Agenda Item 6.1

Project Funding through ASCOBANS Progress of Supported Projects

Document 6-01

Progress of Projects Supported through ASCOBANS

Action Requested

• Take note of the report

Comment

Submitted by

Secretariat



Progress of Projects Supported through ASCOBANS

- 1. Since 2008, Parties have been allocating the surplus of the budgets of previous years to project funding. To facilitate this, a budget line for Conservation Projects (BAL 2201) was added to the Agreement's budget, to which positive balances from previous years are rephased.
- The 15th, 16th and 17th Advisory Committee Meetings decided on the projects to be funded from these resources. These decisions are reflected in Annex 10 of the AC15 Report (2008), Annex 13 of the AC16 Report (2009) and Annex XX of the AC17 Report (2010).
- 3. In this document, the Secretariat reports on the progress of the projects that were funded from the budget line for Conservation Projects, as well as projects financed from the contribution from the UNEP Environment Fund. The document contains details of projects concluded since AC17 as well as the status of those underway.

Finalized Projects

- 4. Five projects have been completed since AC17.
- A. Historic and present harbour porpoise populations in the Baltic region geometric morphometrics analysis
- 5. In late 2008, the ASCOBANS Jastarnia Group notified the Secretariat which project they wished to see supported through part of the funds kindly made available to ASCOBANS by the UNEP Executive Director for the Implementation of the Jastarnia Plan. The Agreement contributes 5,000 Euro to the total project costs. The Funding Agreement (SSFA/2009/02) with Aarhus University (Denmark) for the project entitled "Historic and present harbour porpoise populations in the Baltic region geometric morphometrics analysis" was signed in June 2009.
- 6. The ASCOBANS funding covered the travel costs of the researcher, Anders Galatius Jørgensen, to museums and collections around the Baltic Sea. The main result expected of the project was the best possible assessment of historical and current population structure of the harbour porpoise in the Baltic by morphometric analysis with the use of all available material and the most up-to-date technology and methodology.
- 7. The final project report was completed in October 2010 and after having been made available to the Jastarnia Group has been published as AC18/Doc.6-03.

B. Risk Assessment of Potential Conflicts between Shipping and Cetaceans in the ASCOBANS Region

- A funding agreement (SSFA/2009/01) entitled "Risk Assessment of Potential Conflicts between Shipping and Cetaceans in the ASCOBANS Region" was concluded in March 2009 upon recommendation of the 15th Advisory Committee Meeting. The Sea Watch Foundation (UK) received 15,500 Euro.
- 9. Activities agreed under the SSFA include:
 - Acquisition of AIS data in synthesized form showing ship movements per unit time over the ASCOBANS Agreement Area
 - Development of GIS shape files that allow plots of track density by grid cell for the

major types of shipping (possibly also by season)

- Using effort-related sightings data gathered across the region, plot sightings densities by grid cell for the main cetacean taxa (dolphins, porpoises, baleen whales, large toothed whales)
- Identifying main areas and seasons for potential conflict between shipping and cetaceans

10. The main results/outputs expected from this project are:

- Gridded distribution maps showing relative abundance of cetacean species in the ASCOBANS Agreement Area, with focus on species of direct interest to ASCOBANS (small cetaceans)
- Gridded map(s) of shipping traffic showing relative densities of shipping within the ASCOBANS Agreement Area
- Report analysing and interpreting results to highlight potential areas of conflict
- Review of potential and limitations of using AIS data to examine spatio-temporal trends in shipping patterns
- 11. A progress report on the status of the implementation of the project had already been submitted to AC17. The final project report has been published as AC18/Doc.6-04.

C. Analysis of New Data Sets for Risk Assessment of Potential Conflicts between Shipping and Cetaceans in the ASCOBANS Region

- 12. The 17th Advisory Committee Meeting agreed that a map of the ASCOBANS Area showing places with a high risk of ship strikes should be prepared in time for AC19. Peter Evans (Sea Watch Foundation) was to be contracted in order to produce this map. A funding agreement (SSFA/2011/01) specifies that the following activities be carried out:
 - Analysis of New Data Sets for Risk Assessment of Potential Conflicts between Shipping and Cetaceans in the ASCOBANS Region
 - Preparation of map showing results of analysis

The final project report was incorporated in AC18/Doc.6-04 in order to present the combined results to the Committee.

D. Review of Trend Analyses in the ASCOBANS Area

- 13. Following a public tender, a contract for the project entitled "**Review of Trend Analyses** in the ASCOBANS Area", which had been developed by AC16 (see Annex 7 of the AC16 Report), was issued to Peter Evans in December 2009. The aim of the project is to provide AC members with an accessible, readable and succinct overview of trends in status, distribution and impacts of small cetaceans within the ASCOBANS Agreement Area.
- 14. An interim progress report on the status of the implementation of the project and the initial results had been considered by AC17. The final report has been submitted as AC18/Doc.6-05.

E. Coordination of the ASCOBANS North Sea Harbour Porpoise Conservation Plan

15. Following the instructions of AC16, the Secretariat issued a tender for the "Coordination of the ASCOBANS North Sea Harbour Porpoise Conservation Plan", for which

10,000 USD from the UNEP Environment Fund were used. A team of two consultants, Russell Leaper and Vassili Papastavrou, was selected in consultation with the chairs of the North Sea Plan drafting group and a contract was concluded in October 2009.

- 16. The main tasks outlined for the consultancy include:
 - To document and collate existing international and national regulations and guidelines that are relevant to the conservation and management of harbour porpoises in the North Sea and to provide this collation to all stakeholders
 - To promote and explain the Conservation Plan to relevant stakeholders
 - To develop mechanisms to ensure that the Actions given in the Conservation Plan are implemented including the organisation of scientific workshops
 - To make a recommendation for the evolution of some EU fishery regulations: data collection regulation, electronic logbooks, etc. in order to get the most appropriate data from effective fishing effort
 - To coordinate the collection and collation of appropriate data on anthropogenic activities in a format that will facilitate its use in a GIS context
 - To report on progress with the implementation of the plan
- 17. Based on these tasks defined in the Terms of Reference for the contract, the consultants prepared a detailed work plan. An updated progress report on its implementation and initial results had been published as AC17/Doc.4-05. The final report of the consultants is available as AC18/Doc.4-06.

Ongoing Projects

18. Five projects are currently ongoing.

A. Effects of contaminants on reproduction, Phase II

- 19. The German Environment Ministry agreed to finance Phase II of the project "Effects of contaminants on reproduction" by Sinéad Murphy of the University of St. Andrews (UK). This project had been classified as a priority by AC17, but was not selected for funding from the Agreement's core trust fund. The final report of Phase I was published as AC17/Doc.6-05. Under the funding agreement (SSFA/2010/05), 13,591 Euro were allocated to the following activities:
 - Analysis of histological slides processed during Phase I of suspected abnormalities in *D. delphis* ovaries
 - Detailed analysis of all additional available *P. phocoena* ovarian material with corresponding contaminant data. Laboratory analysis includes gross examination of gonads, sectioning of ovaries, counting all corpora scars, and where required histological analysis of corpora scars
 - Assessment of reproductive abnormalities in all *P. Phocoena* ovaries. Laboratory work will include gross and histopathological analysis of ovarian material
 - Where data gaps exist, analysis of teeth samples from *P. Phocoena* for age determination
 - Statistical analysis will be undertaken incorporating age, reproductive, contaminant, nutritional and health status data. This is order to assess the indirect effects of contaminants on reproductive activity in female *P. phocoena*. Further additional

analysis will assess the prevalence of abnormalities in female *D. delphis* and *P. phocoena*.

20. Expected outputs to be achieved include:

- Information on the effects of contaminants on reproduction in small cetaceans
- Implications for conservation of both these species in the ASCOBANS area: If the results identify that contaminants have an adverse effect on individual reproductive capabilities, both species would be more vulnerable to exploitation, especially from other anthropogenic activities such as incidental capture, and would not necessarily recover from exploitation in a predictable way.
- Production of the final report from Phase II
- Production of a scientific paper for peer review on "Assessing the direct and indirect effects of contaminants on female reproductive activity in UK harbour porpoises"
- Production of a scientific paper for peer review on "The prevalence of reproductive abnormalities in small cetaceans, and association with pollutants"
- 21. The final project report is due in September 2011.

B. Inventories of harbour porpoise Phocaena phocaena phocaena presence in Russian territorial waters of the Baltic Sea

- 22. The project "Inventories of harbour porpoise Phocaena phocaena phocaena presence in Russian territorial waters of the Baltic Sea" was selected for funding by the 17th Advisory Committee Meeting. A funding agreement (SSFA/2010/01) for 6,950 Euro was concluded with the Russian non-governmental organization Biologists for Nature Conservation in January 2011. Activities to be carried out under the funding agreement include:
 - To work out questionnaires for fishermen and locals working in the Russian Part of the Gulf of Finland or living near the coast line.
 - To establish a network of contacts with commercial fishing brigades and individual fishermen in Kaliningrad region and Leningrad region.
 - To implement questionnaire survey by distribution (and further collection) of questionnaires among target groups and conducting of verbal interviews.
 - To implement a few field observations (using boat or catamaran) around the main islands, located in the Russian part of the Gulf of Finland in order to find bones or other remains of *P.p. Phocaena* on the shores.
 - To process collected data and write a report based on the results achieved. If the results are positive then develop a major project for more precise investigation of *P. p. phocaena* population in the Gulf of Finland and propose measures for its effective conservation.
- 23. Expected outputs to be achieved are:
 - Report on the investigations made containing detailed information received from fishermen in different regions of studying area, maps with points (if any) where *P.p. phocaena* was observed by fishermen, locals or experts or its remains were found.
 - Set of measures for further research, conservation and management activities concerning *P.p. phocaena* in the Gulf of Finland if any traces of its presence in the area are found.
 - Publication of research results

24. The final project report is due in November 2011.

- C. Feasibility study on the creation of a web-accessed strandings database covering Agreement Party and Range States within the ASCOBANS region
- 25. Also upon decision of AC17 by means of a funding agreement with the Zoological Society of London (SSFA/2010/02), 8,500 Euro were awarded for a "Feasibility study on the creation of a web-accessed strandings database covering Agreement Party and Range States within the ASCOBANS region". The funding agreement was signed in January 2011.
- 26. Under the lead of Rob Deaville, a meeting with potential collaborating partner networks and other stakeholders will be held at ZSL in London to:
 - Establish common areas of data held by each network
 - Establish current methods of data archive and dissemination
 - Agree a defined list of fields for a potential centralised database
 - Agree a process and outline timetable for the production of the potential centralised database
- 27. Following the meeting at ZSL, a report will be submitted to the ASCOBANS Secretariat that will detail;
 - outcomes of the discussion process between networks
 - partner stranding networks that could contribute data to a potential centralised database
 - common areas of data that could be included in a potential centralised database
 - structure and operation of a potential centralised database
- 28. If agreement is reached between networks that such a system is possible, a detailed proposal (with associated costs and timetable) on the creation of a centralised web-accessed database and portal will also be prepared and submitted.
- 29. The final project report is due in November 2011.

D. Understanding harbour porpoise (*Phocoena phocoena*) and fisheries interactions in the north-west Iberian Peninsula

- 30. The funding agreement (SSFA/2010/04) for the project entitled "**Understanding harbour porpoise** (*Phocoena phocoena*) and fisheries interactions in the north-west Iberian **Peninsula**", signed in February 2010, made available to the University of Aberdeen 10,000 Euro for the following activities:
 - Age determination by counting growth layer groups in the dentine. Age data will be used to construct life tables and thus estimate mortality rate.
 - Stomach content analysis and comparison with fishery catch data to determine the potential for competition between cetaceans and fisheries e.g. catch composition, minimum landing size and geographical overlap.
 - Determination of individual reproductive status and history, which together with age data will be used to construct maturity ogives (to establish age and size at sexual maturity), and determine the pregnancy rate and the annual reproductive cycle.
 - Statistical analysis of trends in life history parameters to detect any strong trends in life history parameters over time, permitting inferences about population status.

Comparison with equivalent data for other populations (notably for Scotland) for better interpretation of results.

- 31. The project, which is lead by Fiona Read, is expected to deliver the following milestones:
 - Quantify life history parameters (age structure, age and length at sexual and asymptotic maturity, pregnancy rate, etc) in harbour porpoises for the NWIP.
 - Use age-at-death data to estimate total and fisheries mortality rate for porpoises in the NWIP.
 - Examine evidence for temporal trends in age at sexual maturity, reproductive output and mortality rates.
 - Compare life history parameters for Iberian porpoises with those from northern Europe.
 - Investigate seasonal, geographic, annual and ontogenetic variation in the diet of NWIP in relation to prey abundance and thus define their trophic role in the area.
 - Provide recommendations on conservation of porpoises along the north-west Iberian Peninsula

32. The final project report is due in March 2012.

E. Pollutant exposure in coastal top predators: assessing current levels of exposure and toxic effects

- 33. This final project selected for funding by AC17, entitled "**Pollutant exposure in coastal top predators: assessing current levels of exposure and toxic effects**" is covered by SSFA/2010/03 on 9,750 Euros, which was concluded with the Zoological Society of London in January 2011. Activities to be carried out under the lead of Paul Jepson include:
 - Determine and analyse existing pollutant exposure data for PCBs and organochlorine pesticide levels within the ASCOBANS range.
 - Compare the levels of PCBs in bottlenose dolphins and killer whales with levels of PCBs in healthy and diseased harbour porpoises in UK waters (Jepson *et al* 2005; Hall *et al* 2006) and to a proposed threshold of toxicity for total PCBs of 17mg/kg lipid weight (Kannan *et al* 2000). PCB levels will also be compared with those associated with reproductive impairment in bottlenose dolphin studies in the US (e.g. Schwacke *et al* 2002).
 - Using data from UK-stranded harbour porpoises, generate the first dose-response curve for risk assessments of lethal effects of PCBs (i.e. infectious disease mortality) in exposed populations using empirical cetacean data.
 - Undertake a risk assessment for the toxic effects of PCB exposure in bottlenose dolphins and killer whales in European water within the ASCOBANS range.
- 34. The output expected from this project is a final report to be submitted to the ASCOBANS Advisory Committee assessing the levels of exposure in UK/European bottlenose dolphins and killer whales and their likely toxicological impacts.
- 35. The final project report is due in July 2012.