Agenda Item 7   Relations with other Bodies

Document 7-04   **Proposal for a Joint ACCOBAMS / ASCOBANS Working Group on the Marine Strategy Framework Directive**

Action Requested
- Take note of the proposal
- Comment and provide guidance on follow-up

Submitted by   Secretariat

Secretariat's Note

The 7th Meeting of the ACCOBAMS Scientific Committee (March 2011) suggested to create a common ASCOBANS / ACCOBAMS working group on possible contributions of the Agreements to the work on the European Marine Strategy Framework Directive and its relevance to cetacean conservation.

Within the ACCOBAMS Scientific Committee, Vincent Ridoux in his position of Task Manager on Research, takes the lead. He kindly provided the explanatory note contained in this document.

Further, the document contains a table giving an overview of the Criteria and methodological standards relevant to ACCOBAMS on good environmental status of marine waters, as annexed to the Report of the 7th Meeting of the ACCOBAMS Scientific Committee.

Note for a joint ACCOBAMS-ASCOBANS working group on the Marine Strategy Framework Directive

Most of the ASCOBANS area and a large proportion of the ACCOBAMS area are included within the geographical scope of the EU Marine Strategy Framework Directive.

The main goal of the MSFD is to maintain or restore a good ecological status (GES) by 2020 in all waters under EU Member States' jurisdiction. The MSFD sets out a strategy with key milestones which EU Member States must follow to achieve GES in their marine environment by 2020? These steps are: assessment of current ecological status, definition of GES and corresponding indicators, establishment and implementation of monitoring programmes, development and implementation of corrective measures, achievement of GES.

Eleven high level descriptors are defined and will have to be documented in the process of establishing initial ecological status and monitoring return to GES: 1-Biodiversity; 2-Non-indigenous species; 3-Commercially exploited fish; 4-Marine food webs; 5-Human-induced eutrophication; 6-Sea floor integrity; 7-Hydrographical conditions; 8-Concentration of contaminants; 9-Contaminants in fish & seafood; 10-Marine litter; 11-Energy.

In addition, the Commission agreed on common criteria and standards for defining GES.

The MSFD is the Environmental pillar of Integrated European Maritime Policy and has clear linkages with other Directives and International Conventions, including the CMS and its two regional agreements dealing with the conservation of Cetaceans (ACCOBAMS and ASCOBANS).

At the recent meeting of its Scientific Committee (SC7, Monaco, 20-31 March), ACCOBAMS initiated an expert appraisal regarding the relevance to ACCOBAMS of EU criteria and methodological standards. The Meeting suggested to create a common ASCOBANS / ACCOBAMS working group on this issue. This working group will go deeper on this issue to collect more material for the next ACCOBAMS Scientific Committee, notably examining how ASCOBANS / ACCOBAMS can help feeding the process of MSFD and conversely how MFSD can help ASCOBANS / ACCOBAMS to reach their cetacean conservation goals.

ANNEX 9: Criteria and methodological standards relevant to ACCOBAMS on good environmental status of marine waters

This working document is based on: the Commission Decision of 1st September 2010 on criteria and methodological standards on good environmental status of marine waters (2010/477/EU); http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:232:0014:0024:EN:PDF

The Scientific Committee Members and other participants of Seventh Meeting of the Scientific Committee were invited to review and complete the document with relevant information.

The completed forms were received by Chair of the Scientific Committee from **six experts** as follows (alphabetically): **Alexei Birkun, Dani Kerem, Sergey Krivokhizhin, Giuseppe Notarbartolo di Sciara, Ayaka Amaha Öztürk and Philippe Robert**.

EU Criteria and Methodological Standards (Decision 2010/477/EU)	Relevant or Not Relevant to ACCOBAMS goal Yes / No	Extent of the relevance (High, Medium, Low)	Cetaceans species (or groups of species) to which every particular criterion/standard has a relation and/or may be applied
Descriptor 1 - Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climate conditions.			
1.1 Species distribution **1.1.1** Distributional range	Yes (100%)	High (100%)	All regular species (100%)
1.1.2 Distributional pattern within the latter, where appropriate	Was not included in the questionnaire. Therefore, expert appraisal is not available.		
1.1.3 Area covered by the species	Yes (100%)	High (100%)	All regular species (100%)
1.2 Population size **1.2.1** Population abundance	Yes (100%)	High (100%)	All regular species (100%)
1.3 Population condition **1.3.1** Population demographic characteristics (e.g. body size or age class structure, sex ratio, fecundity rates, survival/ mortality rates)	Yes (100%)	High (100%)	All regular species (100%)
1.3.2 Population genetic structure, where appropriate	Yes (100%)	High (100%)	All regular species (50%) Some species (50%)

1.4 Habitat distribution			
1.4.1 Distributional range	Yes (100%)	High (100%)	All regular species (100%)
1.4.2 Distributional pattern	Yes (100%)	High (100%)	All regular species (100%)
1.5 Habitat extent **1.5.1** Habitat area	Yes (100%)	High (100%)	All regular species (100%)
1.5.2 Habitat volume, where relevant	Yes (100%)	High (100%)	All regular species (100%)
1.6 Habitat condition **1.6.1** Condition of the typical species and communities	Yes (100%)	High (100%)	All regular species (100%)
1.6.2 Relative abundance and/or biomass, as appropriate	Yes (100%)	High (100%)	All regular species (100%)
1.6.3 Physical, hydrological and chemical conditions	Yes (100%)	High (100%)	All regular species (100%)
1.7 Ecosystem structure **1.7.1** Composition and relative proportions of ecosystem components (habitats and species)	Yes (100%)	High (100%)	All regular species (100%)
Descriptor 2 - Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystem			
2.1 Abundance and state characterisation of non-indigenous species, in particular invasive species **2.1.1** Trends in abundance, temporal occurrence and spatial distribution in the wild of non-indigenous species, particularly invasive non-indigenous species, notably in risk areas, in relation to the main vectors and pathways of spreading of such species	Yes (100%)	High (83%) Medium (17%)	All regular species (100%)

2.2 Environmental impact of invasive non-indigenous species			
2.2.1 Ratio between invasive non-indigenous species and native species in some well studied taxonomic groups (e.g. fish, macroalgae, molluscs) that may provide a measure of change in species composition (e.g. further to the displacement of native species)	Yes (100%)	Medium (100%)	All regular species (100%)
2.2.2 Impacts of non-indigenous invasive species at the level of species, habitats and ecosystem, where feasible	Yes (100%)	High (17%) Medium (83%)	All regular species (100%)
Descriptor 3 - Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock			
3.1 Level of pressure of the fishing activity **3.1.1** Fishing mortality	Yes (100%)	High (100%)	All regular species (100%)
3.1.2 Ratio between catch and biomass index (hereinafter 'catch/biomass ratio')	Yes (100%)	High (100%)	All regular species (100%)
3.2 Reproductive capacity of the stock **3.2.1** Spawning Stock Biomass (SSB)	Yes (100%)	High (100%)	All regular species (100%)
3.2.2 Biomass indices	Yes (100%)	High (100%)	All regular species (100%)
3.3 Population age and size distribution **3.3.1** Proportion of fish larger than the mean size of first sexual maturation	Yes (100%)	Medium (100%)	All regular species (100%)
3.3.2 Mean maximum length across all species found in research vessel surveys	Yes (100%)	Medium (100%)	All regular species (100%)

3.3.3 95 % percentile of the fish length distribution observed in research vessel surveys	Yes (100%)	Medium (100%)	All regular species (100%)
3.3.4 Size at first sexual maturation, which may reflect the extent of undesirable genetic effects of exploitation	Yes (100%)	Medium (100%)	All regular species (100%)

Descriptor 4 - All elements of the **marine food webs**, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity.

4.1 Productivity (production per unit biomass) of key species or trophic groups **4.1.1** Performance of key predator species using their production per unit biomass (productivity	Yes (100%)	High (100%)	All regular species (100%)
4.2 Proportion of selected species at the top of food webs **4.2.1** Large fish (by weight)	Yes (100%)	High (100%)	All regular species (100%)
4.3 Abundance /distribution of key trophic groups /species: Abundance trends of functionally important selected groups /species **4.3.1** Abundance trends of functionally important selected groups/species	Yes (100%)	High (100%)	All regular species (100%)

Descriptor 5 - Human-induced **eutrophication** is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algal blooms and oxygen deficiency in bottom waters

5.1 Nutrients levels **5.1.1** Nutrients concentration in the water column	Yes (100%)	High (100%)	All regular species (100%)

5.1.2 Nutrient ratios (silica, nitrogen and phosphorus), where appropriate	Yes (100%)	Medium (17%) Low (83%)	All regular species (66%) Mostly coastal species (17%) Mostly pelagic species (17%)
5.2 Direct effects of nutrient enrichment **5.2.1** Chlorophyll concentration in the water column	Yes (100%)	Medium (17%) Low (83%)	All regular species (66%) Mostly coastal species (17%) Mostly pelagic species (17%)
5.2.2 Water transparency related to increase in suspended algae, where relevant	Yes (100%)	Medium (17%) Low (83%)	All regular species (66%) Mostly coastal species (17%) Mostly pelagic species (17%)
5.2.3 Abundance of opportunistic macroalgae	Yes (100%)	Medium (83%) Low (17%)	Mostly coastal species (100%)
5.2.4 Species shift in floristic composition such as diatom to flagellate ratio, benthic to pelagic shifts, as well as bloom events of nuisance/toxic algal blooms (e.g. cyanobacteria) caused by human activities	Yes (100%)	High (83%) Medium (17%)	All regular species (17%) Mostly coastal species (50%) Fin wale (33%)
5.3 Indirect effects of nutrient enrichment **5.3.1** Abundance of perennial seaweeds and seagrasses (e.g. fucoids, eelgrass and Neptune grass) adversely impacted by decrease in water transparency	Yes (100%)	Medium (17%) Low (83%)	All regular species (33%) Mostly coastal species (17%) Bottlenose dolphin (17%) No appraisal (33%)
5.3.2 Dissolved oxygen, i.e. changes due to increased organic matter decomposition and size of the area concerned	Yes (100%)	Medium (34%) Low (66%)	All regular species (50%) Bottlenose dolphin (17%) No appraisal (33%)
Descriptor 6 - Physical damage, having regard to substrate characteristics			
6.1 Physical damage, having regard to substrate characteristics **6.1.1** Type, abundance, biomass and areal extent of relevant biogenic substrate	Yes (100%)	High (83%) Medium (17%)	Bottlenose dolphin and harbour porpoise (50%) Bottlenose dolphin (50%)

6.1.2 Extent of the seabed significantly affected by human activities for the different substrate types	Yes (100%)	High (83%) Medium (17%)	Bottlenose dolphin and harbour porpoise (50%) Bottlenose dolphin (50%)
6.2 Condition of benthic community **6.2.1** Extent of area affected by permanent alterations	Yes (100%)	High (83%) Medium (17%)	Bottlenose dolphin and harbour porpoise (50%) Bottlenose dolphin (50%)
6.2.2 Multi-metric indexes assessing benthic community condition and functionality, such as species diversity and richness, proportion of opportunistic to sensitive species	Yes (100%)	High (100%)	Bottlenose dolphin and harbour porpoise (50%) Bottlenose dolphin (50%)
6.2.3 Proportion of biomass or number of individuals in the macrobenthos above some specified length/size	Yes (100%)	High (100%)	Bottlenose dolphin and harbour porpoise (50%) Bottlenose dolphin (50%)
6.2.4 Parameters describing the characteristics (shape, slope and intercept) of the size spectrum of the benthic community	Yes (100%)	Medium (100%)	Bottlenose dolphin and harbour porpoise (34%) Bottlenose dolphin (66%)

Descriptor 7 - Permanent alteration of **hydrographical conditions** does not adversely affect marine ecosystems			
7.1 Spatial characterisation of permanent alterations **7.1.1** Extent of area affected by permanent alterations	Yes (100%)	High (17%) Low (83%)	All regular species (50%) No appraisal (50%)
7.2 Impact of permanent hydrographical changes **7.2.1** Spatial extent of habitats affected by the permanent alteration	Yes (100%)	High (17%) Low (83%)	All regular species (50%) No appraisal (50%)
7.2.2 Changes in habitats, in particular the functions provided (e.g. spawning, breeding and feeding areas and migration routes of fish, birds and mammals), due to altered hydrographical conditions	Yes (100%)	High (17%) Low (83%)	All regular species (50%) No appraisal (50%)

Descriptor 8 - Concentrations of **contaminants** are at levels not giving rise to **pollution** effects			
8.1 Concentration of contaminants			
8.1.1 Concentration of the contaminants mentioned above, measured in the relevant matrix (such as biota, sediment and water) in a way that ensures comparability with the assessments under Directive 2000/60/EC	Yes (100%)	High (100%)	All regular species (100%)
8.2 Effects of contaminants			
8.2.1 Levels of pollution effects on the ecosystem components concerned, having regard to the selected biological processes and taxonomic groups where a cause/effect relationship has been established and needs to be monitored	Yes (100%)	High (100%)	All regular species (100%)
8.2.2 Occurrence, origin (where possible), extent of significant acute pollution events (e.g. slicks from oil and oil products) and their impact on biota physically affected by this pollution	Yes (100%)	High (17%) Medium (33%) Low (50%)	All regular species (17%) Bottlenose dolphin and harbour porpoise (33%) No appraisal (50%)

Descriptor 9 - **Contaminants** in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards			
9.1 Levels, number and frequency of contaminants			
9.1.1 Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels	Yes (100%)	High (100%)	All regular species (100%)
9.1.2 Frequency of regulatory levels being exceeded	Yes (100%)	High (17%) Low (83%)	All regular species (100%)

Descriptor 10 - Properties and quantities **of marine litter** do not cause harm to the coastal and marine environment			
10.1 Characteristics of litter in the marine and coastal environment			
10.1.1 Trends in the amount of litter washed ashore and/or deposited on coastlines, including analysis of its composition, spatial distribution and, where possible, source	Yes (17%) No (83%)	Medium (17%)	Mainly teutophags (17%)
10.1.2 Trends in the amount of litter in the water column (including floating at the surface) and deposited on the sea- floor, including analysis of its composition, spatial distribution and, where possible, source	Yes (100%)	Medium (100%)	Mainly teutophags (66%) Mainly teutophags and bottlenose dolphin (17%) Mainly teutophags, bottlenose dolphin and harbour porpoise (17%)
10.1.3 Trends in the amount, distribution and, where possible, composition of micro-particles (in particular micro- plastics)	Yes (17%) No (66%) Unknown (17%)	Low (17%) Unknown (17%)	All regular species (34%)
10. 2 Impacts of litter on marine life			
10.2.1 Trends in the amount and composition of litter ingested by marine animals (e.g. stomach analysis)	Yes (100%)	High (17%) Medium (83%)	All regular species (17%) Mainly teutophags (66%) Mainly teutophags and harbour porpoise (17%)
Descriptor 11- Introduction of energy, including **underwater noise**, is at levels that do not adversely affect the marine environment			
11.1 Distribution in time and place of loud, low and mid frequency impulsive sounds			
11.1.1 Proportion of days and their distribution within a calendar year over areas of a determined surface, as well as their spatial distribution, in which anthropogenic sound sources exceed levels that are likely to entail significant impact on marine animals measured as Sound Exposure Level (in dB re 1µPa 2.s) or as peak sound pressure level (in dB re 1µPa peak) at one metre, measured over the frequency band 10 Hz to 10 kHz	Yes (100%)	High (83%) No appraisal (17%)	All regular species (50%) Cuvier´s beaked whale (50%)

11.2 Continuous low frequency sound			
11.2.1 Trends in the ambient noise level within the 1/3 octave bands 63 and 125 Hz (centre frequency) (re 1µPa RMS; average noise level in these octave bands over a year) measured by observation stations and/or with the use of models if appropriate	Yes (100%)	High (83%) No appraisal (17%)	All regular species (34%) Sperm whale, fin wale, Cuvier´s beaked whale (66%)