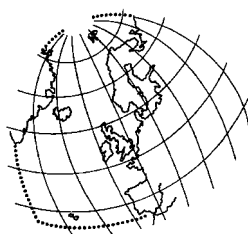


North Sea Pilot Project on Ecological Quality Objectives

Background Document on the Ecological Quality Objective on Bycatch of Harbour Porpoises in the North Sea



OSPAR Commission
2005

The Convention for the Protection of the Marine Environment of the North-East Atlantic (the “OSPAR Convention”) was opened for signature at the Ministerial Meeting of the former Oslo and Paris Commissions in Paris on 22 September 1992. The Convention entered into force on 25 March 1998. It has been ratified by Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland and the United Kingdom and approved by the European Community and Spain.

La Convention pour la protection du milieu marin de l'Atlantique du Nord-Est, dite Convention OSPAR, a été ouverte à la signature à la réunion ministérielle des anciennes Commissions d'Oslo et de Paris, à Paris le 22 septembre 1992. La Convention est entrée en vigueur le 25 mars 1998. La Convention a été ratifiée par l'Allemagne, la Belgique, le Danemark, la Finlande, la France, l'Irlande, l'Islande, le Luxembourg, la Norvège, les Pays-Bas, le Portugal, le Royaume-Uni de Grande Bretagne et d'Irlande du Nord, la Suède et la Suisse et approuvée par la Communauté européenne et l'Espagne.

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1. Background

The Bergen Declaration of the 5th North Sea Conference identified ten issues relating to the ecological quality of the North Sea for the development of ecological quality objectives (EcoQOs). "Marine Mammals" is one of these ten issues. Three Ecological Quality (EcoQ) elements have been developed for this issue, including: (e) *By-catch of harbour porpoises*. The 5th North Sea Conference adopted the following EcoQO for this element: "Annual by-catch levels should be reduced to be below 1.7% of the best population estimate".

This Background Document was prepared by the United Kingdom (lead country for this EcoQO in OSPAR) as input to the review of the advanced EcoQOs under the North Sea Pilot Project.

2. Analysis of the EcoQO

The Objective derives from considerable analysis by the International Whaling Commission (IWC) and the Agreement on the Conservation of Small Cetaceans in the Baltic and North Seas (ASCOBANS). Bycatch of harbour porpoises at levels above this are considered to be unacceptable by ASCOBANS as they unlikely to allow harbour porpoise populations to reach 80% of carrying capacity in the long term. This figure has been considered by both ICES and other advisory structures to the European Commission (responsible for fisheries management issues in all of the North Sea except Norwegian waters). Advice from these sources agreed with the ASCOBANS evaluation. Although not stated explicitly, this target underlies Regulation (EC) No 812/2004 agreed by EU Fisheries Council in April 2004. This regulation includes requirements for monitoring bycatch as well as taking measures to reduce bycatch in certain fisheries.

Those Contracting Parties which are Member States of the European Union are required under the Habitats Directive (92/43/EC) to introduce a system to monitor the incidental capture and killing of all cetaceans. In light of the results of this monitoring, Member States are required to undertake further research or conservation measures to ensure that the incidental capture and killing does not have a significant negative impact on the species concerned. Member States also have a duty to ensure that any measures taken under the Directive are designed to maintain or restore, at a favourable conservation status, all cetaceans. These obligations do not, of course, apply to Norway.

Despite these statutory obligations (most in existence since 1992), knowledge of harbour porpoise bycatch in the North Sea is incomplete. There have been a number of recent reviews of bycatch in European waters, principal among these are:

- a. ICES, 2002. Report of the working group on marine mammal population dynamics and habitats. ICES CM 2002/ACE:02.
- b. CEC, 2002. Incidental catches of small cetaceans. Report of the meeting of the subgroup on fisheries and the environment (SGFEN) of the Scientific, Technical and Economic Committee (STECF). SEC (2002) 376. Commission of the European Communities, Brussels.
- c. CEC, 2002. Incidental catches of small cetaceans. Report of the meeting of the subgroup on fisheries and the environment (SGFEN) of the Scientific, Technical and Economic Committee (STECF). SEC (2002) 1134. Commission of the European Communities, Brussels.
- d. Kaschner, K. 2003 Review of small cetacean bycatch in the ASCOBANS area and adjacent waters – current status and suggested future actions. ASCOBANS MoP4/Doc. 21.

Rather than repeat these, a current summary is presented below, but these sources should be consulted if further detail is required. See also Section 6 of the 2003 ICES Advisory Committee on Ecosystems (ACE) Report: Ecological Quality Objectives

In order to estimate bycatch rates, two main figures are needed: numbers being bycaught and an abundance estimate for the population that the bycatch is coming from.

Bycatch can only reliably be estimated using a properly designed monitoring scheme that is independent of the fisheries being checked. Although several types of fisheries may occasionally catch harbour porpoises, those that pose the greatest risk to harbour porpoise populations are bottom-set gill-nets. Such fisheries are relatively common throughout the shallower parts of the North Sea. Bycatch estimates have been made in most relevant UK, Danish and Swedish fisheries in the North Sea, but not in any French, Belgian, Dutch, German or Norwegian fisheries. Given the range of the harbour porpoise and the scale of relevant fisheries in the North Sea, further information from relevant Norwegian and French fisheries is essential to assess whether or not this EcoQO is being met. There is no additional cost of meeting the monitoring needs of this EcoQO above those needed for the EU Habitats Directive and Fisheries Regulation requirements.

Abundance estimates for North Sea harbour porpoises were last made in 1994 in the SCANS surveys. These are now becoming out-of-date and further surveys are planned in 2005; these surveys are being

funded by European and Member States. A subsidiary problem is that we do not know the structure of the North Sea harbour porpoise population – we know that animals from the western Channel are different from those in the North Sea, and that there is a difference between animals in the northern and southern North Sea and the Kattegat. There are no sharp lines between these groups, and further research is needed if we are to understand the impact of bycatch on different parts of the North Sea harbour porpoise population.

On the basis of current knowledge, it is apparent that the EcoQO is probably not being met in two areas: the east-central North Sea, and the western Channel (part of the Celtic Shelf). Note that the EcoQO may not be being met in further areas where there is insufficient knowledge.

If the EcoQO is to be met, then fisheries practices in these areas need to be modified. Within the European Union, common fisheries management measures have been agreed by the European Fisheries Council (Regulation 812/2004). Member States may also bring in measures applying to their own fleets, subject to certain conditions. Such measures have been brought in by Denmark and are being actively considered by the UK.

Several measures are possible to help Contracting Parties meet this EcoQO. For example, reducing fishing effort using gears most risky to harbour porpoises is likely to reduce bycatch by an amount proportionate to the amount of effort reduction. In addition, the deployment of acoustic devices ('pingers') onto nets has proved effective in tests, at least in the short-term. These work by keeping harbour porpoises away from nets. Other technological solutions are under experimentation at present.