

**Agenda Item 5.4:      Annual National Reports**

**Annual National Report for 2005: Denmark**

**Submitted by:      Secretariat**



***NOTE:***  
**IN THE INTERESTS OF ECONOMY, DELEGATES ARE KINDLY REMINDED TO BRING  
THEIR OWN COPIES OF THESE DOCUMENTS TO THE MEETING**

# ASCOBANS Annual National Report 2005

## DENMARK

### A. General information

Name of party: DENMARK	Period covered: 2005
Name of report compiler: <b>Genevieve Desportes and Maj F. Munk</b> in cooperation with Age Dynamics, the Danish Institute for Fisheries Research (DIFRES), Esbjerg Fisheries and Maritime Museum, Fjord&Bælt (F&B), GDnatur, the Ministry of Environment – Forest and Nature Agency and the National Environmental Research Institute (NERI).	Date of report: <b>March 31, 2006</b>
<b>Danish Forest and Nature Agency, Haraldsgade 53, DK-2100 Copenhagen Ø, Denmark</b> <b>Tel: +45 39 47 24 28; e-mail: mfm@sns.dk</b>	
Any changes in coordinating authority, appointed member of advisory committee: none	

### B. NEW measures/action towards meeting the resolutions of the 4th Meeting of Parties

#### 1. Direct interaction of small cetaceans with fisheries

<p><b>Investigations of methods to reduce by-catch:</b></p> <p>GDnatur, DIFRES and F&amp;B, together with Kolmården Djurpark (SE) and the Institute of Marine Research (NO) completed the NIPER project - Nordic Interactive Pinger for Porpoise Entanglement Reduction - funded by the Nordic Council of Ministers (MiFi - Environment and Fisheries), the Kolmården Fundraising Foundation and the participating agencies (Contact: <a href="mailto:genevieve@gdnatur.dk">genevieve@gdnatur.dk</a>)</p> <p>The objective of the NIPER project was to test the interactive pinger (IP, emission of deterrent sounds activated by porpoises sonar) in a set-up simulating a bottom set gillnet fishery. Accessory goals of the project were collecting data on the sonar source level of wild porpoises and on their acoustic activity in the wild, since knowing these is a prerequisite to optimizing the design of the interactive pinger and its porpoise detection (POD) function. Set of field trials were conducted in August 2004, May and September 2005. The porpoise reaction to the array of IP was also compared to the porpoise reaction to an array of beacon-mode pinger. No difference in reaction was observed. The IP emitted 1-7% of the amounts of displacement sounds emitted by traditional, beacon mode pingers. The final report will be available by mid 2006.</p> <p>DIFRES also conducted research on methods for reducing by-catch of dolphins in pelagic trawls. (Contact: <a href="mailto:fl@dfu.min.dk">fl@dfu.min.dk</a>).</p>
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Estimates of by-catch in set net and pelagic trawl fisheries:			
Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)

Harbour porpoises	No new estimate for 2004. The most recent estimate is that from 2001-2002 presented by Vinther and Larsen (2004) <sup>1</sup>		
Other species	few, but the exact number and species involved unknown.		
<p><b>Implementation of guidelines, new legislation, etc. to reduce by-catch:</b>                  The council of the European Union has on March 22, 2004 adopted common regulations in order to reduce incidental by-catches of small cetaceans. Acoustic deterrent devices will progressively become mandatory in all European waters for gillnet fisheries carried out with vessels over 12m of length. These regulations also recommend 'research on new mitigation measures'. Denmark has taken these new regulations into account in its revised Action Plan for Reducing Incidental By-catches of Harbour Porpoises endorsed in March 2005 (cf. below Implementation of guidelines...)</p>			

**2. Reduction of disturbance to small cetaceans**

<p><b>Information on levels of disturbance:</b></p> <p>The National Environmental Research Institute is investigating the effects on harbour porpoises of wind farm constructions and operations at Nysted Offshore Wind farm and Horns Reef Offshore Wind Farm since 1999. The monitoring programs are based on stationary acoustic recordings (T-PODs) at both farms and in addition ship surveys at Horns Reef. The monitoring programs finish by the end of 2005. The final report on the projects will be available in 2006. Reports on the effect on harbour porpoises of the construction and operation phases are available at the following web pages:  <a href="http://uk.nystedhavmoellepark.dk/upload/pdf/marsvin_2004.pdf">http://uk.nystedhavmoellepark.dk/upload/pdf/marsvin_2004.pdf</a> and <a href="http://www.hornsrev.dk/Engelsk/default_ie.htm">http://www.hornsrev.dk/Engelsk/default_ie.htm</a></p> <p>The two most recent reports are the followings:                  - Tougaard, J., Carstensen, J., Wisz, M.S., Teilmann, J., Bech, N.I., Skov, H., Henriksen, O.D., 2005. Harbour Porpoises on Horns Reef - Effects of the Horns Reef Wind Farm. Annual Status Report 2004 to Elsam Engineering A/S. 69 pp. Available at:  <a href="http://www.hornsrev.dk/Miljoeforhold/miljoerapporter/Porpoises%20Horns%20Reef%202004%20final.pdf">http://www.hornsrev.dk/Miljoeforhold/miljoerapporter/Porpoises%20Horns%20Reef%202004%20final.pdf</a>                  - Tougaard, J., Carstensen, J., Teilmann, J. &amp; Bech, N.I. 2005: Effects of the Nysted Offshore Wind Farm on harbour porpoises. - Annual status report for the T-POD monitoring program. Report request. Commissioned by ENERGI E2 A/S. National Environmental Research Institute. 51 pp.</p> <p>The University of Ruhr-Bochüm (Germany) has resumed in September 2005 a project investigating the hearing sensitivity of harbour porpoises at the Fjord&amp;Bælt, for looking at the effect of man-made noise on harbour porpoise hearing, especially offshore windmill construction works, and to provide guidelines for safe intensity level for sound emissions during underwater operations.</p>
<p><b>Implementation of guidelines, new legislation, etc. to reduce disturbance:</b></p> <p>No new guidelines or legislation implemented.</p>

**3. Protected areas for small cetaceans**

<p><b>Measures taken to identify, implement and manage protected areas:</b></p> <p>The Danish implementation of the EU Habitat Directive included previously the designation of several sites, which were considered important for harbour porpoises (cf. National Report 1998). However, new findings led to a revision of this list and the Danish implementation of the EU Habitat Directive includes now the designation of only one site</p>
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<sup>1</sup> Vinther and Larsen (2004): Updated estimates of harbour porpoise by-catch in the Danish bottom set gillnet fishery. J.Cetacean Res. Manage. 6(1): 19-24.

(The Wadden Sea), which is considered important for harbour porpoises. It will in the future be considered whether other areas should be included.

#### 4. Further research on small cetaceans

##### **Implementation of schemes to use and gain information from stranded cetaceans:**

A Danish contingency plan concerning marine mammals includes guidelines for handling stranded cetaceans.

All other stranded cetaceans than porpoises are systematically collected and tissue samples and skeletons kept in the collections of the two responsible museums, Fisheries and Maritime museum, Esbjerg and Zoological Museum, Copenhagen. Samples from stranded harbour porpoises are opportunistically collected.

The following observations of stranded *cetaceans* were recorded in 2005:

- Harbour porpoise: 143 (some are probably discarded by-caught animals)
- White-beaked dolphin: 10
- White sided dolphin: 2
- Common dolphin: (supposedly) 1
- Fin whale: (supposedly) 1

##### **Research on abundance, population structure etc.:**

NERI conducts regular ship surveys for harbour porpoises at Horns Reef as part of the monitoring program for Horns Reef Offshore Wind Farm. Annual status reports are available and the final report will be ready in 2006.

Tougaard, J., Carstensen, J., Wisz, M.S., Teilmann, J., Bech, N.I., Skov, H., Henriksen, O.D., 2005. Harbour Porpoises on Horns Reef - Effects of the Horns Reef Wind Farm. Annual Status Report 2004 to Elsam Engineering A/S 69 pp. Available at:

<http://www.hornsrev.dk/Miljoeforhold/miljoerapporter/Porpoises%20Horns%20Reef%202004%20final.pdf>

In 2005 Denmark supported the SCANS II (Small Cetaceans in the Europeans Atlantic and North Sea II) dedicated to estimate the abundance of small cetaceans in European Atlantic waters. Extensive ship and aerial surveys were conducted in July 2005, to which NERI, F&B and DHI participated to. Data on abundance for Danish and other EU waters will be available in 2006. Project information and preliminary results can be found at: <http://biology.st-andrews.ac.uk/scans2/>

##### **Research on the effects of pollutants on cetacean health:**

No new project but a publication of previously obtained results:

Strand, J., Larsen, M.M. and C. Lockyer. 2005. Accumulation of organotin compounds and mercury in harbour porpoises (*Phocoena phocoena*) from the Danish waters and West Greenland. *Science of the Total Environment* 350 (2005):59-71.

#### 5. Public awareness and education

##### **Measures taken in the fields of public awareness and education to implement or promote the Agreement:**

The Fjord&Bælt houses 3 harbour porpoises for research purposes and public education and awareness. Through exhibition and talks, the center provides information to the general public and special groups on harbour porpoises in general, the by-catch problem and the effort undertaken to mitigate it in Denmark. The Fjord&Bælt web page ([www.gounderwater.com](http://www.gounderwater.com)) also contains information on harbour porpoise conservation and has a direct link to the ASCOBANS web page.

The Fishery and Maritime Museum is a public museum, which offers lessons on cetaceans as well as exhibitions on whales and whale strandings. Its homepage; [www.hvaler.dk](http://www.hvaler.dk) reports on whales and whale sightings in Danish waters.