is no local or sub-regional Bottlenose Dolphin Conservation Plan. However Dan Kerem proposed two priority actions for the conservation of bottlenose dolphins in Israeli waters (one on the distribution and abundance and one on the interaction between cetaceans and trawling activity).

40. The Scientific Committee welcomed the Conservation Plan for bottlenose dolphins in Andalucía and Murcia (SC4/Inf 1), noting that it provided an excellent model. It agreed that it should be used as the basis for a process and format for the development of future Action Plans.

41. In order to progress on bottlenose dolphin conservation activities in the Mediterranean region, the Committee recommends the following procedure:

- A small group of experts is formed under the coordination of Cañadas and Fortuna to develop a template to enable sub-regional groups of bottlenose dolphin researchers to develop local action plans comprising high priority research and management actions, based on the Andalucía and Murcia experience.
- The template will comprise:
 - (a) an introductory guide applicable to all regions (including consideration of conservation objectives and the process to be followed to identify and develop the necessary actions) and
 - (b) a *pro forma* for specifying local action plans organised as small, high priority research and management actions.
- The template will be sent by the Secretariat to the final list of individuals (as above), organised into sub-regional groups using customary regional seas subdivisions as the appropriate spatial units. It will be their responsibility (either by e-mail and/or through face-to-face meetings) to complete the local action plan based on the template and return it to the Secretariat. The small group of experts will be available to provide advice as necessary.
- Under the guidance of the group of experts, the received completed local action plans will be merged into a single document and presented for consideration at a basin-wide bottlenose dolphin workshop (2007, place to be defined).
- The consolidated final document (Mediterranean bottlenose dolphin Action Plan) will be submitted to the Scientific Committee for final review and then sent to the Parties.
- All actions listed in the final document are to be considered high priority projects for immediate funding and implementation.

42. Reiterating that Parties should be put in position to adopt the plan, the Scientific Committee invited the Executive Secretary to provide timely information about the plan and its legal implications.

5.2.3 Black Sea Cetaceans

43. A. Birkun recalled that the Conservation Plan for cetaceans in the Black Sea was presented at the Third Meeting of the Scientific Committee and indicated that after the Meeting in Cairo he received comments from the Scientific Committee members and the Secretariat. A second draft was then prepared and presented at a round table organised in Istanbul and attended by 20 scientists from the Black Sea countries. The roundtable concluded that some actions need further coordination and identified the following four high priority actions:

- Completion of the basin wide survey
- Establishing a regional bycatch network
- Establishment of stranding network
- Establishment of MPAs networks

44. Based on the conclusions and recommendations of the roundtable in Istanbul, a third draft was prepared and sent to the Secretariat last September, and tabled at this meeting as SC4/Doc 12.

45. Following the debate on the progress made in the development of the Conservation Plan for cetaceans in the Black Sea, the Scientific Committee adopted the conservation plan, adopted a recommendation (SC4.6) to the Parties to ACCOBAMS and to the Bucharest Convention stressing the importance of timely action to conserve Black Sea cetaceans, and invited the Executive Secretary to make the necessary contacts to have the implementation of the Conservation plan included as an Agenda item of the forthcoming meeting of the Black Sea Commission. The Scientific Committee further adopted a recommendation (Recommendation SC4.5) to the Black Sea Commission stressing the importance of the survey for the population estimate and a recommendation to the Contracting Parties to ACCOBAMS about the whole Conservation Plan.

46. The Scientific Committee also recommended setting up a mechanism for the implementation of the Conservation Plan.

5.2.4 Fin Whale

47. G. Donovan informed the meeting that in accordance with the decision of the ACCOBAMS Parties a workshop on fin whales in the ACCOBAMS area was held in Monaco (12-13 November 2005) in collaboration with the Pelagos Sanctuary. The main objectives of the workshop were to review the existing knowledge regarding this species in the Mediterranean and to identify feasible scientific and management actions. The workshop was also aimed at providing a rational background for a Mediterranean fin whales conservation action plan.

48. He then summarised the conclusions of the workshop, making reference to Document SC4/Doc 13 and stressing the following needs:

- Obtain baseline information on the distribution and abundance of fin whales in the ACCOBAMS area and develop a programme to monitor trends in abundance.
- Develop a central photo-identification database for use as a long-term management and conservation tool.
- Examine and elucidate Mediterranean fin whale population structure.

49. The Chair emphasised that in spite of the amount of research work done for this species in the Mediterranean, the Red List meeting organised in March 2006 was unable to come up with an assessment for the status of fin whale in the Mediterranean due to lack of information on population trends, and had thus proposed that the species be classified as Data Deficient.

50. The Scientific Committee welcomed and endorsed the report of the workshop on Mediterranean fin whales and, in order to maintain the momentum generated by the Workshop, recommended to create a Coordination Group under the auspices of the ACCOBAMS Scientific Committee.

51. The primary role of the Coordination Group (CG) is that of prioritisation, encouraging initiatives to take the process forward and the provision of advice. The CG will work in close contact with the ACCOBAMS Secretariat and Parties, the Pelagos Sanctuary and the IWC Scientific Committee, as well as other relevant experts and research groups in the region. It will function according to the following arrangements:

- Modus operandi: The CG members will initially communicate via email. However, it should attempt to meet at least once per year (e.g. during the annual Conference of the European Cetacean Society or in association with an ACCOBAMS Scientific Committee meeting). It will provide a regular summary of its activities to the full ACCOBAMS Scientific Committee and Pelagos. Progress on the work will be a regular item on the ACCOBAMS Scientific Committee.
- Funding: The CG will consider ways to ensure adequate initial funding for the group itself (together with the Secretariat they will explore the broader funding opportunities to ensure that the recommended work takes place to enable the effective implementation of the actions proposed - e.g. EC projects under FP7 or other adequate calls-).
- Membership: To be effective, the core CG should not be too large (5-6 members). However, it should work in a transparent manner and communicate fully with relevant organisations and experts. The opportunistic meetings should be open to the extent practical. In order to avoid potential conflicts of interest, the Chair and majority of members should have relevant international expertise but not be closely associated with particular regional research groups.

52. The Scientific Committee recommended that a budget be allocated to the experts working to develop the project, since till now they were working on a voluntary basis.

5.3 Strandings

5.3.1 Progress report on strandings

53. L. Bennakhla presented a brief analysis of the situation concerning the monitoring of cetacean stranding in the Mediterranean based on the information provided by the countries to RAC/SPA. She emphasised that in anticipation of the fourth Meeting of the Scientific Committee of ACCOBAMS the ACCOBAMS Secretariat and RAC/SPA requested their respective National Focal Points to fill a questionnaire on cetacean stranding network. However, only five countries have replied (the replies to the questionnaire received from these countries appear in Document SC4/Inf 05). It appears from the information gathered that although the situation differs from one country to another, in most of the countries there is an institution in charge of stranding monitoring. This institution is known by the general public and public services as the one to be called in case of a stranding and is responsible for recording and dissemination of the stranding information at national level. However, among these countries the exchange of data with MEDACES is reportedly done only by Spain.

54. A. Birkun presented the assessment of the situation of the stranding monitoring in each of the six countries of the Black Sea. In Bulgaria and Georgia there is no governmental support or tissue bank and the monitoring is done thanks to the efforts of enthusiastic people acting as volunteers. He also informed that there is no stranding network in the Russian Federation and no tissue banks in the whole of the Black Sea region.

55. The Chair remarked, nevertheless, that the situation about stranding monitoring seems to be better in the Black Sea, while in the Mediterranean there is clear need of further effort to promote the creation of stranding monitoring networks. The Scientific Committee stressed that the stranding monitoring network is an extremely important tool and recommended that the Secretariat works, in collaboration with the Agreement's Sub Regional Coordinating Units, on the preparation of a report providing a general picture on the situation in the Mediterranean regarding the cetacean stranding monitoring.

56. The unusual stranding of four beaked whales (*Ziphius cavirostris*) on the 26th of January 2006 on the coast of Almeria, Southern Spain, was discussed. The Scientific Committee commended the action and acknowledged that cooperation between PROMAR (in Almeria), the Spanish Cetacean Society (SEC) and the veterinary experts of the University of Gran Canaria resulted in an efficient investigation, which also provided a good example for other future emergency response strategies.

57. The findings of the pathological study undertaken by the Unit of Cetacean Research (Veterinary Pathology Unit, Institute for Animal Health, Veterinary School) from Las Palmas University in the Canary Islands were been noted – i.e.:

“The pathological findings in the Almeria mass stranding are very similar to previous referenced in “atypical” beaked whale mass strandings associated spatially and temporally to military naval exercises (Bahamas, 2000; Canary Islands, 2002, 2004). In all of these cases mid-frequency active sonar was used before or during the time of strandings. The whales involved were mainly of the *Ziphiidae* family.

Based on current scientific knowledge, and the pathological findings in this study, the most likely primary cause of this type of beaked whale mass stranding event is anthropogenic acoustic activities, most probably anti-submarine active mid-frequency sonar used during the military naval exercises (Jepson et al. 2003, Fernandez et al. 2004, 2005, Cox et al. 2006)”.

58. However, despite enquiries to relevant navies and reports of some concurrent naval activities, no navy has admitted that it was using sonar at or around the time of the event. The Scientific Committee noted that this matter remained unresolved and called on the relevant authorities to continue their investigations and make their findings available in a transparent way.

5.3.2 Report on MEDACES

59. L. Bennakhla introduced the progress report on the MEDACES (Doc Inf 06) and briefly described the present structure of the database. She stated that only 8 countries are providing data to MEDACES.
60. The Chair noted the absence of Italy stressing that the Italian network for monitoring cetacean stranding is publishing, since 1986, yearly reports on cetacean stranding.
61. G. Pavan informed the meeting that the Italian Ministry of the Environment has recently funded the creation of a centralized GIS database to compile the published stranding records.
62. Following the discussion in this Agenda item, the Scientific Committee invited the Secretariat to send a letter to the Parties urging them to provide inputs to the MEDACES as part of their obligations towards ACCOBAMS.

5.3.3 Live standings

63. M. Simmonds informed the meeting about the First ACCOBAMS rescue workshop held in Monaco (3-4 November 2006) with participants from 11 countries. Having considered that the current ACCOBAMS workplan includes an action point on the development of techniques and guidelines to deal with the problem of live stranding, a workshop to address cetacean rescue issues duly met in Monaco on 3 and 4th of November 2006. Participants came from 11 countries covering the Black Sea, Mediterranean and contiguous Atlantic area and including the north African coast. A wide range of issues were discussed and a statement – including a series of recommendation and a range of issues that need further consideration – was developed and agreed for submission to the ACCOBAMS Scientific Committee. The meeting was opened by the Executive Secretary who welcomed everyone and thanked WDCS (the Whale and Dolphin Conservation Society) for its sponsorship of the workshop. Mark Simmonds, the convener, acted as chair and note-taker.
64. An invited expert, James Barnett, the main veterinary adviser to BDMLR (British Divers Marine Life Rescue) provided a detailed report of the development of the stranding network in the UK. This included an introduction to the UK rescue triage and BDMLR's detailed rescue handbook. Stranded cetaceans in the UK are either euthanized or refloated following a well-developed veterinary assessment. (more details can be found on the BDMLR website: www.bdmlr.org). Post mortems have confirmed that euthanasia was clearly the correct course of action in the vast majority of cases. Pathophysiological changes occur in all strandings, emphasising the need for responses to be swift, and the survival rates of refloated animals is unknown. Efforts are now being made to apply satellite tags to refloated animals to monitor their survival and behaviour. Barnett also provided an overview of his investigations into the US strandings networks and noted that some networks had decided that all single stranded animals should be euthanized.
65. Alexei Birkun presented a report on rescue work in the Ukraine. He noted that euthanasia as an option there would be very unpopular with the public and is not supported by national law. He reported on a Black Sea mass mortality event which started in March, 2006 and described the Crimean (Ukrainian) decision-making triage. Frank Dupraz provided an overview on rescue work in France noting amongst other matters, the recent refloating of a stranded fin whale by towing it (from the side) back to sea. Gheorghe Radu provided an overview of cetacean issues in Romania, including a proposal for a rescue centre at the Dolphinarium Constanta. Omar Kada described cetacean issues on the Moroccan coastline emphasising the importance of fisheries interactions. The rescue approach taken on the Spanish Mediterranean coast was described by Juan Jose Castillo. On this coastline there are seven autonomous regions each with its own independent rescue network. Marina Sequeira described the approach taken in Portugal, including to the rehabilitation of calves and noting that a new rehabilitation centre is under construction there. Krista Falzon reported that live strandings in Malta are rare (perhaps one every 3 years) but that a BDMLR training course had recently been held there. Tilen Genov reported on the situation in Slovenia and Claudia Gili described the rescue work undertaken in Italy where dependency on volunteers has given way to a more professional approach and where regulations for rescue and rehabilitation are likely to follow.

66. The workshop went on to consider a range of difficult issues including:

- Veterinary decision making in the field;
- Response to mass strandings;
- Human health concerns;
- Response to stranded neonates;
- Capacity issues and the very significant differences across the ACCOBAMS region in capacity and approaches;
- Data recording during rescues and sampling;
- Rescue of dolphins from harbours; and
- 'Friendly' solitary dolphins.

67. Alan Knight provided a presentation about the difficult and high profile rescue of a bottlenose dolphin from a confined harbour in England. Other problematic solitary dolphins had been recorded from the Spanish, Italian and Montenegro coasts. (More information about solitary dolphins can be found on the WDCS website.) Knight also presented a report on large whale disentanglement as conducted by the Provincetown Centre for Coastal Studies in the USA.

68. All these discussions and presentations led to the development of the workshop statement and further to this a small working group (Simmonds, Birkun and Sequeira) was established to develop text and illustrations for an ACCOBAMS web page or leaflets. Another product from the workshop will be a draft updated contact list of those involved in rescue in the region. It was envisaged that this list will be used to facilitate information exchange and other skill sharing activities and promote rescue work across the region.

69. Following the debate on this item the Scientific Committee welcomed and endorsed the Statement appearing in Annex 4, and recommended to establish an advisory panel for ACCOBAMS rescue activities and a veterinary group as suggested by the workshop. It was also expected that such a group would implement the production of a number of information material such as a booklet in appropriate languages to promote rescue activities in the region (Information provided should include basic rescue recommendations, human safety concerns and links to local rescue organisations).

5.4 Tissue Banks

70. B. Cozzi presented to the Scientific Committee the SC4/Doc.15 "System of Tissue banks: draft operational guidelines, code of conduct and Regional strategy" aimed at the establishment of a network of Cetaceans Tissue Banks for Mediterranean Black Seas fed with samples collected from stranded cetaceans and serve the Agreement by making available biological material. He stressed that tissue banks are an important research and conservation tool and that it would be ideal that each ACCOBAMS Member State should work toward the establishment of a National Tissue Bank. He also recommended that a coordinated network should be established to link all ACCOBAMS Tissue Banks and a Coordinator should be selected among the scientific personnel of the banks.

71. He added that a set of instructions and protocols for the collection and preservation of samples can be found in the website of the Padua Tissue Bank.

72. The representative from WDCS noted the need for updating such protocols towards the appropriate storage of tissues to allow examinations to detect eventual "gas and fat embolic syndrome" as possible cause of death.

73. The Scientific Committee thanked B. Cozzi for his work and the Chair remarked that in addition to the importance of having a network it is vital to assure the continuity of tissue banks, which is something that ACCOBAMS can try to obtain from the Parties.

74. With respect to the ownership of samples, the Scientific Committee accepted the offer of WDCS to prepare a legal analysis and provide an overview on the issue including the eventual restrictions.

75. The Scientific Committee adopted the guidelines contained in SC4/Doc 15 and recommended the preparation of a deontological code.

5.5 Interactions between cetaceans and fisheries

5.5.1 Bycatch, Competitive interactions and acoustic deterrent devices

76. C. Rais briefed the meeting on the activities undertaken so far within the framework of ACCOBAMS concerning the interactions between cetaceans and fishing activities. He indicated that the Secretariat undertook a series of initiatives to ensure a prompt implementation of the ByCBAMS project. It acted through two main directions: contacting potential donors to secure funding for the project components and encouraging countries to develop small national projects aimed at achieving the objectives of ByCBAMS.

77. He also briefed the meeting about the fruitful collaboration established, in accordance with the Scientific Committee recommendations, with the GFCM and in particular with its Sub-Committee on Marine Environment and Ecosystems (SCMEE).

78. C. Fortuna informed the Meeting that the Italian Ministry of Agriculture, Food and Forestry in charge of Fisheries approved a significant financial support for the implementation of the Components 1 to 4 of ByCBAMS. She also briefed the meeting about the joint ACCOBAMS-GFCM workshop on bycatch and the questionnaire disseminated by ACCOBAMS and GFCM to collect data about the cetacean –fishery interactions (the report of the joint workshop, including the questionnaire, appears in Doc SC4/Inf 07) .

79. G. Lauriano presented the outline of the activity he is coordinating for the assessment of the status of competitive interaction and bycatch in the ACCOBAMS area. He emphasised that the ultimate objective of the activity is to have a general picture of the geographical distribution of these issues and use it as basis for developing research programmes.

80. The Scientific Committee commended the efforts of the Secretariat to secure the funding to the ByCBAMS project and the ongoing cooperative activities carried out with the GFCM, in particular the Workshop on cetacean-fishery interactions and the general involvement of ACCOBAMS representatives in scientific GFCM activities and recommended to the Secretariat:

- To keep scientists from the ACCOBAMS area informed about all relevant scientific meetings in order to facilitate their participation;
- To use for the data collection on interactions between cetaceans and fisheries the Questionnaire on cetacean-fishery interactions prepared jointly with GFCM;
- To pursue submitting to the GFCM's Sub-Committee on Marine Environment and Ecosystems (SCMEE) all available material on the conservation status of cetaceans, particularly as far as the distribution and abundance of species, and reported interactions between cetacean and fisheries are concerned.

81. Moreover, since M.N. Bradai was unable to attend the meeting, the Committee recommended that the Chair will contact him after this meeting offering support to prepare the Terms of Reference of the GFCM Transversal Working Group on by-catch.

82. M. J. Cornax from Oceana informed the meeting about the results of the surveys they undertook in the Western and Central Mediterranean on the illegal use of driftnets. She stated that the illegal driftnetting

still occurs in Italy, France and Morocco and recommended to support the European Commission proposal concerning the driftnet definition².

83. The Scientific Committee expressed its high appreciation of the excellent work done by Oceana and decided to again draw the attention of the Contracting Parties that the non enforcement of existing regulations on driftnets has a negative impact on the cetacean populations and seriously affects the credibility of ACCOBAMS (Recommendation SC4.2). It also invited the Secretariat to transmit as soon as possible the text of this recommendation to the relevant Ministries and the European Commission.

5.5.2 Prey depletion

84. The Chair introduced the agenda item and G. Bearzi made a presentation showing the links between the decline in common dolphin populations and the depletion in prey stocks, using as example the case of Kalamos area (Greece).

85. The representative of Ocean Care proposed to organise a meeting in Greece, with the participation of local scientists, to give further consideration to the serious situation in Kalamos. She also suggested to propose the decline in common dolphin in Kalamos as a case study within the framework of the consultation process about the European marine strategy and input to the UN Ocean Atlas.

86. The Scientific Committee encouraged the Executive Secretary to pursue her collaboration with Ocean Care, WDCS and Tethys Research Institute to reach an agreement with the relevant authorities in Greece that improves the situation of the common dolphin in the Ionian Sea.

5.6 Anthropogenic noise

87. G. Pavan introduced the Guidelines to address the issue of the impact of anthropogenic noise on marine mammals in the ACCOBAMS area prepared on the request of the Scientific Committee as response the MOP Resolution 2.16.

88. Following the presentation of the Guidelines and an extensive debate, the Scientific Committee stressed the importance of a number of underlying concepts that need to be taken into account when considering these guidelines:

- The background information and guidelines relate to the emerging issue of marine noise pollution and because this is a rapidly developing area of science these guidelines will need to be regularly reviewed and potentially amended;
- Noise is a significant threat to marine mammals and other marine wildlife;
- Underwater noise should be regulated and reduced;
- Underwater noise should be included in Environmental Impact Assessments; and
- Underwater noise levels should be considered a quality parameter when assessing habitats, MPAs and other features.

89. The Scientific Committee, concerned by the proliferation of Controlled Exposure Experiments (CEE) stressed that those involved in conducting, funding and managing such experiments should strive for international cooperation, coordination and information exchange and where possible joint programmes of work. Avoidance of duplicative or overlapping research will also help to (i) prevent any unnecessary introduction of noise into the marine environment and (ii) achieve optimal scientific and conservation value from CEE.

² « EC (2006). Proposal for a Council Regulation amending Regulations (EC) No 894/1997, (EC) 812/2004 and (EC) No 2187/2005 as concern driftnets. Com (2006) 511. Commission of European Communities. Brussels, 19 September 2006”.

90. The main conclusions and recommendations of the meeting discussion on this agenda item are reflected in the Recommendation 3

91. Considering that certain anthropogenic noise can injure and kill certain species of cetaceans, notably beaked whales (e.g. Cox et al. 2006. Understanding the impacts of anthropogenic sound on beaked whales. *Journal of Cetacean Research and Management* 7(3):177-187), the Scientific Committee recommended that information on the distribution and habitat use of Cuvier's beaked whales in the Mediterranean should be assessed being of fundamental importance for preventing further events of injury and death of these animals due to certain military manoeuvres, seismic explorations, etc. Such information should therefore be distributed to relevant authorities and others (e.g. national Navies, NATO, seismic exploration companies, permitting authorities, etc) to prevent the use of high intensity noise in potentially high density or highly suitable areas for this species, in accordance with the implementation of Resolution 2.16 of the MOP.

92. However, the Scientific Committee acknowledged that for large areas of the region appropriate data on distribution and relative (or absolute) abundance of Cuvier's beaked whales are lacking. It noted that the basin-wide survey (see Recommendation 4) scheduled for summer 2009 will be invaluable in this regard. However, in the meantime, it recommended that a habitat use modelling exercise (such as that available for the northern Alborán Sea) should be attempted for other parts of the Mediterranean Sea as appropriate using existing datasets. It agrees that this effort should be coordinated by A. Cañadas. This will require the collaboration of all researchers holding effort and sightings data in the area. The final report will be sent to the Scientific Committee for comment and approval. As soon as possible thereafter, the Secretariat will provide advice to the relevant authorities, organisations and individuals, based on this report. In addition, given the scarcity of data on Cuvier's beaked whales in the region, the Committee encouraged the development of passive acoustic approaches to detect these animals and provide further information on their distribution and density throughout the region.

5.7 Collisions

93. S. Panigada informed the meeting that in accordance with the decision of the ACCOBAMS Parties, a workshop on large whale ship strike in the Mediterranean Sea was held in Monaco (14-15 November 2005) in collaboration with the Pelagos Sanctuary. The main objectives of the workshop were to synthesize the knowledge of ship strikes of fin, sperm, and other large whales in the Mediterranean Sea; to determine data gaps vital to a more comprehensive assessment of the issue; and to discuss and prioritise mitigation and management measures that might effectively be employed to address the issue.

94. The Scientific Committee welcomed and endorsed the report of the workshop and in order to maintain the momentum generated by the Workshop, recommended creating a Coordination Group under the auspices of the ACCOBAMS Scientific Committee.

95. A major function of the Coordination Group will be to detail and prioritise the research and management recommendations developed during the Workshop. However, on the basis of the report, it is clear that one of the initial priorities of the Coordination Group will be to facilitate actions that are aimed at a general description of the current situation basin wide.

96. The Coordination Group will work in close contact with the ACCOBAMS Secretariat and Parties, the Pelagos Sanctuary, the IWC, IMO and CMS, as well as other relevant experts and research groups in the region. It will function according to the following arrangements:

- Modus operandi: The CG members will initially communicate via email. However, it should attempt to meet at least once per year (e.g. during the annual Conference of the European Cetacean Society or in association with an ACCOBAMS Scientific Committee meeting). It will provide a regular summary of its activities to the full ACCOBAMS Scientific Committee and Pelagos. Progress on the work will be a regular item on the ACCOBAMS Scientific Committee.

- **Funding:** The CG will consider ways to ensure adequate initial funding for the group itself (together with the Secretariat they will explore the broader funding opportunities to ensure that the recommended work takes place to enable the effective implementation of the actions proposed -e.g. EC projects under FP7 or other adequate calls-).
- **Membership:** To be effective, the core CG should not be too large (5-6 members). However, it should work in a transparent manner and communicate fully with relevant organisations and experts. The opportunistic meetings should be open to the extent practical. In order to avoid potential conflicts of interest, the Chair and majority of members should have relevant international expertise but not be closely associated with particular regional research groups.

5.8 Whale-watching

97. C. Fortuna updated the Scientific Committee on the monitoring activity carried out by the Secretariat on the status of whale-watching activities within the Agreement area (SC4/Doc 20).

98. A total of 48 whale-watching operators have been identified so far by the ACCOBAMS Secretariat, in cooperation with the PELAGOS Secretariat: twenty-seven of which are operating in France, 12 in Italy and 9 in Spain. Among these operators, only 12 can host more than 80 passengers per trip (2 in France, 4 in Italy and 6 in Spain). All activities are focused in the PELAGOS Sanctuary and the Strait of Gibraltar. Details on the French and Italian operators can be found in Fortuna et al (2004) and Mayol and Beaubrun (2005).

99. She also informed that in 2006 the ACCOBAMS and PELAGOS Secretariats initiated cooperation for the preparation of a booklet for whale-watching operators ("*Livret à destination des opérateurs de whale-watching*", prepared by P. Mayol, C. Fortuna and A. Sturlese) which should also help in the definition of an eco-label. This process is still ongoing and a final document will be presented at the next Meeting of the ACCOBAMS Parties. Meanwhile, in parallel with updating the ACCOBAMS website and its online directories (www.accobams.org), the operator census will continue.

100. The Scientific Committee recommended to the Secretariat to continue its effort and suggested that the adopted list of whale watching operators should be prepared as for information document for the next Meeting of the Parties. Moreover, the Chair noted that the Scientific Committee had previously agreed that the updating of whale watching guidelines should be done on a regular basis, and that M. Simmonds had kindly volunteered to act as coordinator of this activity.

5.9 Specially protected areas

101. An *ad hoc* workshop was held in the morning of Sunday 5 November with the aim of reviewing the draft program of work on MPAs (SC4/Doc 21).

102. The Scientific Committee took note of the results of the workshop and adopted the conclusions and recommendations contained in Annex 5. The Committee further expressed its appreciation for the work provided by P. Hammond and E. Hoyt.

5.10 Emergency Task Force (ETF) for special mortality and stranding events

103. The Chair introduced SC4/Inf. 11 on the progress towards the establishment of an ACCOBAMS ETF for special mortality and stranding events, in particular in case of:

1. Unusual mortality event
2. Oil or chemical spill affecting cetacean critical habitat.
3. Atypical mass stranding, mostly of beaked whales, and mostly caused by anthropogenic sound.
4. Single individual emergencies: live stranding, net entrapment, entrapment in a bay or harbour.

104. Following the discussion, the Scientific Committee agreed to combine unusual mortality and atypical mass stranding and to hire one consultant to prepare a Contingency plan according to the Terms of Reference annexed to the document. The Committee also recognized the need that a network be established as well, and that specialized pathologists be trained.

105. WDCS and Ocean Care offered to present a proposal in this respect.

106. With respect to oil or chemical spill it was agreed to pursue the contacts with REMPEC and Black Sea Commission in order to define a joint program of work. With respect to single stranding emergencies it was agreed that the matter had already been addressed by the Live Stranding effort (see Agenda item 5.3.3 above).

5.11 Databases and directories

5.11.1 Sighting database and photo-identification programme

107. C. Fortuna informed the Scientific Committee about the outcome of the meeting held in collaboration with CIESM and Pelagos to investigate ways and modalities to establish a joint sighting database (SC4/Doc 22). The Scientific Committee underlined that in the establishment of the joint sighting database, only data on sightings and their related effort should be included. However, given the existence of historical sighting-only data, the database should entail an option for gathering also this type of information. She stressed the need that the Secretariats of the involved Organisations (ACCOBAMS, PELAGOS Sanctuary and CIESM) stimulate scientists to participate to this initiative.

108. S. Panigada presented SC4/Inf 15 in consideration of the potential interactions between Euroflukes and sighting database, which will strengthen both sides and will be seen as a further guarantee increasing the likelihood of widespread participation. Research institutions which are already members of Europhlukes will most likely see the sighting data base as parallel project and will be willing to participate with their datasets, while new contributors will be asked to provide their data to both projects that will be advertised concurrently.

109. A. Cañadas informed the meeting on the plan to submit a proposal to EU to test the software and to extract all the images on bottlenose dolphins from the ACCOBAMS Area and the North Atlantic. The fin whale database could be included as well in the photo-id database.

110. The Scientific Committee commended the work done by the Secretariat and the joint sighting database working group and agreed to continue participating in this work. The Scientific Committee also encouraged the optimization between the joint sighting database and Euroflukes.

5.12 Granting of exceptions for the purpose of non-lethal in situ research

111. C. Shine introduced the issue making reference to the relevant provisions of the Agreement and Resolution 2.8 on “Framework guidelines on the granting of exceptions for the purpose of non-lethal in situ research aimed at maintaining a favourable conservation status for cetaceans”. She indicated that she was requested by the Secretariat to analyse the legal framework under other instruments and prepare draft guidelines on the granting of exceptions, to be presented to this meeting of the Scientific Committee. She stressed that these draft Guidelines break new ground since there is no exact parallel to the ACCOBAMS exception permit procedure elsewhere in the world. The Guidelines are intended to fit the region’s specific needs and to help the Committee and permit authorities handle research applications consistently and efficiently.

112. She then made a comprehensive presentation about the content of the draft guidelines stating the rationale behind its main provisions and making reference to Document SC4/DOC 23.

113. Considering that many participants, while commending the work done by C. Shine, expressed concerns as to the complexity of the matter and the strictness of the proposed measures, the Scientific Committee decided to establish a working group that will exchange by e-mail in order to review the technical part of the guidelines. The Secretariat will be in charge of reviewing the administrative part. The final version should be ready by March 2007 in order to be submitted to the next MOP.

5.13 Release of cetaceans into the wild

114. The Guidelines on release of cetaceans into the wild (SC4/Doc 24), prepared by the WDCS, were already adopted by the Scientific Committee members via e-mail early in 2006. The Scientific Committee welcomed the guidelines, appearing in Annex 6 and agreed that the technical annex "Protocol for the veterinary screening of cetaceans proposed for release", which was promised by WDCS, will be added after circulation within the Scientific Committee. The Committee expressed its appreciation for the support received by WDCS on this regard.

5.14 IUCN Red List of cetaceans of the Mediterranean and Black Seas

115. R. Reeves informed the meeting about the workshop on Red Listing making reference to document SC4/Doc 25. He emphasized that of the 12 assessed units in the region, one was assessed as Critically Endangered, five as Endangered and two as Vulnerable. The other four were considered Data Deficient, since there was no sufficient information to assess their extinction risk. R. Reeves added that in addition to the assessment of the regular species, the report contains exhaustive information about visitor migrant and introduced species in the Agreement Area.

116. The Scientific Committee commended the work done and recommended that the information contained in the report be used to enrich the contents of the ACCOBAMS website.

5.15 Dolphin Assisted Therapy

117. N. Entrup brought information to the attention of the Scientific Committee concerning the continued trade in cetaceans, some of which possibly originate from the Black Sea, pointing especially to the proposed capture of 30 bottlenose dolphins in Turkish waters of the Black, Marmara, Aegean and Mediterranean Seas. Furthermore he drew the SC's attention to the possible introduction of non-native species/subspecies/populations and the risk of disease transmission resulting from the keeping of white whales and bottlenose dolphins from outside the region in sea pens.

118. A. Birkun informed that 2006 is the first year when Russian Federation did not issue permits for captures of bottlenose dolphins in the Black Sea.

119. The Scientific Committee agreed that WDCS prepares a resolution on this issue to be presented to the next Meeting of the Parties. The main conclusions of the discussion under this agenda item are reflected in the Recommendation SC4.11.

Agenda item 6: Procedures for the review of the projects submitted to the Scientific Committee support

120. C. Rais introduced Document SC4/Doc 27 proposing a procedure for the evaluation of projects submitted to ACCOBAMS to seek its approval and endorsement. After a long discussion, the Scientific Committee agreed that:

- the aim of the evaluation should not be to approve projects, but to provide a letter of support for each project examined positively
- there will be 3 sessions per year to evaluate projects

- the evaluation should be published on the ACCOBAMS web site.
- the format to present projects should be harmonized with the one for granting exceptions.

Agenda Item 7: Recommendations

121. The Scientific Committee drafted and adopted the recommendations about the following subjects:
- Conservation of Mediterranean common dolphin (Recommendation SC4.1)
 - Use of driftnets in the Mediterranean Sea (Recommendation SC4.2)
 - Anthropogenic Noise (Recommendation SC4.3)
 - Programme for a comprehensive Survey of the abundance and distribution of cetaceans in the ACCOBAMS Area (Recommendation SC4.4)
 - Black Sea Cetacean Survey (Recommendation SC4.5)
 - Black Sea Cetaceans Conservation Plan (Recommendation SC4.6)
 - Work on fin whales and ship strikes in the Mediterranean Sea (Recommendation SC4.7)
 - Tissue banks (Recommendation SC4.8)
 - Marine Protected Areas for cetaceans (Recommendation SC4.9)
 - Red List Assessments (Recommendation SC4.10)
 - Captive facilities (Recommendation SC4.11)
 - Acoustic Harassment Devices (Recommendation SC4.12)
 - Minimum funding for the Scientific Committee (Recommendation SC4.13)
122. The full text of the recommendations appears in Annex 7.

Agenda Item 8: Any other business

8.1 Ensuring more balanced geographical representation within the Scientific Committee

123. C. Rais informed the Meeting that the Contracting Parties invited the Secretariat to investigate the possibility of ensuring a more balanced geographical representation within the Scientific Committee, recalling that there are four sub-regions, each of them represented by one Member of the Scientific Committee and there was a proposal to add a fifth sub-region which should support a greater representativity within the Committee by the southern Mediterranean countries.

Agenda Item 9: Adoption of Report

124. The Meeting approved the present report on the basis of a draft prepared by the Secretariat and reviewed by the participants.

Agenda Item 10: Closure of Meeting

125. After the customary exchange of courtesies, the Chair closed the meeting at 9.00 p.m. on Wednesday, 8 November 2006.

ANNEX 1

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ANNEX 2

AGENDA

- 1. Opening of the Meeting**
- 2. Adoption of the Agenda**
- 3. Information from the Secretariat**
- 4. Cetacean Conservation status in the Sub-regions**
- 5. Implementation of the ACCOBAMS work plan**
 - 5.1. Comprehensive cetacean population estimates and distribution in the ACCOBAMS Area
 - 5.2. Conservation Plans
 - 5.2.1 Mediterranean Common dolphin
 - 5.2.2 Mediterranean Bottlenose dolphin
 - 5.2.3 Black Sea cetacean
 - 5.2.4 Fin whale
 - 5.3. Strandings
 - 5.3.1 Progress report on strandings
 - 5.3.2 Report on MEDACES
 - 5.3.3 Live strandings
 - 5.4 Tissue banks
 - 5.5 Interactions between cetaceans and fisheries
 - 5.5.1 Bycatch, Competitive interactions and acoustic deterrent devices
 - 5.5.2 Prey depletion
 - 5.6 Anthropogenic noise
 - 5.7 Collisions
 - 5.8 Whale-watching
 - 5.9 Specially protected areas
 - 5.10 Emergency Task Force for special mortality and stranding events
 - 5.11 Databases and directories
 - 5.11.1 Sighting database and photo-identification programme
 - 5.12 Granting of exceptions for the purpose of non-lethal in situ research
 - 5.13 Release of cetaceans into the wild
 - 5.14 IUCN Red List of cetaceans of the Mediterranean and Black Seas
 - 5.15 Dolphin Assisted Therapy
- 6. Procedures for the review of the projects submitted to the SC for support**
- 7. Draft Recommendations**
- 8. Other business**
- 9. Adoption of the report**
- 10. Closure of the Meeting**

ANNEX 3

INFORMATION FROM THE SECRETARIAT

The present report contributes to provide comprehensive information to the Scientific Committee on the status of the Agreement and on the main activities and meetings occurred in 2005-2006.

Status of ratifications

As at 1st September 2006, following the deposit of the instrument of ratification by Slovenia, the number of States parties to the Agreement has risen to 20. Algeria is starting its ratification process, while Turkey expressed its consent in speeding up the procedure for accession.

Meetings

- *November 2005, Monaco:* Joint ACCOBAMS/Pelagos Workshops on (a) "Mediterranean fin whales" aiming at giving the basis for a Conservation Plan for this species in the Mediterranean and on (b) "Collisions between cetaceans and vessels" with the aim to synthesize the knowledge of ship strikes of large whales in the Mediterranean Sea, to determine data gaps vital to a more comprehensive assessment of the issue and to discuss whether mitigation and management measures were necessary. The report on collision was discussed at the 58th Meeting of IWC, following its presentation by Simone Panigada.
- *March 2006, Tunisia:* A seminar on cetacean conservation was organized for the South Mediterranean Countries in collaboration with the RAC/SPA, the ISPA and the INSTM. This Seminar, which gave the opportunity to make a review of the status of knowledge in these countries and to identify their priorities, also focused on the interactions fisheries – cetaceans, on the technical implementation of the project on Bycatch developed by ACCOBAMS in collaboration with GFCM and on the ACCOBAMS project on a long term of multi-species surveys.
- *March 2006, Monaco:* Worldwide experts gathered during the ACCOBAMS-IUCN workshop for the establishment of a "Red List" of cetaceans, in order to evaluate the conservation status of whales and dolphins within the Area of the Agreement. They recognized the killer whale of the Straits of Gibraltar as being a "critically endangered" species, the sperm whale and the three Black Sea species as "endangered" and the Mediterranean common bottlenose-dolphin and striped dolphin as "vulnerable".
- *March 2006, Istanbul:* On the occasion of the 1st Biannual Scientific Conference in Black Sea, a Round Table on the Conservation Plan of Black Sea cetaceans was organized with the aim to finalize the goal and objectives of the Draft Black Sea Cetacean Conservation Plan and recommend research priorities for the proposed goal and objectives of the Draft Plan.
- *September 2006, Monaco:* A meeting on the establishment of a joint ACCOBAMS/CIESM/PELAGOS Cetacean Sighting database was organized, following the decision by the ACCOBAMS Parties during their Second Meeting (Res. 2.7, Annex I, 1.c) and with the aim to lay the first stone of a cooperative effort among the three mentioned organisations and ensure that such database will grow and acquire increasing usefulness with time. (cfr. SC4/Doc 22)

Cooperation with other Organizations

- *GFCM*: The collaboration with the General Fisheries Commission for the Mediterranean (GFCM) strengthened on the occasion of the Thirtieth session of the Commission held on January 2006 in Istanbul (Turkey). On this occasion, the Meeting agreed in addressing together with ACCOBAMS the issue of the interactions between cetacean species in fishery activities, including in the Pelagos Sanctuary. ACCOBAMS took also part in the works of the 7th Session of the Sub-Committee on marine environment and ecosystems (SMEE, cfr. SC4.Inf 07) as well as in the 9th Session of the Scientific Advisory Committee.
- *SAP BIO*: The SAP BIO (Strategic Action Plan for Biodiversity) priorities listed under category 2 “Conservation of Habitats, species and sensitive sites” and category 3 “Assessing and mitigating the impacts of threats on biodiversity” as discussed within the third Meeting of the Advisory Committee (to which ACCOBAMS is a member) are closely linked with the main objectives of the Agreement.
- *UNEP/MAP*: The Barcelona Convention Parties in their last Conference (November 2005, Portoroz, Slovenia) adopted a Recommendation recognizing that, by implementing ACCOBAMS, they will also fulfill the obligation related to cetacean’s conservation of their own Convention. This is a very significant step on the recognition of ACCOBAMS, in particular by Riparian States non-yet Parties.
- *CMS*: Implementing the Recommendation 2.3 on the advisory role of ACCOBAMS in CMS Appendices, the proposal of the Principality of Monaco was accepted and as a result, the Mediterranean population of short-beaked common dolphins was moved from Appendix II to Appendix I and the listing - formerly limited to a "western Mediterranean population" - was extended to the whole Mediterranean population of common dolphins.
- *58 IWC*: see Appendix I
- *Pelagos*: A fruitful cooperation was achieved with the Pelagos Sanctuary in the establishment of a common sighting database (cfr. SC4.Doc 22) and in the realisation of a booklet for whale-watching operators, which should also help in the definition of an eco-label.

Other issues

- *2010 Targets*: With the aim to contribute to the achievement of the 2010 targets in reducing the current rate of biodiversity loss, the Secretariat supported the Lošinj-Cres Special Zoological Reserve for Dolphins in Croatia.
- *Projects*: The “Project for the assessment of the extent of present cetacean by-catch and strandings in the Romanian Black Sea area” was approved by the Bureau and supported thanks to the ACCOBAMS Supplementary Conservation Grants Fund.
In the frame of the “BYCBAMS Project”, the Italian Ministry of Agriculture (MiPAAF) agreed to support the implementation of the following actions:
 - A1 - Standard procedures
 - A2 - Italian Workshop
 - A3 - International Workshop (ACCOBAMS countries)
 - A4 - Data collection in Italy (Tyrrhenian Sea)with the aim to create and verify the workability of a standard methodology for data collection on bycatch and depredation and to define the status of interactions in Italian and international waters (within the Agreement area).

- *Tissue banks*: The Italian Tissue Bank, thanks to the support of the Italian Government (Ministry of Environment) is implementing a series of new actions such as a functional organization of the bank, the possibility to store frozen tissue, an accessible and user-friendly website and a series of services to be offered, including age determination and health care. The Barcelona Tissue Bank, due to lack of funds, is currently non-operative and cannot effectively take up the responsibility of receiving, exchanging or releasing tissue samples.
- *Stranding in Spain*: Following the mass stranding of 4 Cuvier's beaked whales along the Mediterranean Spanish coast (Gulf of Vera) on 26th January 2006, the Secretariat intervened in the inquiries on the causes of this unfortunate event, drawing the attention of British, Spanish and Tunisian Authorities on the gravity of the matter and soliciting their help in finding out if and who was conducting sonar experiments in that area. Replies received both from Spanish and British Authorities denied any kind of involvement of their fleets in the event.
- *Ocean Alliance*: Following the 2004 Voyage of the Odyssey cruise in the Mediterranean, the Secretariat inquired about the status of the analyses of the biological samples that were collected, considering that sperm whales are among the most threatened cetaceans in the ACCOBAMS region and analyses performed on these samples would hold great conservation significance in the frame of the Agreement's goals.

Public awareness

- On the occasion of ACCOBAMS' tenth birthday (24 November 2006), thanks to the support of the Monegasque Government, a series of conferences and events were organized in Monaco, including the submersion of "MIMO", the statue of a common dolphin in the Larvotto Reserve.
- With the objective to raise public awareness especially among young generations, an ACCOBAMS Game in 6 languages was produced for children of Contracting Parties, thanks to the support of the Italian Ministry of Environment.
- The Secretariat also participated with an information stand in two events aimed at raising public awareness on the protection of the marine environment and of cetaceans: the Cetaceans Regatta in Viareggio and "Stelle di mare lungo il fiume" in Rome.

Appendix I

COOPERATION WITH OTHER ORGANISATIONS

Report on the 58th Annual Meeting of the International Whaling Commission Scientific Commission

Fortuna was appointed as official observer at the IWC Scientific Committee by the ACCOBAMS Secretariat.

Donovan reported during the Plenary on the ACCOBAMS activities intervened during the intersessional period (June 2005-May 2006). He mentioned the two ACCOBAMS and Pelagos Sanctuary sponsored Workshops on the “Mediterranean fin whales” and the “issue of ship strikes in the ACCOBAMS region”. The latter report was discussed extensively during the “Bycatch and Other Human Induced mortality” working group (See Annex J of the IWC SC Report). During this working group, Panigada introduced the report of the Workshop on large whale ship strikes in the Mediterranean Sea. The IWC Scientific Committee **endorsed** the recommendations from the Workshop related to estimating the number of ship strikes which included:

- “(a) testing acoustic propagation models through seasons (to examine whether cetaceans may be more vulnerable at certain times of the year);*
- (b) undertaking thorough necropsies of carcasses to determine the true cause of death;*
- (c) undertaking a feasibility study to examine whether information from cases where carcasses are lodged on bulbous bows can be used to model the likelihood that struck whales become lodged and if this can be used to obtain estimates of true strikes;*
- (d) interviewing captains and crews to obtain all information on known ship strikes using an agreed protocol; and*
- (e) conducting a feasibility study to assess the efficiency of dedicated observers to detect ship strikes.”*

The IWC SC also noticed that some of the recommendations from the Workshop included projects that may benefit from collaboration between the IWC Scientific and Conservation Committees, and the ACCOBAMS Secretariat. *“Developing an international database of vessel strikes is extremely important and it should be linked to sighting databases.”*

The Workshop also recommended that ACCOBAMS should (1) liaise with the IWC on issues related to ship strikes and (2) that the ACCOBAMS Secretariat should encourage all countries within the ACCOBAMS region to report all strikes, and the circumstances surrounding those strikes, whenever possible. The workshop further recommended that the ACCOBAMS Secretariat should investigate the most appropriate way in which it can bring cetacean issues to the International Maritime Organisation (IMO) and obtain relevant information from them; liaison with the IWC would also be valuable in this regard. The Committee endorses these recommendations for joint work.

Donovan also mentioned the workshop on Mediterranean cetaceans in the context of the Red List, held jointly with IUCN.

A summary of the workshop held in 2004 to plan a major synoptic survey of the ACCOBAMS region was made available as SC/58/O12 and presented by Cañadas. The survey was discussed under Annexes H and L is endorsed by two sub-committees (In-Depth Assessment and Small Cetaceans) by the full Committee during the Plenary.

Other information relevant to the ACCOBAMS Scientific Committee was presented by Pavan during the two-day pre-meeting of the SWG on Environmental Concerns on “Seismic surveys and cetaceans”. The terms of reference were: *“(1) review and characterise information on seismic sound sources, attenuation, and their effects on cetaceans; (2) review case studies where on-going seismic surveys overlap with cetacean distribution in critical habitats and wide-ranging areas (i.e. migratory paths); (3) review and evaluate effectiveness of current mitigation and monitoring programs during planning, operational, and close-out phases of seismic surveys; and (4) discuss potential impacts for cetaceans (#1,2) and recommended/needed changes in mitigation and monitoring during all phases of seismic surveys (#3).”*

List of documents, relevant to the ACCOBAMS area, presented during the 58th IWC Scientific Committee

- SC/58/BC1. DI GUARDO, G., CASTAGNARO, M., MARRUCHELLA, G., MAZZARIOL, S., MIGNONE, W., OLIVIERI, V., PONZIO, P. AND COZZI, B. Human-induced mortality in cetaceans found stranded on the Italian coastline (1995-2005).
- SC/58/BC 3. PANIGADA, S. AND WEINRICH, M. Report of the Workshop on Large Whale Ship Strikes in the Mediterranean Sea (Monaco, 14-15 November 2005).
- SC/58/BC4. PANIGADA, S., PODESTÁ, M., GRECO, S. AND ROSSO, M. Update on ship strikes in the Italian waters between 2002 and 2005.
- SC/58/BC5. DE STEPHANIS, R. AND URQUIOLA, E. Collisions between ships and cetaceans in Spain.
- SC/58/E17. PAVAN, G., FOSSATI, C., MANGHI, M., PRIANO, M. AND PODESTÁ, M. The impact of man-made noise on marine mammals and mitigation procedures - the Italian situation.
- SC/58/E18. PAVAN, G., FASSATI, C., PRIANO, M. AND MANGHI, M. Recording Cuvier's beaked whales (*Ziphius cavirostris*) with a wideband towed array.
- SC/58/E19. PAVAN, G., COSENTINO, G., MUSUMECI, M. AND SPEZIALE, F. Continuous real-time monitoring with a deep underwater acoustic station. Noise spectra and biological sounds from the NEMO Test Site.
- SC/58/E20. PAVAN, G., MANGHI, M., FOSSATI, C. AND PRIANO, M. Passive Acoustic Monitoring (PAM) tools for the implementation of mitigation policies.
- SC/58/E21. CAÑADAS, A., FORTUNA, C. AND HAMMOND, P.S. Modelling techniques to investigate the impact of changes in habitat on cetacean distribution and abundance.
- SC/58/E23. FOSSI, M.C. AND MARSILI, L. New-tool to investigate toxicological hazard due to endocrine disrupters in Mediterranean cetaceans.
- SC/58/E31. MARSILI, L., FOSSI, M.C. AND BUCALOSSO, D. Trend of organochlorine contaminants in free-ranging and stranded cetaceans along the Italian coasts in the period 1987-2005.
- SC/58/O3. PODESTÁ, M. AND COZZI, B. Analysis of cetacean strandings along the Italian coastline in the years 1986-2004.
- SC/58/IA12. CAÑADAS, A., FORTUNA, C., BIRKUN, A. AND DONOVAN, G. Plans for surveying the Mediterranean and Black Seas (the ACCOBAMS region).
- SC/58/IA13. CAÑADAS, A., DE STEPHANIS, R., PEREZ, S., GARCÍA, S. AND HAMMOND, P. Methods for estimating cetacean abundance: model-based line transect and mark-recapture compared.
- SC/58/SM13. SAGARMINAGA, R. AND BROTONS, J.M. Initiatives in Spain about fisheries-cetaceans interactions.
- SC/58/ProgRep France. Progress report on cetacean research.
- SC/58/ProgRep Italy. Progress report on cetacean research.
- SC/58/ProgRep Spain. Progress report on cetacean research.
- SC/58/ForInfo12. PANIGADA, S., PESANTE, G., ZANARDELLI, M., CAPOULADE, F., GANNIER, A. AND WEINRICH, M.T. Mediterranean fin whales at risk from fatal ship strikes.

List of ACCOBAMS countries that attended the 58th IWC Meetings

- France (all Meetings)
Israel (Only Commission Meeting)
Italy (all Meetings)
Monaco (Only Commission Meeting)
Morocco (Only Commission Meeting)
Spain (all Meetings)
UK (all Meetings)

ANNEX 4

STATEMENT FROM THE FIRST ACCOBAMS RESCUE WORKSHOP

Monaco 3-4th November 2006

The workshop agreed that

- The aim of any rescue attempt should be to reintroduce the animal into the wild;
- Data collection from rescue attempts is a vitally important tool in improving knowledge and records should be kept and results shared within the rescue networks;
- Capacity building in the ACCOBAMS area is an urgent priority, noting that there is very significant variation in capacity across the region and between rescue groups; efforts to address this should include:
 - The establishment of an ACCOBAMS-wide rescue network (ARN);
 - The provision of annual reports about rescue activities to a central body such as MEDACES;
 - Further analysis of rescue capacity within the ACCOBAMS area, followed by efforts to comprehensively improve rescue coverage;
 - The development of an ACCOBAMS rescue triage;
 - Establishing a network of expert vets to provide help and advise to each other and the ACCOBAMS rescue network; and
 - Expanding the numbers of trained volunteers and other rescue workers through appropriate training events (noting there may be a national requirement for licensing of rescue workers);
- The risk of infection from cetaceans being moved into rescue centres or from one location to another for release needed very careful consideration, noting for example that morbilliviruses are endemic in the Black Sea cetaceans;
- The expert vet group should define a list of tests that should be applied prior to release of rehabilitated animals to ensure that the risk of introduction of disease is within acceptable parameters;
- There is a need for improved public understanding of the limitations of rescue;
- The BDMLR triage provided a useful tool to help with assessments on the shore, noting that it is in a process of continual review and development (current draft appended);
- Sampling of animals that live strand is vitally important but must be conducted by qualified personnel and adequately funded. Samples must be properly stored. Diagnostic sampling should only be conducted where laboratories are able to process such samples in a timely manner and provide report-back to the rescuers concerned;
- When consideration is given to the development of rehabilitation centres careful attention should be given to –
 - The requirement for an adequate number of full-time and appropriately trained staff;
 - The need for facilities to be purpose-built to meet the exacting requirements of cetacean rehabilitation, including the need for pools to be of an adequate size;

- The requirement for adequate filtration of sea water;
 - The risk of disease transmission – i.e. pools need to be isolated and with their own filtration;
 - That it is inappropriate for animals in rehabilitation to be on public display;
 - The high cost of rehabilitation (costs of \$40,000+ were identified as likely and it was noted that a pilot whale calf currently in a facility has cost Euros 30,000 over 2 months, and a Risso's dolphin Euro 20,000 for 20 days); and
 - The relatively low rate of success (rehabilitation centres in the US report success rates from 2% to 38%) and therefore the need to consider the cost-effectiveness of this approach;
- The prognosis for release of stranded neonates is particularly poor and even those that may be maintained and weaned in captivity are unlikely at present to be able to become fully functional wild cetaceans.
 - Careful consideration needs to be given to the future of animals in rehabilitation that prove not to be viable in the wild.

It was further noted that

- Veterinarians are usually the decision makers at the rescue site and particular issues for them include what options are available to them, what diagnostic equipment is to hand, whether they have adequate expertise (and/or access to vets with such expertise), in some countries they also have responsibility for public safety and what transport options are available;
- Euthanasia is particularly problematic as an option in some countries because it is opposed by the public and/or illegal;
- Larger cetaceans present particular challenges and are more likely to decline rapidly when stranded, hence time-ashore is a vital limiting factor in deciding their fate;
- Some species are more fragile than other – e.g. *Stenella coeruleoalba* is easily stressed;
- Although such problems are rare, cetacean rescues include a risk to human health and safety that needs to be recognised and addressed. Risks include zoonotic disease, traumatic injury and the usual hazards of working on the seashore or at sea. Suitable health and safety advice needs to be provided to rescuers and insurance for health and third party indemnity may be desirable. Rescue activities need to be conducted in accord with the laws of the countries concerned.
- Mass strandings are rare in the ACCOBAMS region but they would present a severe challenge;
- The opportunity for a skill sharing workshop focused on large whale disentanglement with the Provincetown Centre for Coastal Studies should be explored, noting that the US experts would be pleased to facilitate this if their expenses could be covered. Similarly, the offer from BDMLR to lead further training events in the region should be taken up.
- Careful consideration needs to be given to the final step in the reintroduction to the wild of any rehabilitated cetacean in terms of ensuring that the animal is healthy and properly adapted to life in the wild (e.g. it is able to catch its own fish, is socially viable and so forth). Semi-natural conditions, for example the use of a sea-pen, may be helpful in this regard.
- BDMLR and the UK rescue network are in the process of

- i. reviewing and improving their rescue triage including *inter alia* to take into account size, location and potentially social structure;
 - ii. striving to improve the timing of blood tests so that they can be used to guide assessment in situ;
 - iii. striving to ensure that the rescuers and the wider public approach rescue attempts with realistic expectations – i.e. in the anticipation that most animals that strand will not survive;
 - iv. developing guidelines relating to the size of stranded animals;
 - v. striving to improve the quality of records made of rescue attempts; and
 - vi. deploy satellite tags on refloated animals to help confirm their viability.
- And that further skill sharing between ACCOBAMS and other rescue networks, including the UK, would be beneficial.

Next Steps:

- Consideration should be given to the production of a booklet and/or web pages in appropriate languages to promote rescue activities in the region (text and illustrations are being developed by a small working group). Information provided should include basic rescue recommendations, human safety concerns and links to local rescue organisations.

An advisory panel for ACCOBAMS rescue activities should be established to take the work forward – for example to organise the review of rescue capacity across the region (which might include the use of a detailed questionnaire) and to consider its results and to define further activities such as the establishment of equipment caches.

Triage

Following is the triage used in cetacean rescue responses in the UK. It is from the BDMLR handbook and presented here to illustrate the kind of triage, which might be developed for the ACCOBAMS region.

NB The UK triage is currently under review.



NOTES

To determine if alive, look for opening and closing of blowhole. N.B. big whales may hold breath for ± 20 mins. In these animals, checking for a corneal reflex and assessing other reflexes (see below) will help.

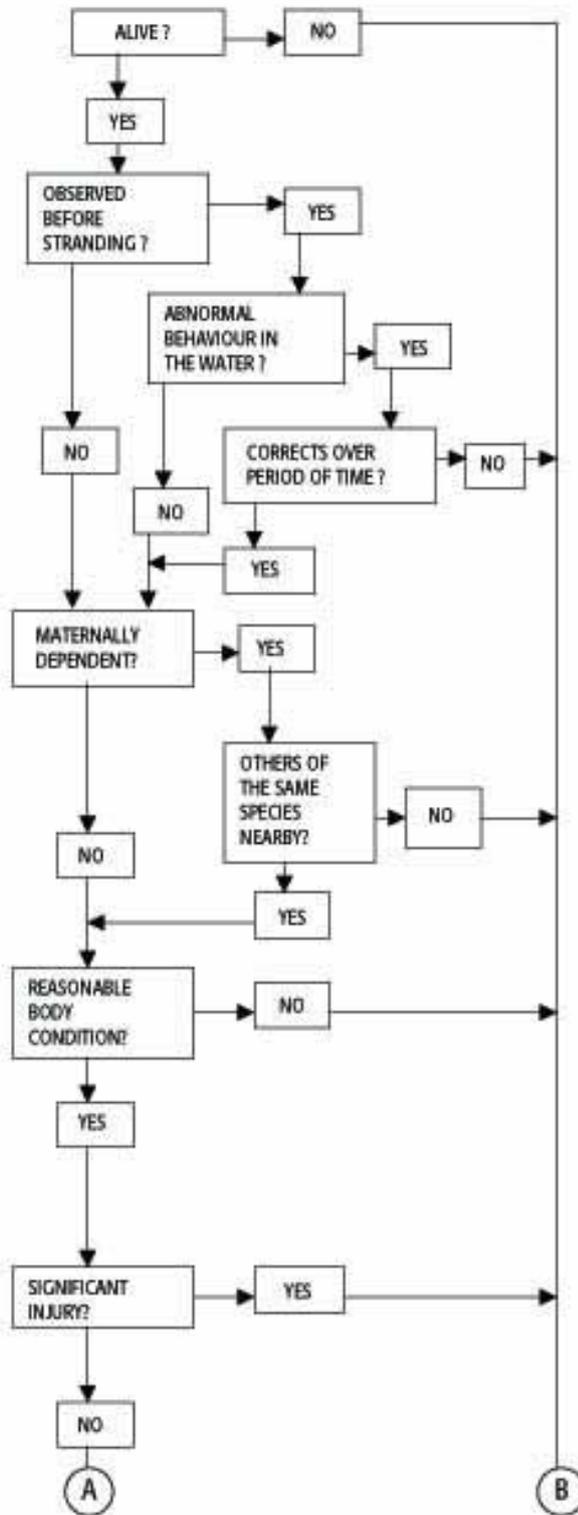
Abnormal behaviour includes twitching, muscle tremors, pronounced and sustained lateral or ventral flexion, listing, lack of responsiveness = movement. Such behaviour may take several hours to correct.

Umbilicus may be present in neonates. Dependent calves of harbour porpoises strand more frequently than calves of other species: born mainly June/July, suckle for seven to ten months, and are 90 – 95 cm in length when weaned. Very occasionally, mother may still be offshore.

Body condition assessed by examination of shape of lumbar muscles below dorsal fin. Reasonable if flat to convex in profile. If concave = visible neck, not suitable for refloat. Interpretation complicated by number of factors: blubber thickness often seasonally and age dependent and may be maintained despite atrophy of underlying muscles, shape of animal may be distorted when beached and animals in good body condition may suffer from acute illness.

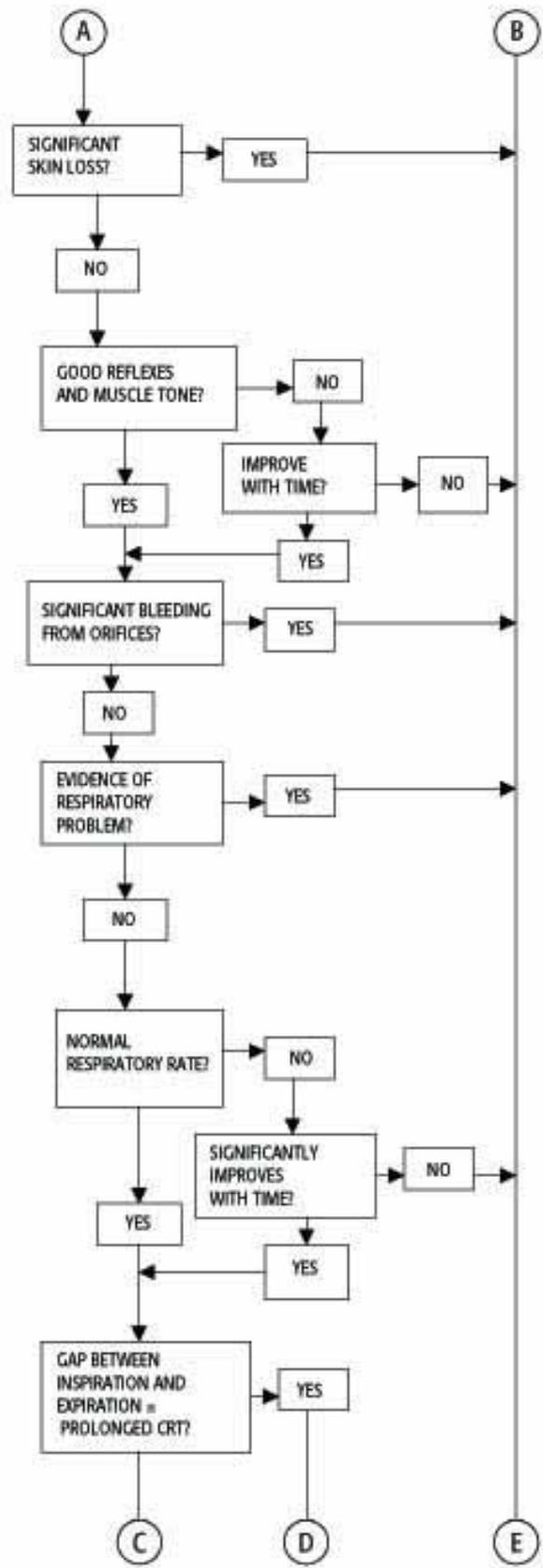
Superficial trauma (often occurs on stranding) generally not clinically significant, despite often heavy bleeding. Deeper wounds, penetrating muscle layer, extensive abscesses or haematomas affect prognosis, as do fractures and dislocations, although may be difficult to detect. N.B. stress and trauma of stranding can cause significant muscle damage, which may not be clinically apparent.

TRIAGE





- Skin condition deteriorates out of water; exacerbated by wind and high temps.; skin wrinkles, peels, cracks and blisters. Excessive skin loss leads to fluid loss and increased risk of secondary infection. This is associated with a poor prognosis. N.B. can detect dehydration as a sponginess or loss of tone when hands are pressed against the animal's flanks.
- Can assess jaw and tongue tone, blowhole, flipper and palpebral reflexes. Poor reflexes and muscle tone may be associated with shock and a decreased level of consciousness, and are a poor prognostic sign.
- Supportive treatment (oral fluids, iv steroids, etc.) and moving the animal into the water may well be required to improve reflexes and muscle tone, i.e. reverse the onset of shock. If no reflexes or evidence of jaw and tongue tone are seen over the course of an hour, the prognosis is likely to be poor.
- Deep bleeding from anus, blowhole and mouth is a poor prognostic sign.
- Signs of respiratory disease include shallow respirations, strong smelling exhalations, mucopurulent blowhole discharge, occasionally coughing and sneezing, and adventitious lung sounds (N.B. latter only detectable in animals < 3 metres).
- Breathing rates for small cetaceans, e.g. common dolphin:
2-5 breaths/min. - normal
over 6 breaths/min. - mild stress or respiratory compromise
over 10 breaths/min. - moderate stress or respiratory compromise
over 10 breaths/min. - severe stress or respiratory compromise.
Normal rate for pilot whale : 1 breathy/min.
Normal rate for sperm whale : as low as 1 breathy/20 mins.
- If increased respiratory rate is due to stress, then removal of stressors should bring the rate down in a few minutes. If due to hyperthermia, rate should come down quickly after extensive cooling.
- Prolonged expiration-inspiration gap (> 4 secs.) may be seen with respiratory disease, or with onset of shock. Capillary refill time normally \leq 2 secs.





Supportive treatment (oral fluids, NSAIDs, etc.) and moving the animal into the water may well be required to reduce the gap between expiration and inspiration, i.e. reverse the onset of shock. If a response is not seen over the course of an hour, the prognosis is likely to be poor.

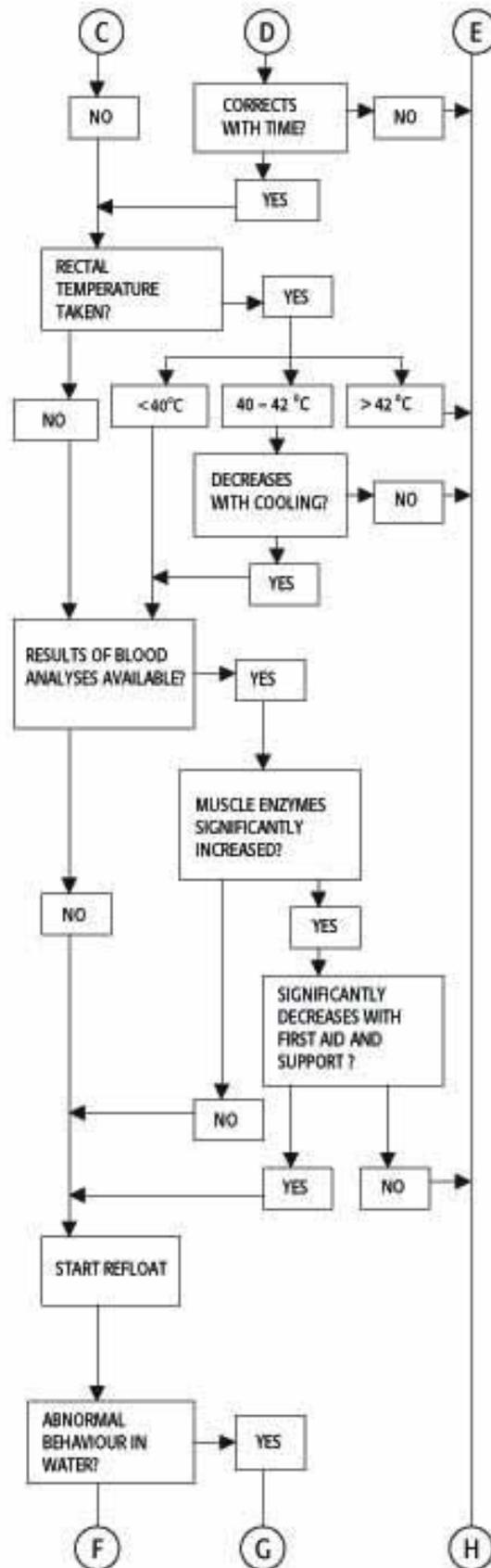
Temperatures taken with standard digital thermometer in animals < 50kg. In larger animals, thermistor probe should be inserted min. 20cm into rectum, although sealed digital thermometer securely attached to length of stomach tubing may suffice. Positive response to cooling in hyperthermic animals is good prognostic sign.

Sample small cetaceans from central tail veins, running near midline of ventral and dorsal surfaces of each tail fluke. See page 71. In larger animals, alternative site is central arteriovenous complex in midline of dorsal fin. Apart from harbour porpoise, no reference ranges available. Results (particularly from 'in practice' analysers) should be interpreted with caution; only muscle enzyme (CK, AST) levels much higher than expected should influence prognosis. Serial bleeding during prolonged refloat may give useful information about stability of condition. As speed of response important, delaying refloat for results is not advisable.

A decrease in the muscle enzyme levels is unlikely to occur until the cetacean is moved into the water and refloating is initiated (see below). This decrease may take several hours to occur.

Carry into waist deep water or, if too heavy, refloat on tide, in a pontoon (N.B. refloatation of very large cetaceans is not usually feasible). Support with blowhole above water, until control of breathing is regained; rock gently to alleviate muscle stiffness or circulatory impairment, and to help restore equilibrium.

See notes above re. behaviour in water. Also: inability to lift head to breathe, no closure of blowhole on immersion, no co-ordinated, forceful efforts to swim. Some signs not necessarily associated with poor prognosis, as may take several hours to correct.



ANNEX 5

THE ACCOBAMS PROGRAMME OF WORK ON MARINE PROTECTED AREAS (MPAS)

The Agreement text (Annex 2 section 3) recognises that protected areas can be one measure used to try to ensure the favourable conservation status of cetaceans within the Agreement area:

Parties shall endeavour to establish and manage specially protected areas for cetaceans corresponding to the areas which serve as habitats of cetaceans and/or which provide important food resources for them. Such specially protected areas should be established within the framework of the Convention for the Protection of the Mediterranean Sea against Pollution, 1976, and its relevant protocol, or within the framework of other appropriate instruments.

At its last meeting, the Parties (Resolution 2.4) asked the Scientific Committee to:

- draft criteria for the selection of special protected areas (hereafter referred to as MPAs, or marine protected areas);
- prepare a special format for proposals for such areas based on the existing SPAMI format for the Barcelona Convention;
- gather information on sites that contain important cetacean habitat in the Agreement area (both within or outside territorial waters).

In developing its response to this Resolution, the Scientific Committee initially discussed the general role of MPAs in the context of cetacean conservation. It stressed that MPAs are one of the tools available to promote cetacean conservation and not an end in themselves. Ideally, they should be considered and evaluated as one possible mitigation measure in the context of one (or more) cetacean conservation plans.

There are a number of issues to consider before establishing MPAs for highly mobile species such as cetaceans. Boundaries must take into account the natural variability in the distribution of cetaceans both intra- and inter-annually. There may be seasonal fluctuations in oceanic conditions and prey availability, and there may also be inter-annual variation in habitat use. Equally importantly, there may be trends (increasing or decreasing) in the use of particular habitats or areas. Thus, temporal information is required to identify the most important habitats. An additional implication is that there may need to be a degree of flexibility in the specification of the temporal and geographical boundaries of MPAs; boundaries may need to be subject to periodic review. Such flexibility is rarely considered in the establishment of MPAs. As discussed below, this has implications for the quality and quantity of the data required to provide the appropriate MPA designation and to enable the MPA being established to meet its stated objectives.

The concept of MPAs and their associated management regimes varies considerably, but to be effective it is important to recognise that:

- the objectives of any MPA must be clearly stated;
- at all stages of the process, appropriate consultation must occur with interested stakeholders;
- a management plan must be developed that is linked to actual and potential threats to cetaceans;
- it must include mitigation measures (and/or research designed to develop such measures), compliance monitoring to ensure that such measures are correctly implemented and scientific monitoring to ensure that the proposed mitigation measures are working as expected;
- monitoring must be built into the management plan to ensure that stated objectives are being met;
- at all stages of the process, co-operation with the appropriate local, national and intergovernmental authorities *must* occur, particularly where, as is frequently the case, the mitigation measures involve the competence of management authorities that do not normally take cetaceans directly into account, especially fisheries with regard to bycatch, depredation and overfishing, but also other agencies managing ship traffic, pollution, etc.

It should also be noted that circumstances may arise in which the MPA may encompass areas that contain few or even no cetaceans but could play a major role in improving their conservation status (e.g., protecting areas that are important to certain stages in the life cycle of key prey species using 'fishery reserves' with restricted or no take zones); such work must clearly occur in conjunction with other bodies (e.g. GFCM; EU; other national and international fishery bodies).

There is thus a considerable body of work that is required to establish an appropriate and effective MPA or network of MPAs; this will inevitably take time, particularly where multinational and/or multiagency issues arise. Without the above, MPAs may provide little or no conservation value – indeed ‘paper’ MPAs may provide a false sense of security with respect to conservation of cetaceans. It should also be stressed that the establishment of MPAs should be seen as complementary to and not a replacement for good conservation/mitigation measures throughout the Agreement area. It is not acceptable to delay targeted mitigation measures for identified threats (and associated monitoring) until full consideration and, where appropriate, designation of MPA(s) and development of a management plan has occurred.

Value of spatial modelling

An important recent advance in methods to describe and understand cetacean distribution and abundance is that of spatial modelling, which includes habitat use modelling and density surface modelling.

Habitat use modelling requires data on cetaceans that are typically collected on surveys, either dedicated to cetacean research or from platforms of opportunity. These data provide measures of abundance such as presence/absence, relative density or, in some cases, absolute abundance. Data are also required on habitat features that may influence cetacean distribution over the whole area of interest; these may relate to physical (e.g. depth, seabed slope), environmental (e.g. sea surface temperature, chlorophyll concentration) and anthropogenic (e.g. vessel traffic) features of the area.

The method involves two steps. First, relative abundance is modelled as a function of habitat features³. This model identifies how much of the variability in relative abundance can be explained by the habitat features included as model covariates and, therefore, which features have an important influence on cetacean distribution and which do not. Second, the fitted model is extrapolated to the whole area to generate a map of predicted relative abundance, equivalent to a map of relative habitat use. If data on absolute abundance of cetaceans are available, the method generates a density surface allowing estimates of abundance for any defined area to be estimated. More details of these methods are given in document SC4/Doc 29, Cañadas *et al.* (2005), Cañadas & Hammond (2006), Fortuna 2006, Panigada *et al.* 2005, Panigada *et al.*, in press and, more generally, in Redfern *et al.* (2006).⁴

To use the results from habitat use modelling to propose protected areas, a method for identifying boundaries to such areas is then needed. For example, these boundaries could encompass contiguous areas that contain a fixed percentage of predicted relative abundance.

The main advantage of habitat use modelling is that it provides an objective way to identify areas of most importance to cetacean populations so that conservation efforts involving marine protected areas can be directed most effectively. The data required to do this are readily collected from a variety of platforms, including platforms of opportunity. Expensive surveys are not necessary for this approach; this makes it particularly attractive for use in regions where resources for cetacean research are limited. Behavioural information can also be incorporated into this approach and be used to characterise not only areas of high density but also the nature of the habitat use.

The main limitation, as with any modelling approach, is that the results are only as good as the available data. Reasonable survey coverage across the range of values for each habitat feature is necessary and the number of cetacean observations needed increases with the number of habitat features included in the model. Interpretation of the results must be made in the knowledge that data will only be available for a limited number of habitat features that may be important to cetaceans or proxies for such factors.

Nevertheless, the potential for using this approach is clear and the Scientific Committee **recommends** its use wherever possible in the designation of proposed MPAs. There are a number of existing datasets in the ACCOBAMS area that are suitable or potentially suitable for habitat use modelling and the method has

³ Habitat features may be important to cetaceans in a positive or negative way. Positive features are those that define good habitat for the survival of species, including appropriate physical conditions, adequate food, etc. These features can be used to identify the most important habitat/areas that may be suitable for protection. Negative features are anthropogenic activities that have an adverse impact on cetaceans; these can inform which actions are appropriate to include in a management plan for a protected area.

⁴ Note: Further work by Panigada *et al.* is in progress and will soon be published. The dataset for the Pelagos Sanctuary will cover the summer months from 1990 up to now. Cetacean presence will be related to physiographic variables and remotely sensed data.

already been used effectively in the Mediterranean (SC4/Doc 29; Bonnin,2003; Cañadas *et al.* 2005; Cañadas & Hammond, 2006; Fortuna 2006; Monestiez *et al.* 2006; Panigada *et al.*, in press). In addition, the basin-wide survey will provide an invaluable dataset for the application of habitat use modelling across the entire ACCOBAMS area, both in absolute terms and in suggesting areas for further consideration and effort.

Response to the Resolution

With this background, the Scientific Committee discussed its direct response to the Resolution of the Meeting of Parties.

Criteria for the selection of special protected areas

(1) Discussion of the merits or otherwise of potential MPAs must occur within the context of the most appropriate tools for addressing particular actual or potential threats to cetacean populations and enabling them to reach or maintain favourable conservation status. A key issue when considering MPAs to protect important cetacean habitat and thus conserve cetacean populations is what is meant by important. Large areas may be important at some level to cetaceans but not all areas can be protected. The aim should be to protect the most important habitat/areas; the challenge is to identify which are the most important habitats/areas (see (2) below).

(2) The concept of ‘critical habitat’ is commonly referred to in the context of MPAs and a number of suggestions and definitions for this exist (e.g., breeding areas; feeding areas; migratory corridors etc). However, in the context of cetacean conservation and management it is important to incorporate the concept of actual and/or potential threats at the population level into consideration of ‘critical’ and appropriate for consideration as an MPA. Thus the definition of what comprises ‘critical habitat’ and suitable candidates for MPAs can be best addressed on a case-by-case basis in the light of the available scientific knowledge. As discussed above, the spatial modelling approach is a powerful tool in this regard.

(3) In specifying potential MPAs, to the extent possible and noting that this can be a staged process, proposals should include information on the following:

- clearly stated objectives of the MPA;
- the rationale for choosing an MPA as the appropriate management tool and the particular temporal and geographical boundaries (including specification of the data and analytical techniques used);
- a draft management plan that is linked to documented actual and potential threats to one or more populations of cetaceans;
- proposals for mitigation measures (and/or research designed to develop such measures), with consideration of appropriate compliance monitoring (to ensure that such measures are correctly implemented) plus scientific monitoring to ensure that each of the proposed mitigation measures (where there are more than one) are working as expected;
- proposals for overall monitoring to ensure that stated objectives are being met;
- details of consultation with and views of interested stakeholders;
- details of legal aspects of the proposed MPA, including co-operation with the appropriate local, national and international authorities must occur.

Format for proposals

The Scientific Committee reviewed a draft format for proposals based on the SPAMI proposal and made suggestions with respect to specification of objectives and monitoring. It was agreed that prior to making a recommendation to the MOP in 2007, it would ‘test’ the format against an actual draft proposal, that for the Alborán Sea. Cañadas and Sagarminaga **agreed** to undertake this work and make any necessary suggestions for improvement to the Committee by email by early February 2007. The Scientific Committee will then develop a final format in good time to be considered by the Meeting of Parties. The final completed proposal will be included as an authored Annex to the Committee’s report. The Committee **stressed** its willingness to work with Parties and provide advice throughout the process.

Information on sites that contain important cetacean habitat in the Agreement area

In the light of the above discussion, the Scientific Committee focussed its discussions on the consideration of four categories of candidates for MPAs within the Agreement area: (a) those proposed and agreed by MoP1; (b) those arising out of Conservation Plans; (c) those arising out of comprehensive spatial modelling work; and (d) other 'new' areas for which preliminary information suggests further consideration be given.

Four pilot MPAs had been proposed at the first MOP in 2002 and confirmed subsequently by the Scientific Committee:

- (1) Kalamos, Greece for common dolphins;
- (2) southern Crete, Greece for sperm whales;
- (3) Cape Sarych to Cape Khersones, SW Crimea, Ukraine in the Black Sea, for bottlenose and common dolphins and harbour porpoises; and
- (4) Losinj, Kvarneric, Croatia for bottlenose dolphins.

The Committee noted that the only action that has been taken thus far was in July 2006 when Croatia announced Losinj to be an MPA, although no management or monitoring plans have been specified. While welcoming the decision of the Croatian Government, the Scientific Committee **strongly recommends** that the national authorities in Croatia work with all stakeholders to create a management and monitoring plan for this MPA. The Committee reminds the Parties of their existing commitment to creating MPAs in the other three areas, and **strongly recommends** that this follows the approach recommended above. In this regard, it draws the Parties **serious concern** to the situation of Kalamos that is discussed further under Item 5.5.2.

As has been stressed above, MPAs should be seen in the context of overall Conservation Plans. In 2004, at MOP2, the Parties welcomed the Mediterranean Common Dolphin Conservation Plan. The Scientific Committee therefore **recommends** that Parties, in co-operation with the Scientific Committee, give priority to giving full consideration to assessing the value of creating MPAs for the following eight areas included as being of special importance in that Plan, following the criteria above:

- (1) Alborán Sea, Spain-Morocco-Algeria (and see below);
- (2) *Waters surrounding the island of Ischia, southeastern Tyrrhenian Sea, Italy*⁵;
- (3) Waters surrounding the island of Malta and southeastern Sicily, Italy;
- (4) Eastern Ionian Sea and Gulf of Corinth, Greece;
- (5) Gulf of Saronikos and adjacent waters (Argo-Saronikos and southern South Evvoikos Gulf), Greece;
- (6) Waters surrounding the Northern Sporades, Greece;
- (7) Northern Aegean Sea, Greece; and
- (8) Waters surrounding the Dodekanese, Greece.

The Committee notes with concern that to date, no effective conservation actions have been taken in response to this Plan as discussed more fully under Item 5.2.1.

The Committee also considered the revised draft Conservation Plan for Black Sea Cetaceans discussed under Item 5.2.3. In addition to the areas of the Black Sea already referred to at MoP1 (see above), it **recommends** that Parties, in co-operation with the Scientific Committee, give priority to giving full consideration to assessing the value of creating MPAs for the following additional two areas in the Black Sea.

- (1) Cape Anaklia to Sarp (Georgia) – this represents winter habitat for common dolphins and harbour porpoises; in particular there is a problem with pelagic trawling for anchovy which has a dolphin bycatch.
- (2) Kerch Strait (Ukraine, Russia) – used by semi-resident Black Sea bottlenose dolphins and as a migration corridor for several thousand harbour porpoises moving to and from the Azov Sea; there is intensive marine traffic and coastal fisheries with bycatch in gillnets and live captures of bottlenose dolphins.

⁵ The Committee welcomed information that the creation of a marine reserve in the waters around Ischia to protect cetaceans was proposed in early 2006 by the Italian Ministry of the Environment. If finalised, this reserve could lead to the mitigation of certain threats such as boat disturbance and uncontrolled fishing.

The Committee then considered the exemplary work carried out in the northern Alborán Sea using spatial modelling.

The Alborán Sea, at the junction of three biogeographic areas, is the transition chamber where Mediterranean and the Atlantic water masses meet. Its unique and complex oceanography results in an area of extremely high productivity. These factors make the Alborán Sea one of the most valuable European marine sites in terms of biodiversity. This is reflected in the cetacean fauna: Among the 12 species regularly observed in the region, it is particularly important for common dolphins, bottlenose dolphins, striped dolphins, long-finned pilot whales, sperm whales, fin whales and killer whales. It also provides a corridor for cetaceans moving between the Mediterranean and the Atlantic.

Over a decade of dedicated data collection in the northern Alborán Sea has been incorporated into a comprehensive spatial modelling exercise (see the earlier section) and two major projects related to MPAs and conservation plans (notably common and bottlenose dolphins), one for the Spanish Environment Ministry (*DGB – 2002, Proyecto Mediterráneo*) and a subsequent European Commission LIFE Nature project (*LIFE02NAT/E/8610, 2006*). The work is summarised in SC4/Doc 29, Cañadas *et al.* (2005) and Cañadas and Hammond (2006).

The Scientific Committee **commends** this work, noting that it provides an excellent example of the ideal approach to considering MPAs in the context of conservation plans and the use of spatial modelling.

As a result, concrete proposals for MPAs have been developed for the northern region.

In discussing these results, the Committee recognised that for practical reasons, only the northern section of the Alborán Sea has robust scientific data in support of MPA designation. However, there is evidence (mainly from fisheries bycatches, stranding records and observations at sea) to suggest that the southern section also holds large numbers of cetaceans. From an ecological point of view, the Committee agrees that it is sensible to consider offering appropriate protection for the whole Alborán Sea (including international waters), as a SPAMI under the Barcelona Convention although smaller areas within the Alborán Sea should also receive protection under various other provisions such as SACs and special ocean reserves.

As noted above, the Committee **agreed** that the Alborán Sea case should be used to test run the *pro forma*.

Finally, the Committee **recommends** to the Parties two further areas that warrant further attention in the context of candidate MPAs:

- (1) Strait of Sicily including associated islands (Italy, Malta, Tunisia, high seas) - preliminary data suggest that this highly productive fishing area which links the eastern and western Mediterranean may be an important wintering ground for fin whales and there is evidence of vessel collisions. It also contains resident bottlenose and common dolphins, as well as other dolphins.
- (2) Amvrakikos Gulf (NW Greece) – about 150 bottlenose dolphins live in this semi-enclosed area that has one of the highest densities of bottlenose dolphins in the Mediterranean.

The Committee agreed that while the above list represents the highest priority areas for consideration as possible MPAs, it is not presented as a comprehensive list. The Committee **recommends** that Parties consider whether there are candidate areas within their waters and in the high seas, taking into account the above suggestions and recommendations for an appropriate approach.

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ANNEX 6

GUIDELINES ON PROPOSALS FOR THE RELEASE OF CETACEANS INTO THE WILD

Prepared by Cathy Williamson, Captivity Programme Manager and Nicolas Entrup, Chief Executive Officer (WDCS Germany) of the Whale and Dolphin Conservation Society

Introduction

Cetaceans originating from the Agreement area (notably, bottlenose dolphins from the Black Sea) are held in captivity in more than a dozen countries throughout the world. Article II of ACCOBAMS requires Parties to “prohibit and take all necessary measures to eliminate, where this is not already done, any deliberate taking of cetaceans.” The capture and long-term captivity of cetaceans from the ACCOBAMS area are therefore contrary to the spirit of the Agreement.

Opportunities for the release of captive cetaceans into the Agreement area should only involve animals originating from this area and are therefore likely to be rare. These guidelines have been developed to provide guidance in those rare occasions where cetaceans might be released into the wild following a period of time in captivity. They are based on the following concerns, shared by the ACCOBAMS Scientific Committee, that relate to the release of captive cetaceans into the Agreement area:

- Risk of genetic “pollution” from the release of cetaceans originating from outside the Agreement area.
- Risk of disease transfer to the wild populations of the area into which cetaceans are released.

It is the view of ACCOBAMS that the highest priority of any release must be conservation. However, for all objectives, the over-riding priority of any release programme must be that it not affect the conservation status of existing wild cetacean populations. The welfare of the animals to be released must also be of utmost consideration.

Resolution 2.17 on the release of cetaceans into the wild requests the ACCOBAMS Permanent Secretariat, in close consultation with the Scientific Committee, and in liaison with pertinent ACCOBAMS Partners, to develop guidelines on proposals for the release of cetaceans in the wild that are not contrary to the Agreement, on the basis of scientific knowledge and the lessons learned from the experience of previous release programmes.

In addition to the legislative and expert efforts recalled in Resolution 2.17, we also suggest recognition of the following in the development of a resolution to adopt guidelines for the release of cetaceans into the wild:

- Article 9 of the Convention on Biological Diversity, which requires Contracting Parties to adopt measures for the recovery and rehabilitation of threatened species and for their reintroduction into their natural habitats under appropriate conditions;
- IUCN/SSC Guidelines For Re-Introductions, approved in response to the increasing occurrence of re-introduction projects worldwide, and the growing need for specific policy guidelines to help ensure that the re-introductions achieve their intended conservation benefit, and do not cause adverse side-effects of greater impact.
- CITES Resolution 10.7, on the disposal of confiscated live specimens of species included in the Appendices.

We therefore propose the following:

Guidelines on proposals for the release of cetaceans into the wild

Definition of terms

“Release”: **place a captive animal in the wild.**

“Agreement area”: **Area covered by the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area.**

“Habitat”: **space occupied by an animal, including the biophysical resources and processes that sustain its growth, reproduction and survival.**

“Acclimation”: **the process of becoming accustomed or adapting to a new environment or situation.**

“Native population”: **population originating in the place or region in question.**

“Subspecies”: **morphologically or genetically distinct subdivision of a species, consisting of an interbreeding population of individual animals.**

“Conspecifics”: **individuals of or belonging to the same species.**

1. Aims and objectives of release

Recalling ACCOBAMS Article II, which prohibits the deliberate taking of cetaceans from the wild, these guidelines aim to ensure that special consideration is given to proposals for the release into the wild of captive cetaceans that originate from, or are a result of breeding between cetaceans originating from, the Agreement area. Within this context, the release should be guided by the principles of preservation and/or conservation of the species and/or population concerned. In addition, considerations relating to the welfare of the individual animal(s) proposed for release should also be taken into account. The release should aim to ensure that there is no negative impact on the conservation status of the wild populations of the area into which an animal is proposed for release.

2. Planning for the release

2.1. Choice of release site

- The release site should be within the historic range of the population from which the animal(s) proposed for release originate or descend. Genetic studies may be necessary to determine the origin of the animal(s).
- The release should only take place where the habitat requirements of the species are satisfied, and likely to be sustained for the foreseeable future.
- Local experts should be approached, through the Scientific Committee if appropriate, to determine the status and biology of wild populations at the release site and to determine the species' critical needs. This could involve collection of information on habitat preferences, intraspecific variation and adaptations to local ecological conditions, social behaviour, group composition, home range size, shelter and food requirements, foraging and feeding behaviour, predators and diseases.
- The release project should consider that it may potentially impact on the native population of the species in the area into which the animals are proposed for release. Preparation for the release should therefore include research and/or consultation on the past and present abundance of the species/population from which the animals originate or in the area into which the animals are proposed for release.

2.2. Evaluation and preparation of the animal(s) for release

- Cetaceans proposed for release must be subjected to a thorough veterinary screening process before transportation to the acclimation or release site. This is to ensure absence of any infectious pathogens, including non-endemic disease agents with the potential to impact on the native population of the area into which the animals are proposed for release. Such screening is key to minimizing the potential for transmitting disease agents into wild populations. A protocol for the veterinary screening of cetaceans proposed for release should be developed as an annex to these guidelines.
- Information on the age, sex, reproductive status, history (including, where appropriate, time in captivity, number and species of other animals in the same facility), population origin (and exact location of capture, if applicable and known) and health (present and past) of each of the animals proposed for release should be made available.
- Cetaceans proposed for release must be of the same subspecies as the native population of the site chosen for release and show similar ecological characteristics (morphology, physiology, behaviour, habitat preference).
- Local enzootic and epizootic infectious diseases should be vaccinated against, prior to release.
- Body condition should be appropriate for the environmental conditions at the release site.
- Cetaceans to be released should be given the opportunity to acquire the necessary experience to enable their survival in the wild, through training and/or conditioning in the captive environment or in a temporary holding enclosure at the release site, where appropriate.
- Cetaceans should demonstrate the following behavioural characteristics prior to release: a) foraging capability b) normal (non-habituated) behaviour towards humans and human structures c) lack of sensitivity to any monitoring equipment.
- Measures should be taken to ensure the released cetacean(s) do not present a threat to wild conspecifics as a result of any specific behaviour acquired in captivity.
- The proposed release of captive-bred animals should remain subject to review.

2.3. Logistics of the release

- Persons involved in the planning of a release should be acquainted with the relevant literature, seek expert advice and submit a detailed proposal to the ACCOBAMS Secretariat and Scientific Committee for full review and consultation with the appropriate national and regional authorities.
- Personnel and other stakeholders involved in the release project should be multidisciplinary and could include government personnel, natural resource management agencies, non-governmental organizations, funding bodies, universities, veterinary institutions and other expert bodies, providing a full range of suitable expertise.
- Appropriate local and national authorities and interests should be informed about the project noting that where animals may migrate across national boundaries at sea, more than one national authority may need to be approached.
- The release project should have all the necessary national and international permits to ensure the legality of the release.
- The estimated costs of the project should include the full release and monitoring programme and the availability and reliability of the financial and logistical resources required to carry it out.
- Plans for the transportation of animals to the release site should include measures to minimize stress and other health-related problems during transport and ensure access to a suitably qualified veterinarian at all times.
- Measures should be taken to ensure that accurate information is provided to local, national and international interested parties and the media.
- Measures should be taken to ensure the released cetacean is not at risk from human activities at the release site, including provisions to reduce the impact of public interest on the success of the release and to ensure that the released cetacean(s) pose(s) no risk to local inhabitants.

3. On-site rehabilitation and release

- Following transportation, acclimation prior to release should take place in a suitable environment, preferably in an enclosed sea pen in a sheltered bay, exposed to the natural forces and environment of the sea (e.g. waves, rocks), with an adequate supply of live fish for the animals to establish hunting techniques. The provision of a 'halfway house' of this type can provide the means of gradually returning the animals to the wild, while enabling monitoring of their condition in their natural environment prior to release. It could also provide a site to which the animals can be returned in case of illness or other incapacity following release.
- A suitably qualified veterinarian should be available throughout the rehabilitation process and cetaceans should undergo further veterinary screening prior to release.
- Release into the wild environment should occur as soon as the animals demonstrate the behavioural characteristics referred to in 2.2. and environmental conditions are deemed fit for the release to be carried out.

4. Post-release monitoring

- Post release monitoring of all cetaceans released must be carried out.
- Monitoring techniques should provide sufficient information about the post release activity without disrupting the normal activities of the animal.
- Photo-identification techniques, which use a photograph taken of both sides of a cetacean's dorsal fin, can be used to identify released individuals. By circulating photo-identification images throughout the fishing community and to other boat users, sightings of released individuals can be monitored. Information can also be distributed throughout the community close to the release site to encourage the reporting of sightings. Other monitoring techniques, including freeze-branding, tagging and telemetry should be subject to review, according to the provisions of ACCOBAMS Resolution 2.8.
- In addition, dedicated demographic, ecological and behavioural studies of released cetaceans should be undertaken to contribute to a study of long-term adaptation by the individual(s) released and the native population. The study should record factors such as the behaviour, body condition and association with conspecifics of the released cetaceans.
- Measures should be put in place to ensure any problems with the release can be addressed, such as the collection and investigation of mortalities, interventions (e.g. supplemental feeding, veterinary aid) and decision-making in relation to revision, rescheduling, or discontinuation of the programme where necessary, including animal recovery and placement.
- Public relations activities, including education and media coverage, should continue post-release, with the goal of helping to contribute to the success of the release.

5. Evaluation of the release

- A written evaluation of the release and any post-release monitoring should be presented to the ACCOBAMS Secretariat.
- Project managers should also seek publication of the results in scientific and popular literature.

Recommended reading:

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ANNEX 7

RECOMMENDATIONS

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RECOMMENDATION SC4.1

Conservation of Mediterranean Common Dolphins

Once one of the most common cetacean species in the Mediterranean, the common dolphin has declined throughout the region during the last 30-40 years. Conservation problems for the species have been recognised since the 1970s when the UNEP Mediterranean Action Plan (Barcelona, 1975) recommended strong conservation measures to protect the species. The 2000-2010 IUCN Action Plan for the world's cetaceans noted that common dolphins had declined dramatically and called for urgent conservation action to prevent their extirpation from the region. In 2003 the Mediterranean population of common dolphins was classified as Endangered in the IUCN Red List of Threatened Animals. The ACCOBAMS Scientific Committee has repeatedly drawn attention to this issue. In 2004, a comprehensive Conservation Plan for Mediterranean common dolphins, endorsed by the Scientific Committee, was welcomed at the 2nd Meeting of the Parties to the Agreement. In 2005, the Mediterranean population of common dolphins was included in Appendix I of the Convention on the Conservation of Migratory Species (CMS)⁶.

Despite all the strong scientific evidence, strategic planning and the multiple expressions of concern, and recommendations, it is a matter of **grave concern** to this Committee that no relevant action has been taken so far that may result in common dolphin recovery in the region. On the contrary, the threats which are thought to be causing decline (primarily bycatch in fishing gear and prey depletion caused by overfishing) are continuing to jeopardise the survival of relict groups and the Mediterranean population at large. This is particularly serious since the question of bycatch could be largely addressed by Parties enforcing existing laws (see Recommendation SC4.2).

Once again, the Scientific Committee **reiterates** that the implementation of the Mediterranean Common Dolphin Conservation Plan (MCDCP) is a high priority in the region. It **stresses** to the Parties that failure to act to preserve common dolphins can only be interpreted as a failure of the Parties to the commitment they made when signing the agreement to 'maintain a favourable conservation status for cetaceans in the area'. The most urgent and feasible actions that need to be taken were discussed during the Fourth Meeting of the Scientific Committee and the discussion can be found in the Meeting's report.

Despite the agreement to appoint a MCDCP Coordinator at the 2nd Meeting of the Parties to ACCOBAMS (Resolution 2.20), this has not occurred for financial reasons. As a practical way forward in this critical situation the Scientific Committee **strongly recommends** that a small Steering Committee is created immediately to facilitate the implementation of the priority actions of the plan and to coordinate with the relevant authorities. It **draws the attention of the Parties** to the fact that this will require seed funding as is detailed in Recommendation SC4.13.

Given the key role of fisheries in the survival of the common dolphin in the Mediterranean, the Scientific Committee also **recommends** that the Secretariat, the Parties and the Scientific Committee, as appropriate, cooperate to ensure that:

- (1) the international concern for common dolphins be conveyed to the relevant EU authorities, and appropriate strategies and funding opportunities be identified;
- (2) participation of appropriate members of the ACCOBAMS (its Scientific Committee or Secretariat) at fisheries meetings such as those organized by FAO (GFCM, ICATT), such that information on the impact of fishing activities on Mediterranean common dolphins is provided and collaborative efforts encouraged;
- (3) a joint workshop with GFCM be organised on the situation of common dolphins in the Mediterranean Sea and on ways to mitigate impact caused by fisheries;
- (4) that work with the CMS Secretariat will start on a joint approach to encourage the Parties to implement conservation action, consistent with the decisions taken so far and the listing of Mediterranean common

⁶ The population was also already included in Appendix II but the listing - formerly limited to a "western Mediterranean population" - was extended to the whole Mediterranean population of common dolphins.

dolphins in Appendix I of CMS.

The Scientific Committee also wishes to highlight for the Parties the issue of prey depletion as a factor in common dolphin decline, as witnessed by work in the Gulf of Vera, Spain, and in the waters of Western Greece. For this latter area, a long-term dataset reflects the need for the establishment of an Emergency Action Plan at this site, in order to avoid reaching an irreversible situation.

RECOMMENDATION SC4.2

The use of driftnets in the Mediterranean Sea

The Scientific Committee draws the attention of the Parties to its previous recommendations (1.2 and 2.2) regarding bycatches and driftnets in the Mediterranean Sea:

The Scientific Committee yet again **stresses** that bycatches in driftnets are by far the primary cause of anthropogenic mortality for most pelagic cetacean populations within the Mediterranean Sea. In particular it highlights the severe problem they represent for the conservation status of striped dolphins, sperm whales and particularly common dolphins⁷, which appear to be continuing their rapid decline in many parts of the Mediterranean and which were classified by IUCN as Endangered in the Mediterranean.

Despite the banning of driftnets for the capture of highly migratory species within the Mediterranean Sea by EU regulation, and despite the ICCAT recommendation endorsed by GFCM^{8, 9} and the successive recommendations by this Committee endorsed by the Parties (e.g. Resolution 2.13), the number of driftnets operating in the Mediterranean Sea remains high¹⁰ due to both illegal operations and the exploitation of legal loopholes.

The Committee once again expresses its **grave concern** over this situation.

It **strongly urges** the Parties to take immediate action to ensure compliance by their nationals with the complete ban on driftnets and to encourage similar actions by relevant non-member states. The continued use of driftnets constitutes the most serious threat to cetacean populations in the Mediterranean Sea. Failure to enforce the driftnet ban can only be interpreted as a failure of the Parties to fulfil their commitment to 'maintain a favourable conservation status for cetaceans' when ratifying ACCOBAMS.

The Scientific Committee also noted that in order to justify relaxation of the driftnet ban, the deployment of pingers with driftnets had been presented to the EC as an effective mitigation measure. The Committee **stresses**, however, that existing relevant studies produced contradictory results^{11,12,13}. The Committee **insists** on the difficulty in conducting appropriate experiments to demonstrate the effectiveness or otherwise of pingers both in the short and long-term. It draws attention to the guidelines drawn up by the IWC Scientific Committee in this regard¹⁴. It **strongly emphasises** the need for the results of any pinger experiments and field trials to be thoroughly reviewed by appropriate experts before any management decisions are taken.

⁷ Tudela S., Kai Kai A., Maynou F., El Andalossi M., Guglielmi P. 2005. Driftnet fishing and biodiversity conservation: the case study of the large-scale Moroccan driftnet fleet operating in the Alboran Sea (SW Mediterranean). *Biol. Conserv.* 121:65-78.

⁸ EC (2006). Proposal for a Council Regulation amending Regulations (EC) No 894/1997, (EC) 812/2004 and (EC) No 2187/2005 as concerns driftnets. COM (2006) 511. Commission of European Communities. Brussels, 19 September 2006
EC (1997-1998). Council Regulation (EC) No 894/97 of 29 April 1997 laying down certain technical measures for the conservation of fishery resources (O J L 132, 23.5.1997) as modified by Council Regulation (EC) No 1239/98 of 8 June 1998 (O J L 171, 17.6.1998) until 31 December 2001.

⁹ GFCM (2005). Recommendation GFCM/2005/3 (A). Report of the twenty-ninth session. Food and Agriculture Organization of the United Nations. Rome, 21–25 February 2005. ICCAT 03-04.
Recommendation by ICCAT relating to Mediterranean Swordfish (entered into force: June 19,2004).

¹⁰ Oceana (2006) "Thonaille": the use of driftnets by the french fleet in the Mediterranean; Italian driftnetters 2006: the Oceana report.

¹¹ Imbert, G., Gaetner, J.C., Carbone S., Laubier, L. (2002). Effet des repulsifs sur les captures de dauphins dans les thonailles. Université d'Aix Marseille II. Commande 1 5241, rapport intermédiaire n°3 étape du 15 février 2002 à la région Provence Alpes Côte d'Azur, 36 p.

¹² Kastelein, R.A., Jeannings, N., Verboom, W.C., de Haan, D., Schooneman, N.M. (2006). Difference in the response of a striped dolphin (*Stenella coeruleoalba*) and a harbour porpoise (*Phocoena phocoena*) to an acoustic alarm. *Marine Environmental Research* 61: 363-378.

¹³ GECEM. WWW.gecem.org/site.html

¹⁴ International Whaling Commission. 2001. Report of the Scientific Committee, Annex L. Report of the Workshop on Bycatch Mitigation Measures in Static Fisheries. *J. Cetacean Res. Manage. (Suppl.)* 3:292-6.

RECOMMENDATION SC4.3

Anthropogenic Noise

The Scientific Committee recommends that Parties and non Parties carefully consider and act upon the recommendations and guidelines developed and endorsed by the Scientific Committee (SC4/Doc 18) in order to regulate and mitigate underwater anthropogenic noise in the ACCOBAMS area. It notes that this work has taken into account the work on noise undertaken by *inter alia* the International Whaling Commission Scientific Committee, the US Marine Mammal Commission, the US National Marine Fisheries Service, and other governmental and non governmental organizations.

It notes that an important component of these recommendations and guidelines is the development of a permit system. It recognises that the development of permit systems is complex and may take considerable time. Given this, it strongly requests the Parties to act in accordance with the following principles as soon as possible:

- a) *Noise should be considered a potentially significant threat to marine mammals and other marine wildlife; this threat can range from continuous noise exposure (disturbance, masking, site avoidance, etc.) with long-term effects to acute exposure with potential short-term harmful and even lethal effects. Particular attention should be given to habitats that host sensitive species such as beaked whales.*
- b) *Priority should be assigned to high quality research to map the range of noise doses to which animals are exposed and to define the noise exposure doses that may have impacts on marine mammals welfare and survival. Specific research is also required to characterize all those human activities that produce or may produce underwater noise.*
- c) *Consideration of the effects of underwater noise should be included in Environmental Impact Assessments and in the consequent design of mitigation procedures for any activity with the potential of introducing noise underwater.*
- d) *Underwater noise levels should be considered a quality parameter when assessing habitats, zoning MPAs and other issues related to marine life. This should be considered a priority in critical habitats and whenever noise may affect essential behaviour (e.g. feeding, reproduction, nursing).*
- e) *Underwater noise should be regulated and reduced; specific laws will be required to set limits to the noise irradiated underwater by ships and motorboats, whatever their function, and by any other noise-producing activity- especially high priority should be accorded to high power sources (seismic and sonar) and both offshore and coastal construction works.*

The Scientific Committee also encourages the development of quieter and environmentally safer acoustic technologies and the use of best available control technologies and other mitigation measures in order to reduce the impacts of man-made noise sources in the Agreement area.

RECOMMENDATION SC4.4

Programme for a comprehensive survey of the abundance and distribution of cetaceans in the ACCOBAMS area

At its 2nd meeting, the Scientific Committee drew the attention of the ACCOBAMS Parties to the ‘fundamental importance of obtaining baseline population¹⁵ estimates and distributional information of cetaceans within the area as soon as possible’. It stressed that without such information (and a suitable monitoring programme) it will be impossible to *inter alia* determine whether ACCOBAMS is meeting its conservation objectives. The great importance of such information in the assessment of risk, the determination of appropriate mitigation measures and the associated determination of priority actions, has been highlighted in many discussions of the Scientific Committee, including recent discussions on bycatches, MPAs, fin whales, the conservation plans for common dolphins, Black Sea dolphins and bottlenose dolphins (see recommendations of the SC2 and SC3). All recommendations from the Scientific Committee were adopted by the Parties during the last MOP.

The Committee **reiterates** that such work represents the highest priority for research within the area (although this should not be interpreted as meaning that other work can not continue in parallel). The Scientific Committee **strongly endorses** this plan for further work. It thanks the Steering Group and the Secretariat for the considerable work already undertaken on a largely voluntary basis. However, it believes that for the project to come to successful fruition it is essential that seed funding be found for the coordinators. This is considered further under Recommendation SC4.13.

Consequently, the Committee **recommends** that the Parties:

- (1) Reaffirm their earlier commitment to the project given in Resolution 2.19;
- (2) Co-operate with the Steering Group and Secretariat promptly with respect to requests for information;
- (3) Facilitate the process of obtaining permits for vessels and aircraft to operate in their EEZs;
- (4) Give high priority within their national research budgets to offering financial or in-kind (e.g. in the form of appropriate vessels, aircraft and/or observers) support for the survey;
- (5) Provide the essential seed funding required to allow the essential planning and co-ordinating to continue (see Recommendation SC4.13)

¹⁵ Use of the word population here implies obtaining knowledge on stock structure as well as abundance

RECOMMENDATION SC4.5

Black Sea Cetacean Survey

The Scientific Committee has reviewed the present state of development of the Black Sea basin-wide survey initiative under the auspices of the Permanent Secretariat of the Black Sea Commission in co-operation with ACCOBAMS. It recognises the major contribution to this initiative made at the Meeting on methodology for surveying the Black Sea (St. Andrews, UK, September 2005) and the Workshop on Cetacean Surveying in the Black Sea (Istanbul, Turkey, October 2005). It endorses the most recent version of the proposal (October 2006) and emphasizes the **essential** nature of international co-operation between Black Sea researchers and those involved in the major survey initiative for the Mediterranean Sea (see Recommendation SC4.4), and in particular researchers from the Sea Mammals Research Unit (SMRU) and the Centre for Research into Ecological and Environmental Modelling (CREEM). It **agrees** that the project should be considered as three, separately funded sub-projects:

- (1) Phase 1 'Survey Design',
- (2) Phase 2 'Surveying the Study Area'; and
- (3) Phase 3 'Data Analysis';

It **urges** that every effort be made to carry out the survey in the near future and preferably in 2007.

The Scientific Committee is fully appreciative of the funding difficulties encountered by this comprehensive survey initiative but notes that sufficient money has already been promised by responsible person from the Institute of Ecology and Evolution (Moscow, the Russian Federation) to allow Phase 1 to begin immediately. It therefore **strongly recommends** as a matter of some urgency that:

The Black Sea Commission's Secretariat presents the proposal to the Black Sea Commission for proper consideration, endorsement, and the determination of potential donors; that the available funds are made available to begin Phase 1 as soon as practicable and certainly by 1 January 2007 through a mechanism (for example an implementing organisation such as the Black Sea Council for Marine Mammals) to be determined by the Black Sea Commission and ACCOBAMS.

RECOMMENDATION SC4.6

Conservation Plan for Black Sea Cetaceans

The preparation of a Conservation Plan for Black Sea Cetaceans was one of the priorities assigned at the 1st Meeting of the Parties (Monaco, 2002; Resolution 1.9, Action 6). The 1st draft of the Plan was considered at the 3rd Meeting of the Scientific Committee (Cairo, 2005) while a further draft was discussed and supported in general and in most details by participants of the Round Table on the Conservation of Black Sea Cetaceans (Istanbul, May 2006).

At its 4th meeting in Monaco, the Scientific Committee adopts and commends the 3rd, substantially improved, version of the Plan, prepared under the auspices of the ACCOBAMS Permanent Secretariat and the Permanent Secretariat of the Black Sea Commission.¹⁶

Consequently, the Scientific Committee **recommends** that the ACCOBAMS Parties and the Parties to the Bucharest Convention (through the Black Sea Commission) endorse its views of the Plan and:

- (1) Agree that it should form an integral component of discussions of the Black Sea regional and national strategies, plans, programmes and projects concerned with the protection, exploration and management of the Black Sea environment, biodiversity, living resources, marine mammals, and cetaceans, in particular; and
- (2) Facilitate the implementation of all actions proposed in the Plan such that they are completed as soon as possible and preferably within the next five years;

In particular, it **urges** that those actions which require coordinated effort and full institutional support from the ACCOBAMS Secretariat, the Black Sea Commission and the concerned individual Governments are addressed as a matter of urgency. These are:

- (1) Completion of the basin-wide survey (see Recommendation SC4.4);
- (2) Establishment of a regional bycatch network integrated with a regional stranding network; and
- (3) Continue to work towards the establishment of a marine protected areas network (see Recommendation SC4.9).

¹⁶ Birkun A., Jr., Cañadas A., Donovan G., Holcer D., Lauriano G., Notarbartolo di Sciarra G., Panigada S., Radu G., and van Klaveren M.-C. 2006. Conservation Plan for Black Sea Cetaceans. ACCOBAMS, Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area. 49 pp.

RECOMMENDATION SC4.7

Work on fin whales and ship strikes in the Mediterranean Sea

The Scientific Committee welcomes and endorses the reports and recommendations of the two ACCOBAMS/Pelagos workshops held in Monaco in November 2005 on (1) Mediterranean fin whales and (2) vessel collisions and cetaceans.

Fin whales

In order to maintain momentum generated by the Workshop and to ensure that its recommendations are acted upon, the Scientific Committee **agrees** to create a Steering Group under the auspices of the ACCOBAMS Scientific Committee.

The Steering Group will work in close contact with the ACCOBAMS Secretariat and Parties, the Pelagos Sanctuary Secretariat and the IWC Scientific Committee, as well as other relevant experts and research groups in the region. Its primary role will be that of co-ordination, prioritisation, encouraging initiatives to take the process forward and the provision of advice, aiming to a co-operative and supranational approach to fin whale research conservation efforts.

Ship strikes

Similarly, in order to maintain momentum generated by the Workshop and to ensure that its recommendations are acted upon, the Scientific Committee **agrees** to create a Steering Group under the auspices of the ACCOBAMS Scientific Committee.

The Steering Group will work in close contact with the ACCOBAMS Secretariat and Parties, the Pelagos Sanctuary Secretariat, the IWC, IMO and CMS, as well as other relevant experts and research groups in the region.

In particular, the Scientific Committee **recommends** that it works closely with the IWC whose Scientific Committee and Conservation Committee are already working on this issue at the global scale and investigating *inter alia* co-operation with IMO and the development of a worldwide database.

In conclusion, the Scientific Committee **recommends** that the Parties:

- (1) Endorse the report and recommendations from the two workshops;
- (2) Assist in providing data if requested;
- (3) Give serious consideration to provide the seed funding for the work of the Steering Groups requested under Recommendation SC4.13.

RECOMMENDATION SC4.8

Tissue Banks

The Fourth Meeting of the Scientific Committee examined the Guidelines for the establishment of a system of Tissue Banks within the ACCOBAMS agreement and concluded that it is desirable for all Parties and Range States to consider establishing their own National Tissue Banks (NTBs), the goal being to ensure that appropriate tissues from stranded, bycaught and other marine mammals are appropriately harvested, processed, stored and distributed. In this regard, the SC recommends:

- That all Parties in which a NTB is active engage in a long-term commitment to maintain its existence and functionality;
- That all Parties ensure that local stranding networks, governmental organizations, non-profit organizations and any other agencies involved in the response to cetacean strandings should contribute to the NTB (or, in the absence of a national bank, to the nearest regional tissue bank) by harvesting and sending tissue samples according to a recognized protocol;
- That all NTBs be connected within a specific tissue bank network (TBN); and
- That all Parties support existing local NTBs and promote their participation to the TBN. In this respect all the Parties should facilitate exchange of tissues among the TBN by arranging proper CITES permits

The usefulness of tissue banks is tightly connected to the existence of effective stranding networks in the ACCOBAMS area. Therefore, the Scientific Committee reiterates its recommendation to the Parties that stranding networks be maintained in all Member States, and established where they do not exist.

RECOMMENDATION SC4.9

Specially Protected Areas for Cetaceans

The Scientific Committee welcomed and commended the work by Hoyt (SC4/Doc21) and Cañadas et al. (SC4/Inf01), which provided the main background for development of the Committee's response to the MOP Resolution on MPAs.

Criteria for Proposals

The Committee emphasized the importance of following a staged process in identifying and selecting candidate MPA, and it is recommended that proposals should include the following information:

- Clearly stated objectives of the MPA;
- The rationale for choosing an MPA as the appropriate management tool and the particular temporal and geographical boundaries (including specification of the data and analytical techniques used);
- A draft management plan that is linked to documented actual and potential threats to one or more populations of cetaceans;
- Proposals for mitigation measures (and/or research designed to develop such measures), with consideration of appropriate compliance monitoring (to ensure that such measures are correctly implemented) plus scientific monitoring to ensure that each of the proposed mitigation measures (where there are more than one) are working as expected;
- Proposals for overall monitoring to ensure that stated objectives are being met;
- Details of consultation with and views of interested stakeholders;
- Details of legal aspects of the proposed MPA, including co-operation with the appropriate local, national and international authorities must occur.

Format for Proposals

The Committee welcomed the willingness of Cañadas and Sagarminaga to prepare a draft proposal for an Alborán Sea MPA in the format adopted by the Committee, with the expectation that this 'test run' would facilitate needed refinements and improvements to the format before it is considered final for delivery to the next Meeting of the Parties.

Sites for Consideration in the Agreement Area

Four pilot MPAs had been proposed at the first MOP in 2002 and confirmed subsequently by the Scientific Committee:

- (1) Kalamos, Greece for common dolphins;
- (2) southern Crete, Greece for sperm whales;
- (3) Cape Sarych to Cape Khersones, SW Crimea, Ukraine in the Black Sea, for bottlenose and common dolphins and harbour porpoises; and
- (4) Losinj, Kvarneric, Croatia for bottlenose dolphins.

The Committee noted that the only action that has been taken thus far was in July 2006 when Croatia announced Losinj to be an MPA, although no management or monitoring plans have been specified. While welcoming the decision of the Croatian Government, the Scientific Committee **strongly recommends** that the national authorities in Croatia work with all stakeholders to create a management and monitoring plan for this MPA. The Committee reminds the Parties of their existing commitment to creating MPAs in the other three areas, and **strongly recommends** that this follows the approach recommended above. In this regard, it draws the Parties **serious concern** to the situation of Kalamos that is discussed further under Item 5.5.2.

As has been stressed above, MPAs should be seen in the context of overall Conservation Plans. In 2004, at MOP2, the Parties welcomed the Mediterranean Common Dolphin Conservation Plan. The Scientific Committee therefore **recommends** that Parties, in co-operation with the Scientific Committee, give full

consideration to assessing the value of creating MPAs for the following eight areas included as being of special importance in that Plan, following the criteria above:

- (1) Alborán Sea, Spain-Morocco-Algeria;
- (2) Waters surrounding the island of Ischia, southeastern Tyrrhenian Sea, Italy;
- (3) Waters surrounding the island of Malta and southeastern Sicily, Italy;
- (4) Eastern Ionian Sea and Gulf of Corinth, Greece;
- (5) Gulf of Saronikos and adjacent waters (Argo-Saronikos and southern South Evvoikos Gulf), Greece;
- (6) Waters surrounding the Northern Sporades, Greece;
- (7) Northern Aegean Sea, Greece; and
- (8) Waters surrounding the Dodekanese, Greece.

The Committee notes with concern that to date, no effective conservation actions have been taken in response to this Plan as discussed more fully under Item 5.2.1.

The Committee also considered the revised draft Conservation Plan for Black Sea Cetaceans discussed under Item 5.2.3. In addition to the areas of the Black Sea already referred to at MoP1 (see above), it **recommends** that Parties, in co-operation with the Scientific Committee, give priority to giving full consideration to assessing the value of creating MPAs for the following additional three areas in the Black Sea and adjacent waters.

- (1) Cape Anaklia to Sarp (Georgia) – this represents winter habitat for common dolphins and harbour porpoises; in particular there is a problem with pelagic trawling for anchovy, which has a dolphin bycatch.
- (2) Kerch Strait (Ukraine, Russia) – used by semi-resident Black Sea bottlenose dolphins and as a migration corridor for several thousand harbour porpoises moving to and from the Azov Sea; there is intensive marine traffic and coastal fisheries with bycatch in gillnets and live captures of bottlenose dolphins.
- (3) The Turkish Strait System (Turkey) – used by all Black Sea cetacean species, including harbour porpoises (also present in the Aegean Sea).

Finally, the Committee **recommends** to the Parties two further areas that warrant attention in the context of candidate MPAs:

- (1) Strait of Sicily including associated islands (Italy, Malta, Tunisia, high seas) - preliminary data suggest that this highly productive fishing area which links the eastern and western Mediterranean may be an important wintering ground for fin whales and there is evidence of vessel collisions. It also contains resident bottlenose and common dolphins, as well as other dolphins.
- (2) Amvrakikos Gulf (NW Greece) – about 150 bottlenose dolphins live in this semi-enclosed area that has one of the highest densities of bottlenose dolphins in the Mediterranean.
- (3) The Committee agreed that while the above list represents the highest priority areas for consideration as possible MPAs, it is not presented as a comprehensive list. The Committee **recommends** that Parties consider whether there are candidate areas within their waters and in the high seas, taking into account the above suggestions and recommendations for an appropriate approach.

RECOMMENDATION SC4.10

Red List Assessment

The SC recommends that Parties (a) take note of the assessments produced by the 2006 Monaco workshop of experts and (b) implement measures to address the indicated threats to the populations assessed as Critically Endangered or Endangered (see Table below). Specific and immediate attention should be given to Gibraltar killer whales, Mediterranean common dolphins, Mediterranean sperm whales and Black Sea/northern Aegean Sea harbour porpoises.

An important finding of the 2006 Monaco workshop of experts was the need for better data and analyses that would improve understanding of the status of several cetacean species in the Mediterranean and Black Sea regions.

The SC recommends that Parties provide appropriate financial, logistical and technical support to investigators seeking to improve knowledge on: (a) population structure, (b) animal abundance (see Recommendation SC4.4 on surveys), (c) causes of mortality (see Recommendation SC4.8 on tissue banks) and (d) linkages between animal health and potential threat factors (e.g. toxic contaminants, anthropogenic noise)(see Recommendation SC4.3 on noise).

| Species | IUCN Category |
|--|-----------------------|
| Killer whale, Gibraltar population | Critically Endangered |
| Sperm whale, Mediterranean population | Endangered |
| Short-beaked common dolphin, Mediterranean population ¹⁷ | Endangered |
| Short-beaked common dolphin, Black Sea sub-species | Endangered |
| Common bottlenose dolphin, Black Sea sub-species | Endangered |
| Harbour porpoise, Black Sea sub-species, interpreted to include the animals in the northern Aegean Sea | Endangered |
| Common bottlenose dolphin, Mediterranean population | Vulnerable |
| Striped dolphin, Mediterranean population | Vulnerable |
| Fin whale, Mediterranean population | Data Deficient |
| Cuvier's beaked whale, Mediterranean population | Data Deficient |
| Long-finned pilot whale, Mediterranean population | Data Deficient |
| Risso's dolphin, Mediterranean population | Data Deficient |

¹⁷ Assessed in 2003

RECOMMENDATION SC4.11

Captive facilities

Recalling that Article II of ACCOBAMS requires Parties to “prohibit and take all necessary measures to eliminate, where this is not already done, any deliberate taking of cetaceans” the Scientific Committee expresses its concern about the continued live captures and trade of cetaceans in the Agreement Area for the following reasons:

- The Scientific Committee agrees with the concerns expressed in the IUCN Cetacean Specialist Group 2002-2010 Conservation Action Plan for the World’s Cetaceans that ‘live-capture can become a serious threat to local cetacean populations and especially when it is undertaken ‘without a rigorous program of research and monitoring’ (see that plan – Reeves et al. 2003, p. 7 – for specifications of what such a program would include). The Scientific Committee is unaware of any stock assessment of any kind that has been carried out in relation to the proposed live-captures in Turkey.
- There is a real risk of escape by cetaceans held in sea pens, judging by known precedents. Therefore, there is reason for concern that non-native cetaceans (in the present instance white whales) and dolphins (e.g. Black Sea bottlenose dolphins into the Mediterranean or vice-versa) could be introduced into the region.
- Similarly the unregulated keeping and exchange of captive animals creates a further risk of introduction of exotic pathogens into the Agreement area especially when at least some of them are housed in sea pens, and also potential genetic pollution resulting from mating between animals from different populations or subspecies.

The Scientific Committee also notes that the Black Sea subspecies of bottlenose dolphin was assigned a zero trade quota by CITES in 2002 and assessed as Endangered under the IUCN Red List criteria according to a recent workshop of experts. The Mediterranean ‘subpopulation’ was assessed by the same workshop as Vulnerable. The SC invites the Secretariat to contact the CITES Secretariat to discuss these developments.

RECOMMENDATION SC4.12

Acoustic Harassment Devices

The Scientific Committee welcomed the report from the Secretariat on the ongoing cooperation with the GFCM; particularly on the work done during the last meeting of the Sub-Committee on Marine Environment and Ecosystems (SCMEE) (Rome 11 September 2006), including the GFCM-ACCOBAMS workshop on cetacean-fishery interactions.

It supports the concern expressed at that Workshop over the unregulated use of acoustic devices in fisheries (for definitions of such devices, see “Guidelines for technical measures to minimise cetacean-fishery conflicts in the Mediterranean and Black Seas”, edited by S. Northridge, C. Fortuna and A. Read), and in particular the importance of an adequate analysis of the utility of acoustic devices used in cetacean / fishery interactions (as expressed in the recommendation: “*to promote robust scientific experiments to assess the impact of different types of pingers on cetacean and fish species*” adopted by the GFCM Scientific Advisory Committee, Rome 24-27 October 2007). This complements the concern expressed in Recommendation (driftnets) at this meeting.

In this light the Scientific Committee reminds the Parties of the concerns already expressed in ACCOBAMS Resolution 2.12, and its annexed guidelines, that urges Parties:

- “To strictly regulate the use of AHDs to alleviate conflicts between cetaceans and fisheries or mariculture operations in the Agreement area;
- To strongly recommend that the use of pingers, where authorized and appropriate, only be conducted with controlled studies to ensure that they are an effective mitigation measure”

RECOMMENDATION SC4.13

Minimum funding for the Scientific Committee

The Scientific Committee is well aware of the budgetary constraints facing national and international organisations. It recognises that up until now it has not directly requested funding from ACCOBAMS as a body or its Parties. However, it is concerned that certain high priority conservation recommendations it has made in the past have either not occurred or have been considerably delayed for financial reasons.

Given this, and in the light of certain key recommendations it has made at this meeting, it **respectfully requests** that serious consideration be given to the allocation within the budget of ACCOBAMS, *minimum seed funding* to ensure that some action occurs on the highest priority issues, noting that this funding is not to carry out the actions themselves but to enable progress to be made in terms of co-ordination and the search for full funding. These are:

- (1) Basin Wide survey (Recommendation SC4.4): This has been accorded the highest priority action by the Committee in the recommendation 2.9 of the 2nd Scientific Committee adopted by MoP2. For the project to come to successful fruition it is essential that seed funding be found for the co-ordinators to allocate sufficient time to complex logistical work required. This involves *inter alia* organising workshops (not the cost of the workshops themselves), acquiring permits, finding potential sources of funding and writing proposals, determining appropriate vessels, aircraft and observers, travel etc. The Committee estimates that this will require the equivalent of 8 months for the year 2008 or some €20,000. A similar amount will be required for 2007 but the Committee recognises that this is outside the budgetary period for the next MOP.
- (2) Mediterranean common dolphin conservation plan (Recommendation SC4.1): This represents the most serious conservation problem in the Mediterranean and to date no actions have been taken. The seed funding will allow for the necessary liaison with the various fishery bodies and other authorities, fishermen themselves, stakeholders including NGOs, the development of appropriate capacity building and public awareness measures, travel etc. The Committee estimates that will require some €30,000 for the year 2008.
- (3) Progress on fin whale and ship strike work: while this is not as high priority as the previous two items, the Committee believes that is essential to maintain the momentum generated by the two workshops. The seed funding will allow the steering groups to achieve the necessary liaison (including travel) with Pelagos, IMO, IWC and CMS, and researchers to ensure that action begins on the priority recommendations outlined in the report. The Committee estimates that this will require some €15,000 in 2007.

The Committee **stresses** that without this minimum seed funding, work on these priority items may not occur. In making this request, it is certainly not suggesting that this should be considered sufficient for the work of the Committee. It emphasises that Parties are invited to make voluntary contributions or adopt as national projects for all of its recommendations the present request is rather to ensure that this minimum level of seed funding is realised. As always the Committee is open to offering advice to the Secretariat on other aspects of its work that have budgetary implications.

The Committee also wishes to reiterate to the Parties its willingness to provide advice and review proposals for work intended to make a contribution to the work of ACCOBAMS. It is aware that many individual Parties allocate funds for national ACCOBAMS-related research and it believes it can play a useful role in assisting in identifying work that is (a) most directly in accord with the conservation priorities identified in Resolutions adopted by the Parties and (b) will directly assist the Committee in its priority work. Similarly, the Committee is pleased to work with the Secretariat in this regard.