

# ICES WKN2K REPORT 2008

ICES ADVISORY COMMITTEE

ICES CM 2008/ACOM:46

REF. ACOM

## Report of the Workshop on dealing with Natura 2000 and Related Requests (WKN2K)

5 June 2008

Copenhagen, Denmark



ICES

International Council for  
the Exploration of the Sea

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Recommended format for purposes of citation:

ICES. 2008. Report of the Workshop on dealing with Natura 2000 and Related Requests (WKN2K), 5 June 2008, Copenhagen, Denmark. ICES CM 2008/ACOM:46. 48 pp. <https://doi.org/10.17895/ices.pub.19280417>

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## Contents

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<b>Executive summary .....</b>	<b>5</b>
<b>1 Opening of the meeting.....</b>	<b>7</b>
1.1 Conservation objectives in Natura 2000 sites.....	8
<b>2 Using fisheries data to develop management measures .....</b>	<b>10</b>
2.1 Types of fisheries data available.....	10
2.1.1 Log books/catch statistics.....	10
2.1.2 Surveillance reports.....	10
2.1.3 Information from the fishing industry.....	10
2.1.4 Vessel Monitoring System (VMS) satellite data.....	10
2.1.5 Satellite remote sensing.....	11
2.1.6 Monitoring observations.....	11
2.1.7 On-board observers .....	11
2.1.8 Description of fleet <15 m .....	11
2.2 Use of VMS .....	11
2.2.1 Classification of fleets/metiers .....	12
2.2.2 Problems with merging VMS with log books.....	12
2.2.3 Properties of VMS data/identifying fishing activity .....	12
2.2.4 Properties of VMS data/modelling temporal gaps.....	12
2.3 Fleet activity and distribution.....	12
2.3.1 Temporal extent and resolution.....	12
2.3.2 Spatial extent .....	13
2.4 Way forward .....	13
<b>3 Consultation process .....</b>	<b>14</b>
3.1 Background .....	14
3.2 Improving the planning and consultation process .....	15
3.2.1 Are specific conservation objectives for all habitats and species at the site available and clearly justified?.....	15
3.2.2 How well are the presence and distribution of the conservation features at the site known, based on reliable evidence and scientific records/observation?.....	15
3.2.3 Is the basis for the spatial extent of the site boundary clearly explained and justified in terms of the conservation objectives?.....	15
3.2.4 Are the threats to habitats and species from different types of fishing gears understood and documented, and have they been explained to all stakeholders including relevant RACs?.....	15
3.2.5 Is the fine-scale and broad-scale distribution of fleets (by nation, gear and species) described for the site and the region, and is there associated information on target and bycatch species? .....	15
3.2.6 Is there any information on seasonal trends in fisheries? .....	16

3.2.7	Are there any cumulative or in-combination effects to be considered? .....	16
3.2.8	Which fisheries management measures, if any, are necessary and sufficient to maintain the habitat features in favourable condition; and are they proportionate, and enforceable? .....	16
3.2.9	Are any proposed buffer zones proportionate to ensure full site protection and/or effective monitoring? .....	16
3.2.10	What measures would be necessary to monitor and assess the maintenance and/or recovery of the interest features within the site? Are they in place? .....	16
<b>4</b>	<b>Annex 1: National progress with the selection of conservation objectives.....</b>	<b>17</b>
4.1	Ireland. ....	17
4.1.1	Species .....	17
4.1.2	Habitats .....	20
4.2	Denmark .....	25
4.3	Sweden .....	25
4.4	Belgium .....	26
4.5	UK.....	26
4.5.1	Are conservation objectives specified in the management plans for proposed offshore Natura 2000 sites?.....	26
4.5.2	Do they include all species at the site?.....	26
4.5.3	How will favourable condition of the interest features be identified? .....	27
4.5.4	If specified, is favourable condition quantified and related to explicit thresholds/reference levels? .....	27
4.6	Spain .....	27
4.6.1	Management measures .....	28
4.6.2	Fisheries control plan .....	29
4.7	German North and Baltic Seas.....	29
4.8	Portugal.....	32
4.9	France .....	34
4.10	The Netherlands .....	34
4.11	Canada .....	34
<b>5</b>	<b>Annex 2: National Vessel Monitoring System (VMS) summaries .....</b>	<b>37</b>
5.1	Denmark .....	37
5.2	Belgium .....	37
5.3	Norway .....	37
5.3.1	General .....	37
5.3.2	Level of access .....	38
5.3.3	Analyzing (IMR) .....	38
5.3.4	The Norwegian system for satellite tracking of fishing vessels.....	38

5.3.5	Flag state principle.....	38
5.3.6	Handling of data .....	39
5.3.7	Access to the tracking details .....	39
5.4	UK.....	39
5.4.1	is VMS readily available on request to your national fisheries agency or directorate?.....	39
5.4.2	Are there any restrictions on the access you can have to these data?.....	39
5.4.3	Is data for multiple years available, and for all nations?.....	39
5.4.4	Other useful information .....	40
5.5	Sweden .....	40
5.6	Spain .....	40
5.7	Germany .....	40
5.8	Ireland .....	41
5.9	The Netherlands .....	41
<b>Appendix 1: Participants' list .....</b>		<b>43</b>



## Executive summary

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Conservation objectives for species and habitat features within Natura 2000 sites must be specific, detailed and practical if associated management measures (*e.g.* for fisheries) are to be understood by the industry.

Coordination between Member States in the development of conservation objectives is important, especially for trans-boundary management of the same feature (*e.g.* Dogger Bank). It is recommended that the biogeographic seminars, to be held by the Commission in 2008/09 to review the spatial distribution and extent of all Natura 2000 proposals, are also used to identify common conservation objectives and management approaches.

Although collaboration between states is a sensible option, it is not possible to wait for neighbouring countries before making a broader management plan. Informal links are therefore encouraged. Despite the Commission's efforts to promote full establishment of the Natura 2000 network in the marine environment, the little progress in designation of marine areas by Member States so far will make it difficult to fulfill the timetable agreed with Nature Directors (marine sites will be proposed by 2008). The Commission intends to carry out a proper assessment of the proposals for SCIs made by Member States at Community level taking into account the distinctive ecological conditions of the different EU major sea areas. In the meantime, if a MS requests fisheries management measures for conservation purposes for a marine site under its jurisdiction, the Commission will strive to have those measures in place under the CFP in a reasonable timeframe.

It is not easy to make a practical interpretation of the ecosystem objectives of the Habitats and Birds Directives (favourable conservation status). It is also unclear how favourable conservation status should be interpreted in relation to pristine unimpacted environments. One pragmatic approach discussed at this workshop was that favourable conservation status should be compatible with sustainable development.

Use of Natura 2000 as the only measure to achieve a broad improvement in conservation status throughout regional seas will not be successful. A broader range of measures, including sector-specific controls and technical measures, will be needed to achieve the desired outcome.

Progress made under the EMPAS project, and in recent science publications, has provided protocols for the analysis and presentation of fisheries data (including the <15 m fleet), including catch/effort data from logbooks, VMS records and fishermen's knowledge. All types of data are required for effective management planning.

Access by all Member States to fisheries data (particularly satellite monitoring of larger vessels) must be guaranteed if effective management plans are to be prepared. These data should be available retrospectively as well as from 2009 as intended under the new Data Collection Regulations.

It is recommended that ICES provide a forum for coordination of conservation objectives for Natura 2000 sites, the use of fisheries data and the further development of analytical tools for application in site designation and management planning.

A comprehensive consultation process (Section 3) developed in parallel with EU guidance on establishing fisheries management measures, highlights the need for a level playing field so that all sectors are treated fairly by measures.

Sites should contain zones designated for different purposes. A feature boundary should describe the site and use physical and biological evidence to do so. A management conservation zone beyond the feature boundary should prevent adverse impacts to the site by activities adjacent to the site. An enforcement boundary beyond this management conservation zone should be designed to provide effective enforcement, based on the frequency of signals from VMS or other suitable data.



## 1 Opening of the meeting

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The one-day workshop began at 09:30 on Thursday 5th June. The Chair of the workshop welcomed participants and introduced the work for the day and other arrangements. There were three important tasks to address, related to the conservation objectives of member states in Natura 2000 sites, specification of fisheries data that can be used for site selection and monitoring, and completion of a consultation process to assess fisheries proposals.

Specific terms of reference are provided below.

2007/2/ACOM46 The **Workshop on dealing with Natura 2000 and Related Requests (WKN2K)** (Chair Stuart Rogers, UK) will be established and will meet at ICES Headquarters, 5 June 2008 to:

- a ) consider the outputs of WKFMMPA and AGWINS (2007), and relevant sections of the reports of WGDEEP, WGDEC and views from AMAWGC;
- b ) collate conservation objectives established or planned for Annex I and II species and habitats in offshore Natura 2000 sites by European Member States, advise on approaches that may be evident;
- c ) for international fisheries effort distribution data, specify the temporal extent and resolution, and the spatial extent, scale and resolution, of data from international metiers that would be necessary to understand and advise on the implications of fisheries closures at offshore sites;
- d ) complete the description of a consultation process for managers to assess proposals for fishery management measures at offshore Natura 2000 sites (based on work of AGWINS 2007);
- e ) consider and make recommendations for future ICES work in this area.

Members of the Workshop will correspond to provide information by 1 May 2008.

WKN2K will report by 30 June for the attention of ACOM.

### 1.1 Conservation objectives in Natura 2000 sites

An overview of progress with implementing the Habitats and Birds Directives by Ireland, Denmark, Sweden, Belgium, UK, Spain, Germany, Portugal, The Netherlands and France Member States is provided in Annex 1. Conservation Objectives for sites in Canada developed under the Oceans Act are also provided. Progress with the development of specific conservation objectives has been made by Germany during the EMPAS project (<http://groupnet.ices.dk/EMPAS/default.aspx>) and independently by the UK, and Ireland. These summaries show a wide range of implementation amongst Member States, from those with coastal and offshore sites in the process of designation, to others where specific management plans have been formulated. There appears to be no overall coordination, and little evidence of shared experience between States to address e.g. trans-boundary issues. The selection of conservation objectives seems to be a particularly difficult task.

An important principle behind the establishment of Natura 2000 sites in European Seas (and MPA globally) is a clear understanding of what is being achieved-i.e. what is the target state of the marine environment that managers must aim for? If it is assumed that the objective is not to return the seas a pristine state (which would of course mean no human activities) then some level of sustainable development must be agreeable to all parts of society. For species to be in favourable condition under these circumstances requires them only to have access to the appropriate levels of habitat for all life-history stages. Ensuring the quality of these habitats will be the necessary task of management. Further discussion and advice would be sensible on the extent to which favourable conservation status is a characteristic of an ecosystem under sustainable development.

Considering that the marine environment has been heavily influenced by man for centuries already, then restoring to an unknown pristine state is not practical or likely. One option might be to choose a target condition describing an improved state, and then restrict pressures in order to achieve it. Some of the necessary measures might act at a broad scale for populations of, for example seabirds or marine mammals, but more specific site-based measures might be needed for threatened species such as *Arctica islandica*.

When it is difficult to select specific objectives it is acceptable to choose a reference direction, i.e. to aim for an improvement in status, provided that this can be quantified adequately. This option to show an improvement without an endpoint will allow managers to see what an unimpacted environment actually is like, and guide the selection of specific management measures. Convincing stakeholders that there is a clear scientific justification behind such objectives will be a challenge.

This lack of an explicit goal or endpoint strongly suggests that very clear conservation objectives are preferable. These objectives need to identify the species and communities which are threatened, and the extent of degradation caused by each sector. They need to be clear enough to convince stakeholders that the reduction in their activity is a necessary measure.

This point has been emphasised by the Commission, who stress that precise objectives with carefully designed management measures are important in order to have a strong case. A strong case supported by good arguments will be better understood by stakeholders.

Under these circumstances the use of Natura 2000 as the only measure to achieve an improvement in the conservation status is likely to be unsuccessful. A broader range

of measures, including sector-specific controls and technical measures, will be needed to achieve the desired outcome.

In relation to the Habitats Directive sandbank and reef features, which have been the subject of detailed study in the EMPAS project, it might be necessary to consider the effects of human activity not only on the features themselves, but also on all species which form part of the assemblage. If conservation objectives require, for example, the protection of all fish species associated with benthic habitats to be protected, it will be necessary to explain and justify to the fishing industry why exploitation even with 'environmentally friendly' gears such as pots and longlines might still not be acceptable.

Networks of Natura 2000 sites will make a useful contribution to international conservation but only if they are represented coherently across European seas. There is currently only a limited amount of collaboration and exchange of plans between member states, so the selection of sufficient interconnected sites that form a useful network is not assured. Trans-boundary sites need Commission agreement and uniformity of style if they are to be effective. The need for shared plans and representative networks of sites is particularly relevant on the Dogger Bank, where the development of management plans for fisheries is under discussion in the EMPAS Project on behalf of Germany, without formal engagement of other states which are responsible for the same feature in their own waters.

Despite this, there are considerable benefits to be gained from the EMPAS project, and other EU 'Life' projects in Spain and Portugal, in developing useful products and encouraging common methods of working. Ideally it would be sensible to have a Natura 2000 management plan for the entire North Sea; however it is not possible to wait for neighbouring countries in order to provide this broader and more inclusive approach. So some coordination at the level of specific conservation objectives is therefore essential, and the precedent of a designation in the same habitat by one Member State would be helpful to another. The series of biogeographic seminars, to be held by the Commission to review the spatial distribution and extent of all Member State proposals, would be an excellent opportunity to also address the identification of common conservation objectives between Member States, or even common approaches to management.

## **2 Using fisheries data to develop management measures**

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This section describes the work of a sub-group tasked with the following ToR:

ToR c) for international fisheries effort distribution data, specify the temporal extent and resolution, and the spatial extent, scale and resolution of data from international metiers that would be necessary to understand and advise on the implications of fisheries closures at offshore sites;

### **2.1 Types of fisheries data available**

#### **2.1.1 Log books/catch statistics**

Log books and catch statistics as reported to ICES have for a long time been the only source for information on fishing effort. Since not all vessels are obliged to fill out log books, and in particular smaller vessels and day-trippers may not report in terms of log books, log book based effort is likely to be misleading as a reflection of overall effort. As a recent example, Halpern *et al.*, 2007 published a global impact map, which grossly underestimated fishing effort in the coastal North Sea since data from shrimp fisheries (trips less than 24 h) were not included.

A major problem with log books is that at present they are not reporting on a haul-by-haul basis. More highly resolved information is obtained in Denmark for a small reference fleet comprising vessels > and < 15 m length. Here, information is collected in terms of private log books on a haul-by-haul basis. In Sweden, haul-by-haul information is collected in connection with monitoring of bycatch of seals. In Norway, haul-by-haul information is mandatory.

It is recommended that, when available, log book information at least at the fleet level of Member States is used to characterise national fishing activities in conjunction with VMS.

#### **2.1.2 Surveillance reports**

Fisheries inspections provide a very detailed information source, available throughout the year. However, coverage of the fishing fleet is selective and not complete. The number of inspection vessels is small, affecting that spatial coverage.

#### **2.1.3 Information from the fishing industry**

In evaluating Western Irish N2000 sites, information from the fishing industry was acquired and has proved to be valuable to help interpret the VMS data available (ICES, 2007). Information that includes personal information from single fishermen comprising diaries and fishing charts is an important source of data to help with the selection of sites for conservation, especially those structural habitats such as reefs. Fishermen may also collect information on biological features (biogenic reefs) and sediments at remote locations, for which scientific data are not available and too costly to obtain.

In the light of stakeholder participation, it is recommended that this type of information is used in site designation and development of conservation objectives.

#### **2.1.4 Vessel Monitoring System (VMS) satellite data**

At present, only vessels > 15 m are obliged to carry a vessel monitoring system (VMS) equipment. Analysis of VMS is recommended as a standard procedure. See next section.

### **2.1.5 Satellite remote sensing**

This is not a common source of information, although it has successfully been applied in the Baltic Sea (Kourti *et al.*, 2005).

### **2.1.6 Monitoring observations**

Observations on static gear indicated by flags/buoys may be obtained during aerial surveys during monitoring of birds and marine mammals. This was accomplished during survey campaigns in the German EEZ. The temporal coverage is not high, and costs are high. Observations of this type are highly effective when combined with other non-fishery observations.

### **2.1.7 On-board observers**

On-board observers e.g. from the DCR-program and/or national discard projects may provide valuable information. However, fleet coverage is not high so it is unlikely that they will provide a complete spatial image of fishing activities. Their value lies in that they provide information on process rates (discards rates, bycatch rates, etc.). Sweden currently covers 5% of effort for > 15 m vessels with observers under regulation EC 812/2004 concerning incidental bycatch of marine mammals.

### **2.1.8 Description of fleet <15 m**

Interviews in harbours, private log books, electronic monitoring and e-log books are opportunities to analyse this segment of the inshore fleet. In Spain, a reference fleet is electronically monitored, but compliance is not optimal. In UK, overflight records are taken but are not precise. However, it is assumed that they can show where the main pressures are.

## **2.2 Use of VMS**

The collection of VMS is stipulated by EC 2244/2003, which itself is based on the Council Regulation EC 2371/2002, describing the principles of the European Common Fisheries Policy (CFP). CFP aims at achieving economically and ecologically sustainable fisheries, and the use of VMS is one of the methods endorsed to analyse and manage fisheries. At present, costs for VMS transmission and equipment are to be paid by the fishermen.

The level of access by Member States to VMS data is detailed in Annex 2.

Each EC member state holds the data for its own national fleet everywhere, for member state vessels within its national waters and for third-country vessels within its national waters. Data is only made widely available after ensuring privacy protection, so that data need to be made anonymous. In this respect, it is recommended that the STECF privacy protection guidelines are followed, meaning that data for small fleets can only be published after aggregating and combining with others until minimum requirements are met (e.g. data for more than 5 vessels).

By 2005, the size limit for vessels obliged to carry VMS was set to 15 m (before that it was 18 m and 21 m, respectively.), so that in particular for coastal fisheries carried out with small boats, VMS coverage is incomplete.

VMS data are transmitted with information on vessel ID, position, operation status, speed, and direction. Since 2006, the complete suite of information is available to national authorities inside their national waters both for foreign and national vessels. Before 2006, for foreign vessels only position data were transmitted to national authorities, making it very difficult to infer fishing activities from the raw data.

### 2.2.1 Classification of fleets/metiers

Experience from the EMPAS project shows how different sources of information can be acquired to obtain a reasonable classification of foreign fleets, for which log book information is not available (Pedersen *et al.*, 2008). As a final step, information still not available may be extracted from the European vessel register (<http://ec.europa.eu/fisheries/fleet/index.cfm>). It must be noted that the gears actually deployed may differ from the ones listed in the register.

Even without full information, using VMS data at least shows where vessels are fishing. With full information, this may be further assigned to gear type or even metier, when catch and net characteristics are included.

### 2.2.2 Problems with merging VMS with log books

Since log books do not report on a haul-by-haul basis, changes in gear cannot be precisely assigned to VMS data of the same day.

### 2.2.3 Properties of VMS data/identifying fishing activity

Fishing activity from VMS signals is determined by applying a speed criterion. It is recommended that, ideally, this criterion is applied vessel-by-vessel, since large vessels may have the same speed for trawling as small vessels may have for steaming. A more practical application would be to apply these speed rules to selected metiers.

### 2.2.4 Properties of VMS data/modelling temporal gaps

Due to time intervals of up to 2 h between two subsequent VMS registrations, a considerable part of vessel activity is not accounted for. In particular, it cannot be assumed that vessels only trawl along the straight lines connecting subsequent VMS points, but move to either side and by this cover a greater area (Deng *et al.*, 2005; Fock, 2008).

The analysis of VMS points depends on the frequency of transmission. At shorter intervals ( $< 0.5$  h), it is likely that no further unaccounted movements have been undertaken so that joining points by straight lines is reasonable. At greater intervals, this assumption is not likely, so that further movements must be accounted for by statistical treatment to model the likely spatial coverage (Fock, 2008; Mills *et al.*, 2007). Simply drawing density distributions ('kernels') around VMS data points is not an adequate solution, because this is not a likely fishing pattern.

## 2.3 Fleet activity and distribution

Several pressure indicators of fishing effort have been described (Piet *et al.*, 2007). Proposed indicators range from days-at-sea if only log books are available, to high resolution spatial effort data in terms of frequency (times-per-year) or density (hours fished per area).

### 2.3.1 Temporal extent and resolution

In the analysis of VMS data, the presentation of fisheries distributions on an annual, monthly or weekly basis depends on the objectives of the analysis. In the EMPAS project it appeared that for benthic population models monthly resolution was required, whereas for avifauna and marine mammals, seasonal effort estimates were appropriate.

However, for any resolution, to account for inter-annual variability in fleet activity, three years of VMS data are recommended for analysis (i.e. since 2005).

### 2.3.2 Spatial extent

Fishing effort should be obtained for the whole biogeographic area under consideration, so that large scale implications such as dislocation of fishing effort after closing fishing grounds can be addressed. The size of the EEZ of the Member State might therefore be too small in this respect.

Whether VMS are displayed either as points or as density per area is dependent on the objectives of the analysis. In the EMPAS project, points were used to analyse impacts on habitats with defined borders (Pedersen *et al.*, 2008). The rationale behind this was that combining all the points from a fleet indicates the area used by the fleet as a whole. It is not likely that deviations from a spatial pattern could be disguised over a longer time in VMS records.

For features expressed in terms of density (avifauna, mammals), fishing effort can also be easily expressed as density (e.g. hours by area). In the EMPAS project, a 3x3 nm and a 6x6 nm grid were chosen. The minimum size depends on the frequency of the VMS transmissions and the average between-point distances.

## 2.4 Way forward

The use of VMS data is becoming more widespread within Europe, but standard methods of analysis, presentation and interpretation are not in use. Standard methods of application of these data are particularly important when trans-boundary comparisons need to be made, and there are restrictions on the ability of member states to freely exchange these data. To encourage more harmonised use of these data, it is recommended that a standard projection and software is used (e.g. ArcView), and that ICES acts as a forum for the exchange of expertise in this field.

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### 3 Consultation process

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A sub-group addressed ToRd completing the description of a consultation process for managers to assess proposals for fishery management measures at offshore Natura 2000 sites (based on work of AGWINS 2007).

#### 3.1 Background

The relevant text from the AGWINS report is as follows:

Most coastal EU Member States are in the process of identifying and proposing habitats for protection as offshore Natura 2000 sites, and are developing suitable management frameworks for these sites. For example, a joint ICES/German government project is currently developing an approach to fisheries management of German Natura sites in the North Sea and Baltic (ICES, 2007). While it is the responsibility of each Member State to interpret the Habitats Directive in the most appropriate way, it will improve the consultation process if a consistent approach is adopted. The following ten steps will help with the assessment of proposals for fisheries management measures at Natura 2000 sites.

- 1) Are specific conservation objectives for all habitats and species at the site available and clearly justified?
- 2) How well are the presence and distribution of the conservation features at the site known, based on reliable evidence and scientific records/observation?
- 3) Is the basis for the spatial extent of the site boundary clearly explained and justified in terms of the conservation objectives?
- 4) Are the threats to habitats and species from different types of fishing gears understood and documented, and have they been explained to all stakeholders including relevant RACs?
- 5) Is the fine-scale and broad-scale distribution of fleets (by nation, gear and species) described for the site and the region, and is there associated information on target and bycatch species?
- 6) Is there any information on seasonal trends in fisheries?
- 7) Are there any cumulative or in-combination effects to be considered?
- 8) Which fisheries management measures, if any, are necessary and sufficient to maintain the habitat features in favourable condition; and are they proportionate, and enforceable?
- 9) Are any proposed buffer zones proportionate to ensure full site protection and/or effective monitoring?
- 10) What measures would be necessary to monitor and assess the maintenance and/or recovery of the interest features within the site? Are they in place?

A preliminary draft document outlining the European Commission's (DG-MARE and DG-ENV) forthcoming guidance on this issue was also made available to WKN2K. It was evident that the AGWINS suggestions listed above were the basis for the list of "scientific and technical information backing MSs requests for fisheries management measures under the CFP", included in the Commission's document.



## 3.2 Improving the planning and consultation process

Comments and some recommendations are provided below against each of the ten points listed in Section 3.1. The sub-group noted that the ten information points were relevant not just for consultation (so that stakeholders understood what was happening), but also in justifying requests for management measures to the European Commission.

### 3.2.1 Are specific conservation objectives for all habitats and species at the site available and clearly justified?

The objective of this statement is to ensure that all those reading the documents relating to a site could see a clearly written justification of precise and specific conservation objectives. Without such text, there was a danger that discussions would be based on differing perceptions of what was needed.

### 3.2.2 How well are the presence and distribution of the conservation features at the site known, based on reliable evidence and scientific records/observation?

This is a description and evaluation of the evidence used to justify the site. It is important that the degree of confidence in any description is known. This section should help in finding any further information that might be available on a site.

### 3.2.3 Is the basis for the spatial extent of the site boundary clearly explained and justified in terms of the conservation objectives?

This relates to Section 3.2.2, but also see Section 3.2.9.

### 3.2.4 Are the threats to habitats and species from different types of fishing gears understood and documented, and have they been explained to all stakeholders including relevant RACs?

This step is really comprised of two items. Knowledge on the effects from various fishing métier (gear and usage) on habitats and species that a site might be designated for is important background information for the whole process, and could usefully be established at the European (ICES) level.

Adequate outreach to and consultation with stakeholders is essential throughout the selection, designation and management process, despite this not being a requirement under the Habitats Directive. The earlier this starts the better, but it was noted that many fisher's organisations had many other important items on their agenda that would inhibit good consultation. It was expected that consultation would become easier and would improve as organisations learned more of the general requirements for the Natura network. Stakeholder consultation should include countries/member states with an interest in the site.

### 3.2.5 Is the fine-scale and broad-scale distribution of fleets (by nation, gear and species) described for the site and the region, and is there associated information on target and bycatch species?

The "species" in this statement plainly refers to target species and the whole question might be combined with statement 3.2.6 to encompass nation, métiers, and various time and space scales. It is important to understand why the site is important to both the fishing industry as a whole and to individual fishing enterprises. It would be helpful, where possible, to evaluate the risks associated with any displacement of fishing activities.

### **3.2.6 Is there any information on seasonal trends in fisheries?**

See Section 3.2.5.

### **3.2.7 Are there any cumulative or in-combination effects to be considered?**

It was felt that this could be looked at in two ways. The cumulative/in-combination effects could be examined from the perspective of the site's conservation, with GIS being a useful spatial tool in assisting this. The spatial conflict analyses carried out in the WKFMMPA workshop prior to this meeting was also of use. The cumulative effect could also be usefully described as that faced by the industry. In both cases, there would be considerable difficulties in calibrating effects against each other and in assigning proportions of total effect.

### **3.2.8 Which fisheries management measures, if any, are necessary and sufficient to maintain the habitat features in favourable condition; and are they proportionate, and enforceable?**

The focus on habitat was restrictive and the group suggested rephrasing to: "to ensure that the site is in favourable condition".

### **3.2.9 Are any proposed buffer zones proportionate to ensure full site protection and/or effective monitoring?**

The group noted that "buffer zone" was not a useful concept, and recommended that there were essentially three sorts of boundary a) a boundary drawn around the scientific feature; b) a boundary drawn around the area where management actions that could affect the feature that the site is designated for might be needed; c) a boundary drawn such that enforcement authorities can be sure that no damaging activities are occurring. The boundaries in the latter two cases might be very wide compared to the boundary for the scientific aspects of the site.

### **3.2.10 What measures would be necessary to monitor and assess the maintenance and/or recovery of the interest features within the site? Are they in place?**

It was important to take account of site condition monitoring requirements when designing sites and setting their conservation objectives.

The group noted an over-riding need for the burden of proof to be switched away from those implementing statutory EU obligations onto those carrying out activities that might damage sites. This burden already applies to most other (marine) industries and all industries should be treated equally.

## 4 Annex 1: National progress with the selection of conservation objectives

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European states are at various stages in the selection of conservation objectives and the designation of Natura 2000 sites. Contributions provided by Member States show that, while all have adopted the principles laid down in the Directives that require favourable conservation status of listed species and habitats, only a small number have generated specific conservation objectives.

One of the main tasks of this short workshop was to raise awareness of this different level of progress amongst Member States, encourage a common understanding of approaches to selecting objectives, and develop meaningful relationships with stakeholders. This is especially important for those states which share boundaries, and have responsibilities for the same species and habitats.

The following sections, for each state that has provided data, address national progress against the following four questions;

- Are conservation objectives specified in the management plans for proposed offshore Natura 2000 sites?
- Do they include all species at the site?
- How will favourable condition of the interest features be identified?
- If specified, is favourable condition quantified and related to explicit thresholds/reference levels?

### 4.1 Ireland

#### 4.1.1 Species

##### 4.1.1.1 Bottlenose Dolphin, Harbour Porpoise, Common (Harbour) Seal and Grey Seal

The total national population of Bottlenose Dolphin (*Tursiops truncatus*), Harbour Porpoise (*Phocoena phocoena*), Common Seal (*Phoca vitulina*), and Grey Seal (*Halichoerus grypus*) must be maintained at, or restored to, favourable conservation status. This may be achieved through the following objectives:

Maintain the range and distribution of this species as stable within Ireland and prevent the equivalent of a 1% loss per annum, and no more than 10% loss in total below the reference range;

Maintain the population structure of this species such that reproduction, mortality and age structure are not deviating from normal and that the national population does not decrease by greater than 1% per annum or to a level 25% below the favourable reference population\*;

Ensure that there is a sufficiently large habitat of suitable quality available to support the long term survival of this species; and

Ensure individual operations or activities in combination with other operations or activities do not cause a change in range, distribution or population structure, which would result in unfavourable conditions for the future conservation interests of this species.

\* current population estimate (Bottlenose dolphin) is 6482 although additional survey effort is required to generate a more robust estimate.

\* current population estimate (harbour porpoise) is 100 000–112 000 although additional survey effort is required to generate a more robust estimate.

\* 2003 population estimate (common seal) is 2905 although additional survey effort is required to generate a more robust estimate.

\* 2005 breeding population estimate (grey seal) is 5509 while 2007 moult survey estimate is 5343 seals although additional survey effort is required to generate a more robust estimate.

DocHab 04-03/03-rev.3  
Annex C

## Assessing conservation status of a SPECIES

General evaluation matrix (per biogeographic region within a MS)

Parameter	Conservation Status			
	Favourable ('green')	Unfavourable - Inadequate ('amber')	Unfavourable - Bad ('red')	Unknown (insufficient information to make an assessment)
<b>Range<sup>1</sup></b>	Stable (loss and expansion in balance) or increasing <u>AND</u> not smaller than the 'favourable reference range'	Any other combination	Large decline: Equivalent to a loss of more than 1% per year within period specified by MS <u>OR</u> more than 10% below favourable reference range	No or insufficient reliable information available
<b>Population</b>	Population(s) above 'favourable reference population' <u>AND</u> reproduction, mortality and age structure not deviating from normal (if data available)	Any other combination	Large decline: Equivalent to a loss of more than 1% per year (indicative value MS may deviate from if duly justified) within period specified by MS <u>AND</u> below 'favourable reference population' <u>OR</u> More than 25% below favourable reference population <u>OR</u> Reproduction, mortality and age structure strongly deviating from normal (if data available)	No or insufficient reliable information available
<b>Habitat for the species</b>	Area of habitat is sufficiently large (and stable or increasing) <u>AND</u> habitat quality is suitable for the long term survival of the species	Any other combination	Area of habitat is clearly not sufficiently large to ensure the long term survival of the species <u>OR</u> Habitat quality is bad, clearly not allowing long term survival of the species	No or insufficient reliable information available
<b>Future prospects</b> (as regards to population, range and habitat availability)	Main pressures and threats to the species not significant; species will remain viable on the long-term	Any other combination	Severe influence of pressures and threats to the species; very bad prospects for its future, long-term viability at risk.	No or insufficient reliable information available
<b>Overall assessment of CS<sup>2</sup></b>	All 'green' <u>OR</u> three 'green' and one 'unknown'	One or more 'amber' but no 'red'	One or more 'red'	Two or more 'unknown' combined with green or all "unknown"

<sup>1</sup> Range within the biogeographical region concerned (for definition, see Annex F, further guidance on how to define range (e.g. scale and method) will be given in a foreseen guidance document to be elaborated by ETC-BD in cooperation with the SWG.

<sup>2</sup> A specific symbol (e.g. arrow) can be used in the unfavourable categories to indicate recovering populations

#### **4.1.2 Habitats**

##### **4.1.2.1 Estuaries**

The total national resource of estuaries must be maintained at, or restored to, favourable conservation status. This may be delivered through the following objectives:

Maintain the range of estuaries as stable within Ireland and prevent the equivalent of a 1% loss per annum, and no more than 10% loss in total;

Maintain the distribution of estuaries as stable across the national range and prevent significant changes in its distribution pattern;

Prevent the equivalent of a 1% loss in surface area per annum, and no more than 10% loss in total;

Prevent any reduction in the diversity of floral and faunal species arising from human activities;

Ensure individual operations or activities, in combination with other operations or activities, does not cause a change in the integrity of the principal community types;

Ensure the water quality in estuaries is of sufficient quality to maintain the integrity of the principal community types; and

Ensure that there is a sufficiently large habitat of suitable quality available to support the long term survival of species associated with this habitat.

##### **4.1.2.2 Sandbanks slightly covered by seawater at all times**

The total national resource of sandbanks slightly covered by seawater at all times must be maintained at, or restored to, favourable conservation status. This may be delivered through the following objectives:

Maintain the range of sandbanks slightly covered by seawater at all times as stable within Ireland and prevent the equivalent of a 1% loss per annum, and no more than 10% loss in total;

Maintain the distribution of sandbanks slightly covered by seawater at all times as stable across the national range and prevent significant changes in its distribution pattern;

Prevent the equivalent of a 1% loss in surface area per annum, and no more than 10% loss in total;

Prevent any reduction in the number of floral and faunal species arising from human activities;

Ensure individual operations or activities, in combination with other operations or activities, does not cause a change in the integrity of the principal community types; and

Ensure that there is a sufficiently large habitat of suitable quality available to support the long term survival of species associated with this habitat.

## Assessing conservation status of a HABITAT type

## General evaluation matrix (per biogeographic region within a MS)

PARAMETER	CONSERVATION STATUS			
	Favourable (‘green’)	Unfavourable – Inadequate (‘amber’)	Unfavourable - Bad (‘red’)	Unknown (insufficient information to make an assessment)
Range <sup>1</sup>	Stable (loss and expansion in balance) or increasing AND not smaller than the ‘favourable reference range’	Any other combination	Large decrease: Equivalent to a loss of more than 1% per year within period specified by MS OR More than 10% below ‘favourable reference range’	No or insufficient reliable information available
Area covered by habitat type within range <sup>2</sup>	Stable (loss and expansion in balance) or increasing AND not smaller than the ‘favourable reference area’ AND without significant changes in distribution pattern within range (if data available)	Any other combination	Large decrease in surface area: Equivalent to a loss of more than 1% per year (indicative value MS may deviate from if duly justified) within period specified by MS OR With major losses in distribution pattern within range OR More than 10% below ‘favourable reference area’	No or insufficient reliable information available

<sup>1</sup> Range within the biogeographical region concerned (for definition, see Annex F, further guidance on how to define range (e.g. scale and method) will be given in a foreseen guidance document to be elaborated by ETC-BD in cooperation with the SWG.

<sup>2</sup> There may be situations where the habitat area, although above the ‘Favourable Reference Area’, has decreased as a result of management measures to restore another Annex I habitat or habitat of an Annex II species. The habitat could still be considered to be at ‘Favourable Conservation Status’ but in such cases please give details in the Complementary Information section (“Other relevant information”) of Annex D.

PARAMETER	CONSERVATION STATUS			
	Favourable (‘green’)	Unfavourable – Inadequate (‘amber’)	Unfavourable - Bad (‘red’)	Unknown (insufficient information to make an assessment)
Specific structures and functions (including typical species) <sup>3</sup>	Structures and functions (including typical species) in good condition and no significant deteriorations / pressures.	Any other combination	More than 25% of the area is unfavourable as regards its specific structures and functions (including typical species) <sup>4</sup>	No or insufficient reliable information available
Future prospects (as regards range, area covered and specific structures and functions)	The habitats prospects for its future are excellent / good, no significant impact from threats expected; long-term viability assured.	Any other combination	The habitats prospects are bad, severe impact from threats expected; long-term viability not assured.	No or insufficient reliable information available
Overall assessment of CS 5	All ‘green’ OR three ‘green’ and one ‘unknown’	One or more ‘amber’ but no ‘red’	One or more ‘red’	Two or more ‘unknown’ combined with green or all ‘unknown’

<sup>3</sup> A definition of typical species will be elaborated in the frame of the guidance document by ETC-BD in cooperation with the SWG.

<sup>4</sup> E.g. by discontinuation of former management, or is under pressure from significant adverse influences, e.g. critical loads of pollution exceeded.

<sup>5</sup> A specific symbol (e.g. arrow) can be used in the unfavourable categories to indicate recovering habitats.



#### **4.1.2.3 Reefs**

The total national resource of reefs must be maintained at, or restored to, favourable conservation status. This may be delivered through the following objectives:

Maintain the range of reefs as stable within Ireland and prevent the equivalent of a 1% loss per annum, and no more than 10% loss in total;

Maintain the distribution of reefs as stable across the national range and prevent significant changes in its distribution pattern;

Prevent the equivalent of a 1% loss in surface area per annum, and no more than 10% loss in total;

Prevent any reduction in the number of floral and faunal species arising from human activities;

Ensure individual operations or activities, in combination with other operations or activities, does not cause a change in the integrity of the principal community types; and

Ensure that there is a sufficiently large habitat of suitable quality available to support the long term survival of species associated with this habitat.

#### **4.1.2.4 Mudflats and sandflats not covered by seawater at low tide**

The total national resource of mudflats and sandflats must be maintained at, or restored to, favourable conservation status. This may be achieved through the following objectives:

Maintain the range of mudflats and sandflats as stable within Ireland and prevent the equivalent of a 1% loss per annum, and no more than 10% loss in total;

Maintain the distribution of mudflats and sandflats as stable across the national range and prevent significant changes in its distribution pattern;

Prevent the equivalent of a 1% loss in surface area per annum, and no more than 10% loss in total;

Prevent any reduction in the diversity of floral and faunal species arising from human activities;

Ensure there is no reduction in area or disturbance of intertidal sea grass or biogenic communities;

Ensure individual operations or activities, in combination with other operations or activities, do not cause a change in typical species composition in more than 25% of the area occupied by each of the principal sediment community types;

Ensure the water quality in tidal mudflats and sandflats is of sufficient quality to maintain the integrity of the principal community types; and

Ensure that there is a sufficiently large habitat of suitable quality available to support the long term survival of species associated with this habitat.

#### 4.1.2.5 Large shallow inlets and bays

The total national resource of large shallow inlets and bays must be maintained at, or restored to, favourable conservation status. This may be delivered through the following objectives:

Maintain the range of inlets and bays as stable within Ireland and prevent the equivalent of a 1% loss per annum, and no more than 10% loss in total;

Maintain the distribution of inlets and bays as stable across the national range and prevent significant changes in its distribution pattern;

Prevent the equivalent of a 1% loss in surface per annum, and no more than 10% loss in total;

Prevent any reduction in the diversity of floral and faunal species arising from human activities;

Ensure there is no deterioration of communities that are nationally rare, internationally threatened and/or in decline including inter alia:

*Zostera marina* communities,

Maërl communities,

*Lanice conchilega* communities,

*Sabella pavonina* communities,

*Serpula vermicularis* reefs,

*Ostrea edulis* reefs,

*Limaria hians* reefs,

*Pachycerianthus* beds,

Sea pen communities,

*Neopentadactyla mixta* beds, and

*Edwardsia delapiae* communities;

Ensure individual operations or activities, in combination with other operations or activities, does not cause a change in the integrity of the principal community types;

Ensure the water quality in large shallow inlets and bays is of sufficient quality to maintain the integrity of the principal community types; and

Ensure that there is a sufficiently large habitat of suitable quality available to support the long term survival of species associated with this habitat.

#### 4.1.2.6 Submerged or partially submerged sea caves

The total national resource of sea caves must be maintained at, or restored to, favourable conservation status. This may be delivered through the following objectives:

Maintain the range of sea caves as stable within Ireland and prevent the equivalent of a 1% loss per annum, and no more than 10% loss in total;

Maintain the distribution of sea caves as stable across the national range and prevent significant changes in its distribution pattern;

Prevent any reduction in the diversity of floral and faunal species arising from human activities;

Ensure individual operations or activities, in combination with other operations or activities, does not cause a change in the integrity of the principal community types;

Ensure the water quality in sea caves is of sufficient quality to maintain the integrity of the principal community types; and

Ensure that there is a sufficiently large habitat of suitable quality available to support the long term survival of species associated with this habitat.

## 4.2 Denmark

Nature 2000 Sites in Danish offshore waters are based on detailed mapping of the occurrence of the marine habitat types in a limited area, where the habitat types were expected to be found, as well as registration of the fauna and flora at the seafloor. Management plans in the offshore area are not worked out yet. Management plans in the coastal zone are in course of preparation.

We are working with developing tools to assess conservation status both in coastal area and on open water reefs in Nature 2000 areas, but are not succeeded yet. The indicators we are using are fauna and flora at the seafloor. Denmark has not clarified the "Interpretation Manual of European Union Habitats" for the characteristic animal and plant species belonging to the marine habitat types, and we have not decided how to manage a type-specific reference conditions for the marine habitat types corresponding to "favourable conservation status". That is one of the reasons for not having developed tools to assess conservation status.

That means that the only conservation objectives we have in the marine habitat types in Denmark to day is, that the conservation objectives of the marine habitat shall be "favourable conservation status".

The situation is almost similar as regards to the marine species, where we also are using "favourable conservation status". Where we have enough data, we are using a number to define "favourable conservation status", for instance for the common seal.

## 4.3 Sweden

Sweden has three N2000 areas partly located in EEZ and the government is considering four more. These areas only cover shallow offshore areas while no areas in deeper waters have been proposed as N2000. Management and conservation plans for the three areas were finalised in 2005 and they all suffer from lack of data. However much more data have been collected from the areas since 2005 and this work is continuing. This means that in a year or two we will have a much better data material to base a revision of the plans on.

Conservation objectives: The plans include objectives but on a general level due to lack of data. The objectives are therefore often not specific enough to allow an evaluation.

The management plans do not include all species. Regarding habitats and species listed in the birds and habitats directive, the birds' directive is somewhat better covered. Listings in the habitats directive are only partly covered due to lack of data.

Definition of favourable conditions: This also suffers from lack of data.

#### 4.4 Belgium

The conservation objectives for the habitat types and species are formulated in a general way in the Royal Decree that establishes these MPAs. However, these conservation objectives are not operational. Therefore the proposed policy plans foresees as one of the first measures the definition of the conservation objectives, taking into account the concept of "favourable state of conservation of the habitat types and species for which the MPAs have been established. The other objective of the proposed research object is the development of a monitoring programme that assesses the "favourable state" as well as the ecological pressures so as to adjust the site management in the future.

#### 4.5 UK

##### 4.5.1 Are conservation objectives specified in the management plans for proposed offshore Natura 2000 sites?

Yes, see attached example-updated objectives will be produced for the submission of sites to the EC in September. Currently these are as follows.

Subject to natural change, *maintain/restore* the [Annex 1 Feature] in favourable condition, such that:

The natural environmental quality<sup>6</sup> is maintained.

The natural environmental<sup>7</sup> processes are maintained.

The extent, diversity, community structures<sup>8</sup> and typical species<sup>9</sup> representative of the [Annex I Feature] are *maintained/restored*<sup>10</sup>.

The Conservation Objectives will state either maintain or restore, dependent on the Site Selection Assessment Document. If there is evidence of damage to the feature then the Objective will be to restore-in some cases the management action would be the same (e.g. for *Lophelia* reefs maintaining or restoring would require a cessation of fishing with mobile demersal gear).

##### 4.5.2 Do they include all species at the site?

Owing to the diversity of the UK sites we do not feel that it is appropriate to come up detailed lists of species. We will approach typical species in two ways.

- 1) species that have been found on sites will be listed in the Site Assessment Documents
- 2) a contract is being let to define criteria for which species would be considered typical-this should be completed over summer 2008

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<sup>6</sup> e.g. chemical quality parameters of water, suspended sediment levels, radionuclide levels etc should not deviate from baseline conditions.

<sup>7</sup> e.g. circulation, sediment deposition and erosion etc. should not deviate from baseline conditions.

<sup>8</sup> e.g. age classes, sex ratios, distribution of species, abundance, biomass, reproductive capacity, recruitment, range and mobility.

<sup>9</sup> See the Site Selection Document for examples.

<sup>10</sup> This will also take account for the *maintenance* / *restoration* of natural structures and functions and ecological processes.

#### 4.5.3 How will favourable condition of the interest features be identified?

The condition of the site has been assessed in the Site Assessment Documents. This is very coarse as the information available for our sites is limited e.g. accurate figures for feature extent are not possible. If there is evidence of damage to the feature then the Site Assessment Documents have stated this and the conservation objectives will state that the feature is to be restored. We do not feel that absolute values are required for this.

#### 4.5.4 If specified, is favourable condition quantified and related to explicit thresholds/reference levels?

Thresholds as such will not be used, rather it is expected that activities should not have a detrimental impact on sites. The aim will be to maintain or restore the features based on the assumption that removal or prevention of damaging activities will result in a more favourable or maintained favourable condition.

### 4.6 Spain

In the LIFE02NAT/E/8610 project (Conservation of cetaceans and sea turtles in Murcia and Andalusia), establishment of conservation goals (from the global Habitat Directive goal down to specific objectives for species and habitats) was debated in depth with the assistance of an international external advisory committee in the context of the development of SAC Management Plans and Species Conservation Plans. Conservation goals were divided in those focusing on maintaining the favourable conservation status for target populations of cetacean and sea turtle (ensuring the genetic diversity), and those dealing with habitats (e.g. ensuring adequate physical and chemical characteristics of water). Likewise a similar process was used for the development and design of the Monitoring Plans to analyse trends in conservation status.

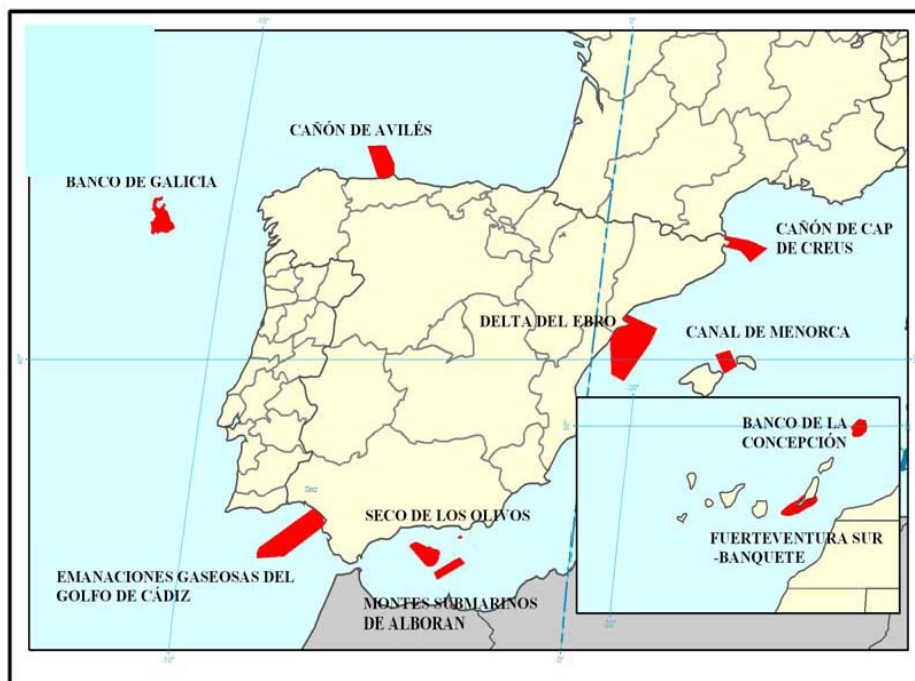
The conservation objective is the one addressed by the Habitats Directive, "to maintain the ecological status of such species and habitats for which SCIs and SPAs have been designated". Close coordination with Regional Seas Conventions and Global Environmental Agreements is required.

The following approach was used to accomplish the Directives and setting conservation objectives:

- 1) Identification and inventory of areas that are important for the conservation of the habitats and species of the Annex I & II of the EU Directives. Importance of EU Life and Projects on this process.
- 2) The European Commission evaluates the national list of proposed SCIs. Estimated calendar: Hole list (including a representative network of offshore pSCI) to be sent by 2014.
- 3) Spain must protect each designated area and maintain the conservation status of each habitats and species of the habitats and species of the EU Directives. Important considerations for areas located within the EEZ waters (management: i.e. CFP and IMO regulations).

**INDEMARES** "*Inventory and designation of the marine Natura 2000 network in Spain*" of the Biodiversity Foundation (Fundación Biodiversidad), is a LIFE+ proposal. The main objective is to complete the marine Natura 2000 network. The project will be undertaken during the 2009–2013 period and has a total budget of 16,5 M€, participating 9 partners (Ministry of the Environment, Rural and Marine Affairs, Spanish Insti-

tute of Oceanography, High Council for Scientific Research, Oceana, WWF/Adena, SEO/BirdLife, Alnitak, CEMMA and SECAC).



#### Case Study: El Cachucho MPA (pSCI and OSPAR MPA)

**Areas to be prospected in order to include in Natura 2000 in future (LIFE+ Project INDEMARES):**

- Banco de la Concepción
- Área de Gran Canaria-Fuerteventura
- Cañón de Creus
- Canal de Menorca
- Delta del Ebro-Columbretes
- Seco de los Olivos
- Mar de Alborán
- Chimeneas de Cádiz
- Banco de Galicia
- Cañón de Avilés

##### 4.6.1 Management measures

###### Fisheries

Ban fishing with bottom gears in the area. In the first step, we proposed not to eliminate all demersal fisheries activities. Fishing activities kept on the “Cachucho Area” should be developed under the scientific supervision of the Spanish Institute of Oceanography. Surface longline fishing, small-scale gear (except bottom longline gear) and purse-seine are not restricted as they are not considered to interfere in the habitats under protection.

### **Oil and gas exploration**

No new permissions for oil and gas exploration will be awarded. The permits already in place will not be renewed.

### **Mining**

Mining activities are prohibited within the area with the only exception of the ones already awarded.

### **Military activities**

Military activities which produce underwater noise (explosions) or the use of low frequency sonars are prohibited.

#### **4.6.2 Fisheries control plan**

- VMS control centre will record Area coordinates so as to automatically trigger an alert system in the control centre for all trawlers or vessels sailing in the area of El Cachucho in order to check if they are fishing.
- Establish the corresponding partial inspection plans to direct and influence control in the area of El Cachucho by using the surveillance patrol vessels of the Navy and the Civil Guard.
- Aerial control

In addition, the regional governments are working also on the proposals of coastal SCIs. As an example, the Basque Government (Department of Environment and Regional Planning) is working through AZTI-Tecnalia on a project which includes the production of technical specifications on marine habitats in the framework of Habitat Directive, the proposal of marine SCIs in the Basque Country according to Annex I and Annex II of the Habitat Directive, and the proposal of marine areas of interest based on their geomorphology, archaeological values, etc.

## **4.7 German North and Baltic Seas**

Responsibility for implementation up to 12 nm: German Coastal States (Niedersachsen, Schleswig-Holstein, Hamburg, Mecklenburg-Vorpommern).

Responsibility for implementation from 12 up to 200 nm: German Federal Administration.

Designation, Nomination: Except of a few sites in Mecklenburg-Vorpommern Germany has completed the Natura 2000 designation and nomination to EU COM in terrestrial and marine areas.

Principle conservation objectives were added to the nomination send to the EU COM according to the procedures given by the Commission decision 97/266/EC.

The general conservation objectives of nominated sites have to be specified when site specific regulations and or management plans will be implemented.

#### ***Are conservation objectives specified in the management plans for proposed offshore Natura 2000 sites?***

All SCIs are protected under the general provisions of the HD. In 2007 all Natura 2000 sites in German offshore waters were accepted by the EU Commission as SCIs. Therefore, according to Article 4 (4) Germany is in charge to implement the necessary conservation measures as fast as possible within the next six years.

EIAs for plans or project which have the potential to harm the conservation objectives of SCIs or SPAs have to be conducted by assessing the impact on provisional or existing detailed conservation objectives implemented by the responsible nature conservation agencies on a case by case base for all impacts due to the intended plan or project (Article 6 (3)).

For offshore SCIs or SPAs which are already protected according to national jurisdiction conservation objectives are specified in the specific regulations or ordinations, e.g. Ordination for the SPAs in the German EEZ were adopted in 2005.

**Do they include all species at the site?**

Independent of species and habitats which guided the delineation process all species of the annexes of the HD are protected according to the HD in an SCI or SAC. SPAs protect all wild bird species and especially those listed under the conservation objectives in regulations and/or management plans.

**How will favourable condition of the interest features be identified?**

Favourable conservation statuses have to be identified for three specific cases:

- a ) as criteria for an environmental impact assessment (eia) of an impact on a specific site according to Article 6 (3) and (4) HD,
- b ) for the regularly reporting of the Member States to the Commission on the conservation status of the protected habitats and their typical species and the species and their specific habitat according to Article 11 and Article 17 of the HD; and
- c ) to evaluate possible derogations from the system of strict protection for species of Annex 4 (according to Article 12 HD) under Article 16 HD. Derogations from the strict protection of birds in Article 5–8 BD are only allowed under the conditions described in Article 9 BD.

For (a) in the German EEZ site specific criteria that guarantee maintaining or improvement of the current conservation status exist for the SPAs (§ 3 of the Ordinances). Recently, a book was published to enhance the case specific interpretation (Mendel *et al.*, 2008: Profiles of seabirds and waterbirds of the German North and Baltic Seas; Biologische Vielfalt 59. English version, in press). For SCIs to date preliminary conservation objectives have been defined by the German Federal Agency for nature Conservation (BfN). (An overview is given by Peddersen *et al.*, 2008 accepted: "Natura 2000 sites and Fisheries in German Offshore Waters". ICES, Journal of Marine Science).

For (b) and (c) the favourable statuses of the species and habitats have to be evaluated for the total territory of the Member State and in each biogeographic region. Germany has send 2007 a national report for the years 2000–2006 on the conservation status of the species and habitats following the specific guidance of the Commission (Assessment, monitoring and reporting of conservation status-Preparing the 2001–2007 report under Article 17 of the Habitats Directive (DocHab-04–03/03 rev.3)).

For species and habitats specific national criteria for the assessment have been developed (Species: Schnitter *et al.*, ed. 2006); Habitats: Krause *et al.*, 2008)

For the German North Sea and Baltic Sea the results of the national report are summarised in the following tables (FV: Favourable; U1: Unfavourable-Inadequate; U2: Unfavourable-Bad; XX: Unknown):



**I) German Marine Habitats North Sea (Continental Biogeographic Region).**

CODE	NAME	RANGE	AREA	STRUCTURE	FUTURE PROSPECT	OVERALL ASSESSMENT
1110	Sandbanks	FV	FV	XX	XX	XX
1130	Estuaries	FV	FV	U2	U2	U2
1140	Mudflats	FV	FV	FV	XX	FV
1150	Lagoons	FV	XX	U2	U2	U2
1160	Bights	FV	FV	XX	XX	XX
1170	Reefs	FV	XX	XX	U1	U1

**II) German Marine Species North Sea (Atlantic Biogeographic Region).**

CODE	SPECIES	RANGE	POPULATION	HABITAT	FUTURE PROSPECT	OVERALL ASSESSMENT
LAMPFLUV	River lamprey	FV	FV	U1	FV	U1
PETRMARI	Sea lamprey	XX	U2	U1	U1	U2
ALOSALOS	Allis shad	XX	U2	XX	U2	U2
ALOSFALL	Twaite shad	FV	U1	U1	FV	U1
HALOGRYP	Grey seal	FV	U1	FV	FV	U1
PHOCPHOC	Harbour porpoise	FV	U1	U1	XX	U1
PHOCVITU	Harbour seal	FV	FV	FV	FV	FV

**III) German Marine Habitats Baltic Sea (Continental Biogeographic Region).**

CODE	NAME	RANGE	AREA	STRUCTURE	FUTURE PROSPECTS	OVERALL ASSESSMENT
1110	Sandbanks	FV	XX	XX	XX	XX
1130	Estuaries	FV	U1	U2	U1	U2
1140	Mudflats	FV	FV	U1	FV	U1
1150	Lagoons	FV	FV	U2	U1	U2
1160	Bights	FV	FV	U1	U1	U1
1170	Reefs	FV	XX	XX	XX	XX

**IV) Marine Species Baltic Sea (Atlantic Biogeographic Region).**

CODE	SPECIES	RANGE	POPULATION	HABITAT	FUTURE PROSPECT	OVERALL ASSESSMENT
LAMPFLUV	River lamprey	FV	U1	U2	XX	U2
PETRMARI	Sea lamprey	XX	XX	XX	XX	XX
ALOSALOS	Allis shad	U2	XX	U2	XX	U2
ALOSFALL	Twaite shad	XX	U2	XX	XX	U2
HALOGRYP	Grey seal	U2	U2	U2	XX	U2
PHOCPHOC	Harbour porpoise	XX	U2	U1	U1	U2
PHOCVITU	Harbour seal	FV	U2	U1	U1	U2
Code	Species	U2	U2	U1	U1	U2

***If specified, is favourable condition quantified and related to explicit thresholds / reference levels?***

According to Article 6 (3) of the HD an environmental impact assessment (eia) have to determine case by case if the level of deterioration due to the intended plan or project adversely affect the integrity of the site concerned. For specific impact conditions the German Federal Agency for Nature Conservation had developed a guideline (Lambrecht and Trautner 2007, in German). For the development of case specific threshold levels-named 'orientation values'-this guideline provide transparent technical descriptions for the determination of whether a proposed impact would be significant in a specific situation on land and on sea (ICES WKFMMPA Report 2007).

Additional it should be asked in which Coastal State currently fishery is regarded as plan or project?

#### **4.8 Portugal**

The Azores has 17 marine Sites of Conservation Importance (SCIs) and 13 Special Protection Areas (SPAs) to fulfill the Habitats Directive and the Birds Directive. All 13 SPAs correspond to breeding grounds of seabirds, thus being terrestrial. These areas were designated under the Council Regulation No. 11/2002. Thereby I will mainly focus on the SCIs.

The Species and Habitats (Habitats Directive) behind the designation of the sites were:

1) Species

- *Caretta caretta*
- *Tursiops truncatus*

2) Habitats

- *Coastal lagoons*
- *Large shallow inlets and bays*
- *Reefs*
- *Submerged or partially submerged sea caves*
- *Sand banks slightly covered by water*

The Species of the Bird Habitat behind the designation of the SPAs were:

- *Calonectris diomedea borealis*
- *Bulweria bulwerii*
- *Puffinus puffinus*
- *P. assimilis baroli*
- *Oceanodroma castro*
- *Sterna hirundo*
- *Sterna dougalii*
- *Pterodroma fae*

The habitats and the species only represent a small fraction of we find are in fact priority species for the Azores.

The research, including mapping, in view of the production of the management plans for the Azores marine N2000 were formally initiated in 1999 with project "LIFE98-NAT-P-5275: MARE: Integrated management of coastal and marine areas in the

Azores” ([www.macmar.info](http://www.macmar.info)), complemented by previous knowledge. This project concluded, in 2004, the scientific evaluation and management proposals for five SCIs and seven SPAs. Given the fact that some of the designated SCIs were small and interconnected with important habitats, this project concluded for new proposals where the SCIs were included in larger areas designated either as Marine Reserve (the case of the Formigas/Dollabar bank) and Marine Parks (the cases of Pico/Faial channel and Corvo island).

The works and management plans proposals for the remaining SCIs and SPAs were concluded in 2005 under the project “INTERREG IIIb/MAC/4.2/A2 2001: OGAMP-Management of marine protected areas in Macaronesia (Azores, Canaries and Madeira)”. Outreach, education, dissemination and evaluation were continued under the project “INTERREG IIIb-03/MAC/4.2/A2 2004: MARMAC-Knowledge, promotion and valorization for a sustainable use of marine protected areas in Macaronesia” from 2006 to 2008.

The Law Decree for the Sectoral Plan for the N2000 was published in 2006 (DLR Nº 20/2006/A).

The initial list of SCIs included an offshore site the D. João de Castro seamount (Cardigos *et al.*, 2006; Ávila *et al.*, 2007). The Formigas islets/Dollabar bank, which is outside the territorial seas of the neighboring islands, was not considered in the EEZ because the rocks form an islet raising around 10 meters above the water surface, thus defining themselves surrounding territorial waters. However, they are ecologically offshore type habitats, which go down to 1800 meters deep (Santos *et al.*, 1995).

In 2006 a new project (LIFE04NAT/PT/000213: Important Areas for the Marine Birds in Portugal) was initiated in view to evaluate offshore important bird areas (IBAs) (Amorim *et al.*, 2008). Meanwhile several studies on the distribution of fish, sea turtles (*Caretta caretta*) (Santos *et al.*, 2007), pelagic seabirds (e.g. Cory’s shearwater and *Puffinus puffinus*) and cetacean were initiated using acoustic and satellite telemetry and submerged recording acoustic arrays (see e.g.: Afonso *et al.*, 2008; Magalhães *et al.*, 2008) based on a set of several research projects (e.g. POCTI/BSE/41207/2001: MAREFISH: Benefits of marine protected areas: testing the theory with field experiments; POCTI/BSE/38991/2001 CETAMARH-Ecology and population structure of bottlenose dolphins and sperm whales in the Azores: assessing the relationship with habitat features). Also molecular studies have been developed in view to establish population structure and genetic differentiation (e.g. Querouil *et al.*, 2007; Bried *et al.*, 2008) The distribution of seamounts in the Azores region has been re-evaluated (Morato *et al.*, 2008a) as well their relevance for visitor/pelagic species (Morato *et al.*, 2008b).

During 2002–2006 the OASIS project (EVK3-CT 2002-00073: Oceanic Seamounts: An Integrated Study) was dedicated to the scientific study of two seamounts off the Azores (Sedlo) and off Madeira (Seine). A proposal to designate the Sedlo seamount as a Marine Protected Area was finalized (Santos *et al.*, under revision). Proposals for the classification of the hydrothermal vent sites Menez Gwen and Lucky Strike were concluded in 2002 (Santos *et al.*, 2003), and Rainbow in 2006. These three offshore hydrothermal vent sites and the Sedlo seamount were submitted, in 2006 and 2007, for the OSPAR network of MPAs. Lucky Strike and Menez Gwen were proposed by Portugal, in 2005, as new SCIs under the classification as “reefs”.

The species and habitats that were used to select the Azorean N2000 sites are far from the ideal situation for the region and other species should be included as priority species.

A synoptic description of main conservation issues, zonation covered by policy instruments and distribution of main offshore priority habitats was recently actualized by Probert *et al.*, 2007.

#### **4.9 France**

Site designation in the coastal waters of France has recently been announced. Details can be obtained from [www.aires-marines.fr](http://www.aires-marines.fr).

#### **4.10 The Netherlands**

In the near future, the Netherlands will nominate to the EU a number of Natura 2000 sites in the North Sea as potential Marine Protected Areas (MPAs). These are two coastal areas along the northern and southern Dutch coast, the Doggerbank (sand-bank) and the Cleaverbank (reef). The Frisian Front which qualifies under the Bird Directive will possibly also become a protected area under national legislation.

After the nomination, ecological objectives and management measures will need to be established and work on this is in progress. However, a discussion has started how this should be done in areas with a high natural variability, where human influences are already very great and the effects of climate change are becoming noticeable.

The natural and man-made habitat types in the Dutch part of the North Sea were described in a Dutch discussion paper where it was indicated that some human influences have become so intensive that major habitat characteristics have been altered. Because of its scale and intensity, in particular the bottom fisheries have caused a significant change in the types of natural habitats, resulting in so called “ploughed” or “raked” habitat. Nowadays, about 80% of the Dutch Shelf consists of these types of habitat with a lowered biodiversity, removal of stones, less structure-forming organisms and unnatural age distributions of the fauna.

Furthermore, the marine ecosystem is a very complex system, whereby a subtle interplay between climate, currents, nutrients, sediment and substrate characteristics, fisheries and the intrinsic properties of organisms determines the shape and composition of the system. Over space and time, this system manifests itself in different forms, which are sometimes constant for a while but may also suddenly change, the so called regime shifts. This variability and these shifts pose a major problem in establishing ecological objectives and management measures.

To overcome this problem it has been suggested not to use objectives such as numbers and presence of specific organisms or groups of organisms, but to determine the desired types of habitat. Then the effects and intensities of the different human uses can be adapted to the desired level of protection leading to more natural types of habitat with their coupled (shifting) ecosystem. So to reach the desired habitat development it has been suggested to focus more on presence/absence of human activities such as fisheries than on the state of the ecosystem expressed in numbers of organisms.

#### **4.11 Canada**

Conservation Objectives from Canadian Oceans Act MPAs.



## Sommaire des zones de protection marines désignées sous la Loi sur les Océans.

ZPM	Date de désignation	ZÉGO	Région du MPO	Site	km <sup>2</sup>	Objectifs de conservation (tel qu'énoncé dans le plan de gestion)	Plan de gestion	Advisory body	Contact(s) Régional (aux)
Champ hydrothermal Endeavour	2003	N/A	Pacifique	Offshore, C.-B.	100		Draft	EHV MPA Technical Advisory Committee	<b>Kevin Conley</b> Glen Rasmussen
Gully	2004	ESSIM	Maritimes	Offshore, N.-E.	2 364		Draft	Gully Advisory Committee	Derek Fenton Paul Macnab
Basin Head	2005	GOSLIM	Gulf	Détroit de Northumberland, I.-P.-E.	9.2		Draft	Basin Head MPA Advisory Board	Mireille Chiasson Delly Keen
Eastport	2005	N/A	T.-N.	Péninsule Eastport Baie Bonavista, T.-N.	2.1		Approved	Eastport MPAs Steering Committee	<b>Helen Griffiths</b> Annette Power
Baie Gilbert	2005	N/A	T.-N.	Côte sud-est du Labrador, T.-N.	60		Approved	Gilbert Bay Steering Committee (GBSC)	<b>Helen Griffiths</b> Annette Power
Estuaire Musquash	2006	N/A	Maritimes	Baie de Fundy, N.-B.	7.4		Draft	Musquash MPA Advisory Committee	Penny Doherty

Site d'intérêt	Date de désignation anticipée	ZÉGO	Région du MPO	Site/Lieu	km <sup>2</sup>	Objectifs de conservation (tel qu'énoncé dans le plan de gestion)	Plan de gestion	Advisory body	Contact(s) Régional (aux)
Tarium Niryutait	2008	BSIMPI	C&A	Mackenzie Delta, T.-N.-O.	1 716		Draft	Fisheries Joint Management Committee (FJMC)	Adrienne Paylor Cal Wenghofer
Manicouagan	2008	GOSLIM	QC	Estuaire St. Laurent, P.Q.	543	Protéger et conserver l'écosystème marin hautement productif et riche en biodiversité entourant la péninsule de Manicouagan, incluant plusieurs espèces en péril	Draft	Comité technique	Élaine Albert
Estuaire du Saint-Laurent	indéterminé	GOSLIM	QC	Estuaire St. Laurent, P.Q.	6 000	Assurer, dans l'estuaire du Saint-Laurent, la conservation et la protection à long terme des cétacés et du phoque commun, de leurs habitats et de leurs ressources alimentaires			Guy Cantin
Mont sous-marin Bowie	2008	N/A	Pacifique	Offshore, C.-B.	6 100			Bowie Advisory Team	<b>Dale Gueret</b> Kelly Francis
Race Rocks	indéterminé	N/A	Pacifique	Détroit de Juan de Fuca, C.-B.	2.2 ha			Race Rocks Advisory Board	<b>Glen Rasmussen</b> Kelly Francis
Leading Ticks	indéterminé	N/A	T.-N.	Baie de Notre Dame, T.-N.	50			Leading Ticks Steering Committee	<b>Helen Griffiths</b> Annette Power

Gabriola Passage	Removed from AOI list (1998)
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## **5 Annex 2: National Vessel Monitoring System (VMS) summaries**

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### **5.1 Denmark**

The environmental authorities don't have access to VMS-data. It is only possible to receive data in ICES square, which is far too big a scale compared with the size of the Nature 2000-sites. We only believe that it is possible to get data for the Danish vessels. The Danish fishing fleet, which are fishing in the Baltic Sea don't necessarily have VMS equipment, because they are too small for the demand of VMS equipment.

Very recent developments have provided the Danish National Institute of Aquatic Resources, Technical University of Denmark (DTU-Aqua) access to VMS data. Data has been provided for 2007 for Danish vessels only, and is only available for ships larger than 15 meters. VMS data is registered every 2 hours and in 2007, 473 ships have been sending information via VMS. Older data will likely be made available for DTU-Aqua later this year.

Danish logbook data is provided on a daily basis, i.e. not for every fishing operation, indicating that although the VMS data provides us with information every 2 hours we will not be able to allocate the catches to this level. If logbook information were registered at every fishing operation this would improve the utility of data and help us understand the spatial resolution in the fishing pattern.

### **5.2 Belgium**

Our administration has not yet been able to obtain VMS or other data to understand the location of the fishing activities in relation to MPAs or the other areas of the Belgian part of the North Sea.

In Belgium the federal government has competence for the marine environment; on the other hand, it is the Flemish Region, which is competent for fishery policy issues. Hence, the recent policy plan foresees the collaboration between both authorities so as to address the negative effects of fishing on the habitat types and species for which the sites have been designated (bottom trawling effects on benthic communities and effects of tanglenets on marine mammals). I have contacted the fishery administration and invited them to collaborate with the federal administration to provide the appropriate protection regime to the MPAs and am convinced that over the next years both administrations will collaborate towards this goal (this collaboration is also explicitly mentioned in the policy of the Minister in charge of the Marine Environment).

### **5.3 Norway**

#### **5.3.1 General**

All Norwegian fishing vessels longer than 24 m must every hour report ship ID, time (minute resolution), position, heading and speed of the vessel. From 1st July 2008 all vessels longer than 21 m must report. From 1st January 2009 it is planned to lower the size of the vessel. A decision has not been taken yet.

Data from the year 2000 are available. From 2000 to 2003 the data are not reliable and must be analyzed with care. From 2003 and up good data from all years are available. Also data from foreign vessels are available, but they may only contain reports every second hour.

### 5.3.2 Level of access

The Directorate of fisheries handles VMS-data in Norway. They receive raw data containing ship code, time, position, heading and speed of the vessel. They manage the database with the raw data. At the Institute of Marine Research (IMR) dedicated persons have direct access to the database with raw data. These persons are bound to secrecy. For publication the ship ID must be anonymous.

### 5.3.3 Analyzing (IMR)

At IMR VMS-data are coupled with detailed logbook information to find the gear types that are used to estimate the trawled area by the different gear types. Vessels with speeds of 2–5 knots are defined to be in fishery (bottom trawlers). Due to a trawl ban closer than 4 nautical miles to the Norwegian coast, VMS records inside this border are omitted from the analyses. We also use VMS-data to estimate fishing intensity for each month for the years 2003–2007. At IMR we find it useful to discriminate between shrimp trawl, twin shrimp trawl, triple shrimp trawl, single fish bottom trawl and twin fish bottom trawl in the analyses.

### 5.3.4 The Norwegian system for satellite tracking of fishing vessels

Norway decided with effect from 1st July 2000 to require satellite tracking of all fishing vessels over 24 meters. Currently a total of 400 Norwegian fishing vessels must have satellite tracking equipment installed on board. This equipment automatically transmits the vessel's position, course and speed every hour, 24 hours a day, regardless of where in the world the vessel is located.

Similarly, foreign fishing vessels fishing in Norwegian waters are subject to satellite tracking. The general rule is for vessels with an overall length exceeding 24 meters. However, due to the bilateral agreement between Norway and EU, mutual tracking of vessels above 18 meters has been required from 1st July 2004 and above 15 meters from 1st January 2005.

Coastal states take the responsibility for controlling and administering the tracking in their own economic zones. High seas areas that are not covered by any country's fishing jurisdiction are administered by Regional Fisheries Management Organizations (RFMO), such as NEAFC, NAFO and CCAMLR, where the members jointly frame the regulations.

### 5.3.5 Flag state principle

In accordance with international agreements, a flag state normally accepts the obligation to establish a "Fisheries Monitoring Centre" (FMC). Norway has established such a centre at the Directorate of Fisheries in Bergen.

Norway currently has mutual tracking agreements with the EU, Russia, Iceland, the Faeroe Islands and Greenland. Experience has shown that the only practical solution between cooperating parties is to apply the Flag State Principle. This implies that position reporting as well as future electronic catch and activity reporting is the prime responsibility of the flag state, and that reports are forwarded from the respective flag state to the relevant authorities.

According to this principle, all Norwegian vessels automatically transmit their positions to the Norwegian FMC at the Directorate of Fisheries. If a vessel enters one of the aforementioned parties' zones, the Norwegian FMC automatically retransmits that position, and thereafter its position, speed and course at two hours intervals in accordance with agreements, to the relevant coastal state's or RFMO's FMC. In the



same way reports are transmitted to the Directorate of Fisheries when foreign vessels operate in waters under Norwegian jurisdiction.

#### **5.3.6 Handling of data**

The national FMC controls that positions are received on a regular basis from all vessels with an obligation to have such equipment on board. If position details are not received from a vessel, the FMC must contact the vessel or the flag state FMC without delay. As the transmission takes place automatically, the skipper can not from hour to hour be ordered to keep a check of whether the positions are being transmitted as they should. However, the skipper does have an obligation to control that the tracking system on board the vessel is in working order and is functioning in accordance with regulations.

All position details that are received by the FMC are handled automatically. Data that is forwarded to a foreign country's FMC when a Norwegian fishing vessel enters the relevant country's economic zone is transmitted via a secure data line. All recipients of data are also in accordance with agreements obliged to handle the data they receive in a responsible manner. In 2004, the Directorate of Fisheries received approximately 2.9 million position reports from Norwegian vessels and approximately 0.8 million reports from foreign vessels via their FMCs.

#### **5.3.7 Access to the tracking details**

Data stored at the Norwegian FMC is made available to authorised personnel only. Such personnel are bound by the Official Secrets Act. Data concerning individual fishing vessels will not be generally available, for example via the Internet. Neither will the data be available to other fishing vessels. Only the two Norwegian Search and Rescue Centres have access to tracking details in addition to authorised personnel at the Directorate of fisheries and at the Coast Guard.

### **5.4 UK**

#### **5.4.1 is VMS readily available on request to your national fisheries agency or directorate?**

Yes, and Cefas has access via a synchronised database so we don't have to make requests.

#### **5.4.2 Are there any restrictions on the access you can have to these data?**

UK (England and Wales) has unrestricted access, but our use of the data is restricted:

- 1 ) publication not permitted of outputs that would allow individual vessels to be identified.
- 2 ) publication of outputs must be cleared with our national fisheries agency (Defra MFA).
- 3 ) a standard disclaimer must be attached to outputs derived from VMS data.

#### **5.4.3 Is data for multiple years available, and for all nations?**

UK (England and Wales) has access to data from 2000 for UK vessels in all waters and for all vessels in UK waters.

#### 5.4.4 Other useful information

We currently associate gear codes for UK vessels to VMS by linking to our national landings database via vessel ID, but this join is not yet formalised within the database. For foreign vessels we link to primary and secondary gears in the EU vessel register using EU vessel ID, but again this join is not yet formalised in our database.

### 5.5 Sweden

The Swedish board of fisheries handles and has access to all VMS data on vessels (>15 m) in the Swedish EEZ. Complete datasets on Swedish vessels are available from 2004. The Board of Fisheries has full access to all data including data for all nations (at least for EU-vessels) as they are reported when they enter Swedish EEZ by their flag states. However, scientific use of the data is restricted to ensure vessel anonymity. For VMS data on foreign vessels in Swedish EEZ, data access for scientific use is limited according to policies in the flag state.

### 5.6 Spain

VMS data are available through the Fisheries Control Center, from the General Secretary of the Sea (Ministry of the Environment, Rural and Marine Affairs, Spanish Government). For operability purposes, it is recommended to request data directly to the European Commission, where data from all countries are available and related requests can be applied.

### 5.7 Germany

To analyse the potential conflict between fishing activities and nature conservation targets in marine Natura 2000 sites fishery data on the fine scale distribution of fishing activities of nation and international commercial fishery vessel should be available on appropriate temporal and spatial scale. Temporal and spatial resolution of fishery data should be compatible with the data about the distribution of habitats and species (e.g. bottom trawls 3x3 nm, monthly). The EMPAS project revealed that VMS data in combination with logbook data are the most appropriate to assess fishing effort in the North Sea and Baltic Sea.

Nevertheless, VMS data are only available for fishery vessels > 15 m overall length. In the German part of the Baltic Sea the majority of vessels operating in the set net fishery are much smaller (8–12 m). Therefore estimation of fishing effort solely based on VMS data is largely underestimating the overall the fishing effort in the set net fishery, and VMS should be made mandatory to all commercial fishery vessels.

Additional data have to be available to assess the impact of fishing activities on habitats and species (e.g. bycatch rate of seabirds and marine mammals, impact of bottom contacting gear on benthic habitats and communities). The EU data collection program is not covering a large part of the commercial fleet. Especially data about fishing effort (net length, soak time) and bycatch of small set net vessels (below >15 m) are missing, which would be essential to analyse the impact of set net fisheries on marine mammals and seabirds (more details in the workshop report BfN "Impact assessment of fisheries on marine mammals and seabirds in Natura 2000 sites within the German EEZ of the North and Baltic Seas", Isle of Vilm, Germany, 5–7 May 2008).

Is VMS data readily available on request to your national fisheries agency or directorate?

At the beginning of the EMPAS project (2006) the access to VMS data has been refused by the responsible German Federal agency (BLE) for data protection reasons.

After a legal examination VMS data of national and international vessels in German coastal waters and the EEZ of North Sea and Baltic Sea have been made available to the national fisheries institute (Heinrich von Thünen Institute, vTI). Scientist from the vTI have analysed VMS data and made them available for the impact assessment of fishing activities on habitats and species in the process of the EMPAS project.

***Are there any restrictions on the access you can have to these data?***

The German Federal Agency, as the responsible agency for the management of Natura 2000 sites in the German EEZ has no immediate access to VMS data yet.

***Is data for multiple years available, and for all nations?***

For the analysis in the EMPAS project VMS data have been made available and analysed for the year 2006.

## **5.8 Ireland**

The Marine Institute has had a trial of informal access to VMS data from the Irish Navy for the period 2005 May 2007. The Fisheries Science Services of the Marine Institute was granted access to this data on the understanding that neither the records nor the analyses would be disclosed to any third party. This data initially contained records with information on vessel id, speed, direction, position, heading, and time date of transmission, though latterly (2006–2007) the records did not contain the speed field. This data were used primarily to help plan scientific surveys, for example to detect the extent of commercial *Nephrops* grounds for underwater TV surveys. The data were also used in an exploratory way to examine their utility in discriminating fishing métiers, by linking the records to landings data from the logbooks. Linking records was only possible for a subset of the total record set, but in the cases where this was possible the VMS data has considerable utility for this purpose.

Several technical and operational difficulties were encountered with using this data. Firstly the volume of the recordset is large (in the order of millions of records) and the data were stored in a flat file. This created performance issues with querying. Efforts to link the records to the logbooks database were problematical as the vessel id in the VMS recordset is the international vessel registration number, and as vessels are bought and sold from outside Ireland there is an asynchrony between the conversion of the vessel to/from an Irish registration number on the VMS and the logbooks system.

Because of the volume of records several attempts were made to “bin” the data by spatial area. This threw up several issues which required a “manual” fix. A recommendation would be to port the record set to spatially enabled database platform (e.g. SQLServer 2008), this would facilitate spatial as well as temporal binning of the data, and remove the requirement for a speed field (presuming position and time/date are available).

The Marine Institute do not have access to VMS data beyond May 2007. However, the Sea-Fisheries Protection Authority (SFPA) now hold this data and the Marine Institute is currently discussing the implementation of an MOU between the MI and SFPA which would include access to VMS data.

## **5.9 The Netherlands**

In The Netherlands the Inspection Service of the ministry of Agriculture, Nature and Food Quality has access to all VMS data on vessels (>15 m) of the Dutch fleet and on

all reporting foreign vessels in the Dutch sector of the North Sea. These data are only used to detect illegal fishing practices.

The Research Institute Wageningen IMARES has access to the data on the Dutch fleet only for vessels that have given permission to use these data (approx. 50% of the fleet). For every application, permission has to be obtained from a committee of representatives from the fishermen and the government. Access to data from foreign fleets is under development.

**Appendix 1: Participants' list****Workshop on Dealing with Natura 2000 and Related Requests (WKN2K)**

ICES, Copenhagen, Denmark, 5 June 2008

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