# Eleventh Compilation of Annual National Reports

Bonn, 2008


Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas

ASCOBANS Secretariat
UN Campus Bonn
Hermann-Ehlers-Strasse 10
53113 Bonn, Germany
Tel.: +49 228 815 2416/2418
Fax: +49 228 815 2440
ascobans@ascobans.org
www.ascobans.org

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## Preface

The CMS/ASCOBANS Secretariat is pleased to present the 11th Compilation of Annual National Reports comprising reports from the ten ASCOBANS Parties and two Non-Party Range States, Estonia and Latvia. Most of the information included in this Compilation of Annual National Reports relates to the year 2006[2, 3].

The non-Party reports were provided under the harmonized reporting scheme agreed on by ASCOBANS and HELCOM[1] with the kind support of the Secretariat of the Helsinki Convention.

The Secretariat would like to stress once more the importance of the submission of the Annual National Reports pursuant to Article 2.5 of the ASCOBANS Agreement. The compilations summarize and outline the measures and activities taken by Parties and Non-Party Range States over the years, providing a useful overview and valuable insights in the conservation progress and status of small cetaceans within the Agreement area.

Bonn, April 2008

[1] Cf. Recommendation 17/5, taken at the 5th Meeting of HELCOM HABITAT and the relevant decisions of ASCOBANS bodies

[2] In the case of Germany the report covers the years 2006 and 2007.

[3] In the case of Estonia the report covers March 2006 until April 2007.

## A. GENERAL INFORMATION

### 1. Summary of Party Details

| Party | Period Covered | Report Compiler | Coordinating Authority |
|---|---|---|---|
| Belgium | 1 January – 31 December 2006 | Jan Haelters (MUMM/RBINS); additional information provided by Thierry Jauniaux (Ulg) and Francis Kerckhof (MUMM/RBINS) | Since 2006 the national co-ordinating authority is the Federal service Public health, Food chain safety and Environment, Eurostation II, Place Victor Horta 40 box 10, 1060 Brussels, Belgium. Contact person is Paulus Tak (Paulus.Tak@health.fgov.be). The participation to the Advisory Committee meetings remains with RBINS ( MUMM). |
| Denmark | 2006 | Magnus Wahlberg the Danish Institute for Fisheries Research (DIFRES), Esbjerg Fisheries and Maritime Museum, Fjord&Bælt (F&B), the Ministry of Environment – Forest and Nature Agency and the National Environmental Research Institute (NERI). | Fjord&Bælt, Margrethes Plads 1, 5300 Kerteminde, Denmark; magnus@fjord-baelt.dk |
| Finland | 1 January – 31 December 2006 | Penina Blankett Ministry of the Environment | Penina Blankett Ministry of the Environment P.O. Box 380 00131 Helsinki |
| France | 2006 | Sami Hassani Océanopolis Port de Plaisance du Moulin Blanc | Martine Bigan Chargée de mission espèces marines Direction de la nature et des paysages Ministère de l'écologie et du développement durable 14bd. Du Général Leclerc 92524 Neuilly-sur-Seine |
| Germany | 1 January 2006– 31 December 2007 | Stephan Bräger | Oliver Schall Federal Ministry for the Environment, Nature Conservation and Nuclear Safety Postfach 120629 53048 Bonn |
| Lithuania | 2006 | Laura Janulaitienė | Sigute Alisauskiene Ministry of Environment/Biodiversity Unit A. Jaksto 4/9 2600 Vilnius |

| | | | |
|---|---|---|---|
| Netherlands | 1 January – 31 December 2006 | A.S. Adams | Ministry of Agriculture, Nature & Food Quality , focal person is Drs. M.H.W (Maaike) Moolhuijsen. Post address P.O. Box 40201 NL-2500 EK Den Haag. Telephone (+)31 70 378 5315. E-mail: m.h.w.moolhuijsen@minlnv.nl |
| Poland | 1 January – 31 December 2006 | Krzysztof E. Skora & Iwona Kuklik | Department of Forestry, Nature Conservation and Landscape Protection, the Ministry of Environment. The ASCOBANS coordinator office was held first by Andrzej Langowski and then by Anna Liro.<br><br>The research institution providing consulting services to the Ministry of the Environment was Hel Maritime Station, Institute of Oceanography, Faculty of Biology, Geography and Oceanology at the University of Gdansk (ul. Morska 2, 84-150 Hel), and the members of the ASCOBANS Advisory Committee seconded by the Ministry of the Environment were Krzysztof E. Skora and Iwona Kuklik. |
| Sweden | 1 January – 31 December 2006 | Christina Rappe | Christina Rappe<br>Swedish Environmental Protection Agency<br>Blekholmsterrassen 36<br>10648 Stockholm |
| United Kingdom of Great Britain and Northern Ireland | 1 January – 31 December 2006 | Leigh Bryant (Department of Environment, Food & Rural Affairs) and Eunice Pinn (JNCC) | Ms Christine Rumble<br>Dept. for Environment, Food & Rural Affairs (Defra)<br>Species Conservation Branch<br>2 The Square<br>Bristol BS1 6EB |

**Summary of Range State Details**

| **Range State** | **Period Covered** | **Report Compiler** | **Coordinating Authority** |
|---|---|---|---|
| Estonia | March 2006 – April 2007 | Ivar Jüssi | Coordinating authority has changed to State Nature Conservation Centre, appointed member to AC is Ivar Jüssi |
| Latvia | 1 January – 31 December 2006 | Valdis Pilats | |

## 2. Institutions and Organizations mentioned in national reports

| *Country* | *Name* | *Pages* |
|---|---|---|
| **Belgium** | Dolphinarium Bruges, Belgium | 13 |
| | Federal North Sea Administration | 37 |
| | Management Unit of the North Sea Mathematical Models/Royal Belgium Institute for Natural Sciences (MUMM), Brussels | 7, 24, 27, 31, 37 |
| | Natuurpunt, Mechelen | 37, 40 |
| | Research Institute for Nature and Forest (INBO), Brussels | 31 |
| | Royal Belgian Institute for Natural Sciences (RBINS), Brussels | 7, 31, 37 |
| **Denmark** | Danish Fisheries Research Institute (DIFRES), Lyngby | 7, 11, 15 |
| | Danish Hydraulic Institute (DHI), Horsholm | 33 |
| | Fisheries and Maritime Museum, Esbjerg | 7, 27, 38 |
| | Fjord&Bælt, Kerteminde | 7, 11, 20, 21, 33, 37 |
| | National Environmental Research Institute (NERI), Roskilde | 7, 20, 25, 32, 33 |
| | Zoological Museum, Copenhagen | 27 |
| **Finland** | Finnish Environment Institute, Helsinki | 38 |
| | Finnish Food Safety Authority (Evira), Oulu | 38 |
| | Ministry of Agriculture and Forestry, Helsinki | 15 |
| | Ministry of the Environment, Helsinki | 7, 38 |
| | Museum of Natural History, Helsinki | 38 |
| **France** | AL LARK | 33 |
| | Centre de Recherche sur les Ecosystèmes Littoraux Anthropisés, La Rochelle | 36 |
| | Centre de Recherche sur les Mammifères Marins (CRMM), La Rochelle | 21, 28, 33 |
| | French Navy | 21 |
| | French Research Institute for the Exploitation of the Sea (IFREMER), Issy-les-Moulineaux Cedex | 21, 24, 33 |
| | Groupe d'Etude des Cétacés du Cotentin (GECC), Cherbourg-Octeville | 33 |
| | Groupe d'Etude de la Faune Marine Atlantique (GEFMA), Capbreton | 33 |
| | Ministry of Ecology and Sustainable Development, Paris | 21 |
| | Muséum National d'Histoire Naturelle (MNHN), Biarritz | 33 |
| | National Agency for the Marine Protected Areas, Brest | 25 |
| | Oceanopolis, Brest | 33, 39 |
| **Germany** | German Navy | 24/34 |
| | German Oceanographic Museum, Stralsund | 33/34 |
| | Federal Agency for Nature Conservation (BfN), Bonn | 12, 33, 34, 39 |
| | Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), Berlin | 7, 34, 39 |
| | Ministry of the Interior Schleswig-Holstein, Kiel | 21 |
| | Nature and Biodiversity Conservation Union (NABU), Berlin | 21 |
| | Research and Technology Centre, Büsum | 21, 23 |
| | Society for the Conservation of Marine Mammals (GSM), Quickborn | 21, 39 |
| | Society for Dolphin Conservation (GRD), Munich | 21 |
| | Wadden Sea National Park | 25, 39 |
| **Lithuania** | Lithuanian Sea Museum, Klaipeda | 39 |
| | Ministry of the Environment, Vilnius | 7, 24 |
| **Netherlands** | ANWB, Den Haag | 40 |

| | | |
|---|---|---|
| | Institute for Marine Resources and Ecosystem Studies (IMARES), Wageningen | 13, 26, 28 |
| | Ministry of Agriculture, Nature and Food Quality, Den Haag | 40 |
| | Prins Bernhard Cultuurfonds, Amsterdam | 40 |
| | Royal Netherlands Navy | 22 |
| | Royal Netherlands Institute for Sea Research (NIOZ), Den Burg | 28 |
| | Sea Mammal Research Company (Seamarco), Harderwijk | 13 |
| | Stichting De Noordzee (North Sea Foundation), Utrecht | 37, 40 |
| | VSBfonds, Utrecht | 40 |
| **Poland** | Hel Marine Station, Gdansk | 8, 14, 29, 35, 36 |
| | Ministry of Agriculture and Rural Development, Warsaw | 16 |
| | Ministry of Environment, Warsaw | 8 |
| | Sea Fishereies Institute, Gdynia | 19 |
| **Sweden** | Environmental Protection Agency (SEPA), Stockholm | 8, 40 |
| | Swedish Board of Fisheries, Gothenburg | 14, 35 |
| | Swedish Fishermens Orgainsation | 35, 40 |
| | Swedish Museum of Natural History, Stockholm | 29, 40 |
| **UK** | Centre for Environment, Fisheries and Aquaculture Science (CEFAS), Essex | 37 |
| | Ceredigion County Council, Ceredigion | 24 |
| | Cetacean Research and Rescue Unit (CRRU), Banff | 35 |
| | Countryside Council for Wales (CCW), Bangor | 23, 26, 30, 35, 40 |
| | Department for the Environment, Food and Rural Affairs (DEFRA), Bristol | 8, 14, 29, 30 |
| | Friends of Cardigan Bay | 26 |
| | Hebridean Whale and Dolphin Trust, Tobermory | 35 |
| | Institute of Zoology (IoZ), London | 23, 29, 37 |
| | Joint Nature Conservation Committee (JNCC), Peterborough | 21 |
| | Marine Awareness North Wales (MANW), Bangor | 26 |
| | Moray Firth Wildlife Centre, Moray | 25 |
| | Natural History Museum (NHM), London | 29, 35 |
| | Organisation Cetacean (ORCA), Brighton | 33, 36 |
| | Scottish Agricultural College (SAC), Edinburgh | 29, 37 |
| | Scottish Marine Wildlife Watching Code (SMWWC) | 25 |
| | Scottish Natural Heritage (SNH), Inverness | 23, 26, 35 |
| | Sea Mammal Research Unit (SMRU), St Andrews | 14, 23, 35 |
| | Sea Watch Foundation, Oxford | 26 |
| | Welsh Assembly Government, Cardiff | 23, 30 |
| **International** | International Council for the Exploration of the Sea (ICES) | 27 |
| | Global Marine Network (GMN) | 33 |
| | North Atlantic Treaty Organization (NATO) | 24 |
| | OSPAR | 26 |
| | UNEP/CMS | 32, 37, 39, 40 |

## B. NEW MEASURES/ACTION TAKEN BY PARTIES

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

#### *a. Investigations of methods to reduce by-catch*

**BELGIUM**

In 2006 an extensive round of meetings was held in which scientists, relevant administrations and minister's cabinets dealing with the environment and with fisheries participated. The subject of the meetings was the high and yearly increasing number of incidental catches of harbour porpoises in recreational beach gillnet fisheries. Also recreational beach fishermen were consulted. Recreational use of gillnets was already banned at sea (below the low water mark) in 2001. Although the environment administrations pleaded strongly for a ban on the recreational use of gill nets on the beach, especially between March and May, this could not be agreed upon by the recreational fishermen and the fisheries minister. The measures taken by the fisheries minister in the Ministerial Decision of 21 December 2006 (Official Journal of 28 December 2006) were:

- a ban on the use of trammel nets or 'trémail', one of the types of gill net used by recreational fishermen;
- the height of the gillnets has been defined; they can be 80cm high, except for March to May when they can only be 60cm high;
- a limitation on the total length of gillnets per fisherman to 50m between March and May, and 100m in the other months; a limitation to 50m (12 months/year) had already been installed in certain coastal communities for years, and the use of any gillnet had been banned by the coastal community of Ostend, although difficulties in the interpretation of the local legislation exist.

It is not clear yet how inconsistencies between the Flemish and the local community regulations will be dealt with. The effects of the measures on the number of bycaught porpoises will be evaluated in spring 2007.

In order to prevent or reduce bycatches of seals and birds, professional gillnet fishing in the immediate vicinity of the outer port of Zeebrugge was banned: a distance limit of 200m was installed (Ministerial Decision of 21 December 2006; Official Journal of 28 December 2006).

One of the 3 Belgian professional gillnet fishermen (the largest one, often active outside ICES Area IVc) has made enquiries about obtaining pingers. He has experienced big difficulties in obtaining pingers – apparently it was very difficult to find them on the market in 2006; he will try to obtain them in 2007.

One recreational beach fisherman will voluntarily deploy a pinger on his net from 2007 onwards.

**DENMARK**

DIFRES has continued work on mitigating bycatch of porpoises in bottom-set gill nets. A controlled pinger spacing experiment was conducted in the Danish hake fishery in the North Sea in July-September 2006. The results show that the pinger type used can be deployed with larger spacing than hitherto believed. Details are presented in IWC/SC/59/SM2. In the same fishery and period DIFRES also conducted a controlled experiment with alerting pingers. The results were not encouraging. Details are presented in IWC/SC/59/SM (Contact: fl@dfu.min.dk).

DIFRES also continued research on methods of reducing by-catch of dolphins in pelagic trawls as part of

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|---|
| the EU-funded project NECESSITY (Contact: fl@dfu.min.dk).<br><br>In addition, DIFRES currently performs a M. Sc. project at Fjord&Bælt investigating the detection abilities of harbour porpoises to synthesized echoes of various kinds of gill nets (Contact: fl@dfu.min.dk).<br><br>Teilmann et al. (2006)[4] published a paper on how harbour porpoises at Fjord&Bælt react on sounds from pingers, showing habituation effects after prolonged exposure.<br><br>Wahlberg (2006)[5] quantified the loss in sound intensity for pingers in shallow waters, showing that the sound field can be highly variable depending on bottom substrate and bathymetry.<br><br>Jørgensen (2006) finished a M.Sc. at the Copenhagen University / Danish National Protection Agency showing effects of large-scale usage of pingers on the distribution of harbour porpoises. |
| **FINLAND** |
| No further information |
| **FRANCE** |
| EU NECESSITY project to reduce cetacean by-catch in pelagic trawl fisheries , mechanical and acoustic devices (end of project in May 2007)<br>FR PROCET1 project to reduce cetacean bycatch in pelagic trawl with some commercial pingers (end of project in September 2006).<br>FR PROCET2 project : news trials on mitigation in pelagic trawling by using mechanical and acoustic systems. (end of project in September 2007) |
| **GERMANY** |
| A pilot study was initiated by the Federal Agency for Nature Conservation to study the applicability of ecologically sound fish traps as an alternative to gill nets. Eight fishery enterprises are taking part in this study and will compare fish traps with bottom set gillnets regarding selectivity on target and non-target species, catch efficiency and effects on habitats and species. Initial results are promising, indicating a reduction in by-catch of undersized target species, non-target species, and almost no impact on benthic habitats. [C. Pusch]<br><br>No further investigations or project in preparation to test fish traps as an alternative to gill nets [K.-H. Kock]. |
| **LITHUANIA** |
| No investigations on methods to reduce by-catches of harbor porpoises have been conducted so far. |

[4]Teilmann, J., Tougaard, J., Miller, L.A., Kirketerp, T., Hansen, K. & Brando, S. (2006). Reactions of captive harbor porpoises (*Phocoena phocoena*) to pinger-like sounds. - Marine Mammal Science 22(2): 240-260.

[5]Wahberg (2006). Sound propagation of signals from two pingers and an acoustic harassment device in shallow waters. Report, National Board of Fisheries, Sweden.

**NETHERLANDS**

Effects of pingers on the behaviour of North Sea fish species

To reduce the unwanted bycatch in gillnets, pingers (acoustic alarms) have been developed that are attached to the nets. In the European Union, pingers are made compulsory in some areas in 2005 and in others in 2007. However, pingers may affect non-target marine fauna such as fish.

Therefore a study has been carried out by Seamarco and IMARES (Institute for Marine Resources and Ecosystem Studies) in The Netherlands, to quantify the effects of seven presently commercially-available pingers on the behaviour of five North Sea fish species in a large tank. The species tested were: sea bass (*Dicentrarchus labrax*), pout (*Trisopterus luscus*), thicklip mullet (*Chelon labrosus*), herring (*Clupea harengus*), and cod (*Gadus morhua*).
The fish were housed as single-species schools of 9–13 individuals in a tank. The behaviour of fish in quiet periods was compared with their behaviour during periods with active pingers. The results varied both between pingers and between fish species.

Of the seven pingers tested, four elicited responses in at least one fish species, and three elicited no responses. Whether similar responses would be elicited in these fish species in the wild, and if so, whether such responses would influence the catch rate of fisheries, cannot be derived from the results of this study. However, the results indicate the need for field studies with pingers and fish. Based on the small number of fish species tested, the present study suggests that the higher the frequency of a pinger, the less likely it is to affect the behaviour of marine fish.

*Kastelein, Ronald, A., Sander van der Heul, Jan van der Veen, Willem C. Verboom, Nancy Jennings, Dick de Haan, Peter J.H. Reijnders 2007. Effects of commercially-available acoustic alarms, designed to reduce small cetacean bycatch in gillnet fisheries, on the behaviour of North Sea fish species in a large tank. Mar. Env. Res. (in press)*

Effects of pingers on the behaviour of bottlenose dolphins

A basin study started in 2005 on the impact of pinger sounds (a technical mitigation tool to reduce dolphin by-catches in fishing gear) on a captive bottlenose dolphin of the dolphinarium Bruges (Belgium).
Nowadays there are commercial pingers in use, which produce very high-frequency sound of high density noise, which will mask echo-location sonar reflections with possible negative effects for dolphins to navigate in dangerous trawl areas and could have an opposite effect and add to bycatch in stead of a reduction.
The research deals with the question what the threshold of the frequency density is (delta F) and with which type of sound dolphins first meet problems in detecting a target.
IMARES defined the test signals with the SaveWave and AquaTec pinger types as sound model as well as the acoustic measurements and calibrations of the equipment.
The study is conducted in the mainframe of the EU co-funded project “Necessity” and executed in co-operation with Seamarco (Ron Kastelein) and the dolphinarium Bruges, Belgium.

Net modifications to reduce by-catch of cetaceans in pelagic trawling

Sea trials on net modifications to reduce by-catch of cetaceans in pelagic trawling were carried out by IMARES from 15/09/2006 to 05/10/2006 onboard FRV “Walther Herwig III” in EU-project NECESSITY (Contract No SSP8-CT-2003-501605). A ‘cetacean tunnel barrier’ was rigged in the front part of a 4300 meshes circumference pelagic trawl to avoid the animals from entering the aft part of the trawl and induce an escape route in front of the barrier. The research was conducted in the Bay of Biscay along the French shelf edge and started on the most northern position of the research area (position 46.43.3N and 004.36.8 W). The most southern position was 45.05.4 N and 002.25.7 W.
After initial test hauls, fishing was continued day and night, optimise chances of encountering animals and

observe their behaviour against the barrier. Autonomous video recorder systems were attached to the trawl's top panel at the position of the tunnel barrier outlet. A WESMAR™ trawl sonar was attached to the centre of the headrope to detect fish entering the trawl and any other vocalisation as time reference for the video observations at the tunnel barrier. A total of 19 instrumented hauls were carried out, during all of which video and sonar recordings were collected. On night hauls the trawl was fished with an opened codend to avoid fish catches and hauling of the gear at night. A panel of 250 mm square meshes in the codend collected larger animals, which passed the barrier. The towing speed was about 4-5 knots. The ship's hull sonar system was used in passive mode to detect cetacean vocalisations and their position and heading relative to the ship and trawl. On the first night haul three male common dolphins (*Delphinus delphis*) were caught, on that haul the video instrumentation was not fully optimised and the illumination of the target area contained saturated areas.
Relatively large numbers of sunfish (*Mola mola*) were bycaugth with the highest numbers in the southern part of the research area (51 in 12 hours, 11 in 2:15 hours). All newly developed underwater instruments performed as expected, no other damage than a cable failure can be reported.

**POLAND**

In 2006, the Hel Marine Station continued observing the structure and distribution of fishing nets in the Puck Bay. In addition, acoustic detection of harbour porpoises in the areas where the by-catch has been reported was continued to find the optimum method of reducing this threat in the region of the Polish Baltic zone appearing the most hazardous to these animals.

This represented another phase of preparations to implement a project which purpose is to set periodically a raw of pingers across the mouth of the Puck Bay (between Gdynia and Hel) as a acoustic barrier keeping harbour porpoises far from the area when gill nets are widely used.

**SWEDEN**

The pike perch fisheries in the Baltic has for a long time suffered from seal damages. The National Board of Fisheries is investigating if it is possible to replace nets with fish traps both to reduce seal damages and to replace the net fishery with alternative fishing gear.
The traps used are so called push-up traps. They have been a success in Sweden in the salmon and white fish fisheries. They are now introduced in the pike perch fisheries and the results are promising. In the salmon fisheries the traps mostly replace older traps but in the white fish and pike perch fisheries the traps replace nets and therefore reduce net effort. The project started in 2005 and will continue during 2007.

The push-up trap fishing for pike perch in shallow waters.

**UNITED KINGDOM**

The Sea Mammal Research Unit (SMRU) has continued its work on mitigation measures including working with fishermen involved in the pelagic pair trawl fishery for bass during 2006. A new net with extensive escape zones has been designed and implemented, but chances to test the net were limited in early 2006 due to very limited fishing activity in this fishery. In late 2006 a new design of pinger from Italy (DDD) has been tested in the bass pair trawl fishery with apparently encouraging results, though observations are limited at this stage. This work on bycatch reduction is being carried out under the EU project 'Necessity', which will report in June 2007, and with additional funding from DEFRA.

### *b. Implementation of methods to reduce by-catch*

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|---|
| **BELGIUM** |
| No further information |
| **DENMARK** |
| No further information |
| **FINLAND** |
| *The COUNCIL REGULATION (EC) No 812/2004 of 26.4.2004 Laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98* has been implemented by a decree from the Ministry of Agriculture and Forestry. The Commission Regulation for the observation scheme was enforced by a decree form the Ministry of Agriculture and Forestry in 30.12.2005. The observation scheme was started in the summer of 2006 and will continue during the summer of 2007. No by-catches have been reported under this observation period. |
| **FRANCE** |
| Modification of practices in pelagic trawling (headline at 5 m depth) |
| **GERMANY** |
| Beyond the legal frame provided by EC Regulation No. 812/2004, no further implementation of methods to reduce by-catch is in place [K.-H. Kock]. |
| **LITHUANIA** |
| Yes, on the basis of the Council Regulation (EC) No. 812/2004 |
| **NETHERLANDS** |
| No further information |
| **POLAND** |
| In the Polish Baltic Sea zone, by-catch was the only recognisable reason for losses in harbour porpoise headcount. In 2006, the Polish fisheries sector did not take any further steps (apart from the scrapping of fishing vessels pursuant to other undertakings) to reduce the by-catch. Neither did it try to adjust the dangerous fishing methods to the needs of species protection.<br><br>A potential decrease in the anthropogenic removal of the harbour porpoise headcount will probably be achieved as a side effect of the quantitative cut of the potential of the Polish fishing fleet (Fig. 1 and 2), and particularly that segment of it which operated in the areas where these animals occur and used nets potentially hazardous to them (set gill nets). |

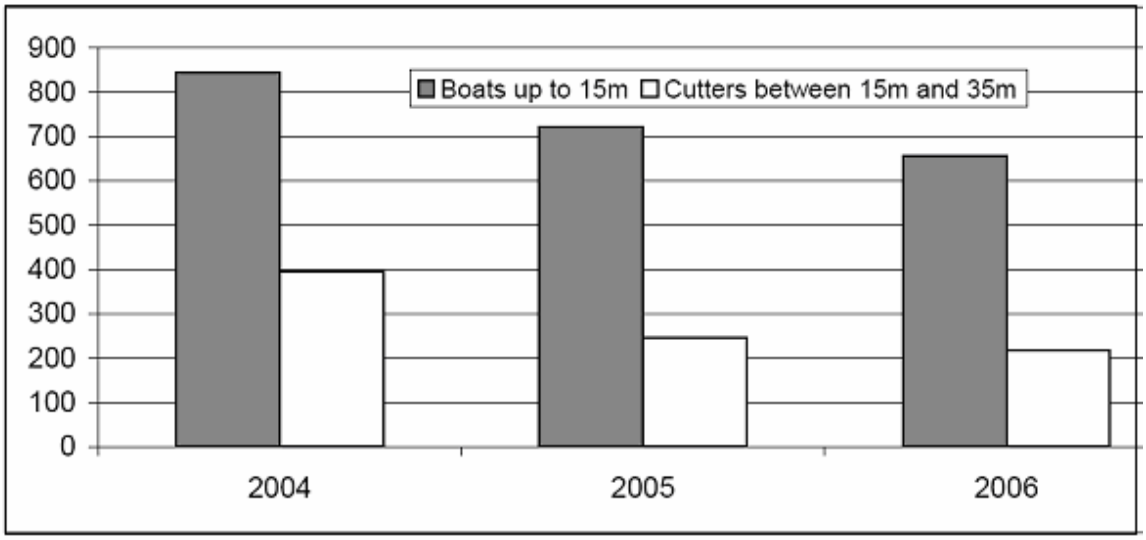



Fig.1. Trends in changes to the number of Polish cutters and boats, 2004-2006 (data based on the register of the Fisheries Department, Ministry of Agriculture and Rural Development)

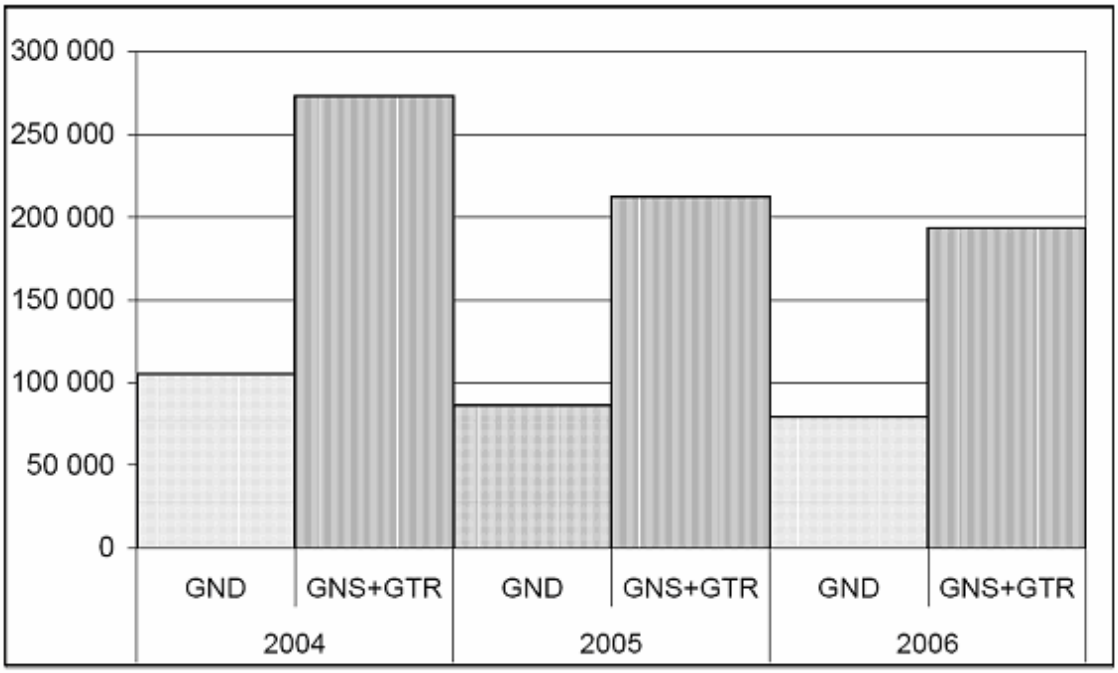



Fig. 2. Number of gill nets available to the Polish Baltic fisheries, 2004 – 2006 (Data based on a register of the Department of Fisheries, Ministry of Agriculture and Rural Development).
Legend:
GND - drift nets
GNS – set gill nets
GTR – set trammel nets

| **SWEDEN** |
|---|
| Implementation of pingers: Swedish fishermen do get pingers for free. Fishermen have been informed about the regulations and also practical information about where and how they can get hold of the pinger. Around 9 fishermen have bought pingers and are using them when fishing in areas where pingers are required.<br>Observer programme: Three observers are employed and have been out on board of fishing boats observing harbour porpoise by-catch since August 2006. |
| **UNITED KINGDOM** |
| **Pingers**<br>Studies of the effectiveness, costs and availability of pingers in the UK, Ireland and France continue to indicate there are no pingers satisfactory for immediate use. The European Commission recognises the dangers they pose to the health and safety of fishermen using the devices in the waters fished by these Member States' vessels. The UK is continuing to work towards developing a suitable pinger and the European Commission is keeping the situation under review. |

### *c. Estimates of by-catch in set net and pelagic trawl fisheries*

| **BELGIUM** | | | |
|---|---|---|---|
| **Observed bycatch in 2006** | | | |
| Species | Estimated number of by-caught animals | Area (ICES area or more detailed) | Notes (type of fishery, effort, seasonal variations, etc.) |
| **Estimates are provisional** | | | |
| *Phocoena phocoena* | 27-31 (+) | IVc | Both recreational fisheries from the beach as professional fisheries at sea. |
| *Lagenorynchus albirostris* | 1 (+) | IVc | Unknown gear |
| **DENMARK** | | | |
| 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 2006.<br>The most recent estimate is that from 2001-2002 presented by Vinther and Larsen (2004)[1] | | |
| Other species | Few, but the exact number and species involved unknown. | | |

[1]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.

**FINLAND**

No further information

**FRANCE**

For pelagic trawl fisheries, estimates have been provided last year with the PETRACET project (pelagic trawling in area VII and VIII).
Updated estimates will be provided with the Necessity project.

Observers for the EC regulation ( n° 812/2004) are deployed and updated estimates for pelagic trawling in area VII and VIII and first estimates for netting in area VIII should be available in June 2008.
The table below brings the last bycatch estimates available for some FR and UE pelagic trawl fisheries (Petracet)

| Species | Estimated number of by-caught animals | Area (ICES area or more detailed) | Notes (type of fishery, effort, seasonal variations, etc.) |
|---|---|---|---|
| Common dolphin | - 10< **11** < 33 | VII | FR Bass pelagic trawling |
| Common dolphin | 24< **575** <1125 | VIII | FR Bass pelagic trawling |
| Common dolphin | 72 < **674** < 2694 | All areas | All EU pelagic trawling |
| | (Petracet results) | | |

**GERMANY**

Last estimate by Kock and Flores (2003): 30 harbour porpoises in German set net fisheries in the North Sea. No estimate for the Baltic Sea; last estimate in the German part-time fishery in the Baltic Sea by Rubsch (2003) [K.-H.Kock].

| Species | Estimated number of by-caught animals | Area (ICES area or more detailed) | Notes (type of fishery, effort, seasonal variations, etc.) |
|---|---|---|---|
| Harbour porpoise | Unknown (3 reported) | Baltic Sea of Schleswig-Holstein (III b) | Gill nets |
| Harbour porpoise | Unknown (5 reported) | Baltic Sea of Mecklenburg-Vorpommern (III d 24) | Gill nets |
| Harbour porpoise | Unknown (0 reported) | German North Sea | |

**LITHUANIA**

| Species | Estimated number of by-caught animals | Area (ICES area or more detailed) | Notes (type of fishery, effort, seasonal variations, etc.) |
|---|---|---|---|
| **-** | **-** | **-** | **-** |

**NETHERLANDS**

| Species | Estimated number of by-caught animals | Area (ICES area or more detailed) | Notes (type of fishery, effort, seasonal variations, etc.) |
|---|---|---|---|
| Harbour porpoise | >200 | Dutch North Sea coast | Presumably gillnets |

**POLAND**

So far, data on harbour porpoise by-catch in the Polish Baltic zone was obtained from fishermen only by their voluntary reporting. Reports, together with the bodies of the caught cetaceans, were collected by the Hel Marine Station, Institute of Oceanography, University of Gdansk. The number of reports was treated as the minimum number of by-catch in the Polish Baltic zone. In 2006, no harbour porpoise by-catch was reported, but 5 dead, stranded specimens were recorded. The reason of the situation might be that the fishermen have stopped reporting by-catch after implementing the Regulation (EC) No 812/2004 about phasing out the drift nets in the Baltic Sea.

Tab.1. Number and location of small cetacean by-catch in the Polish Baltic zone, 2006

| Species | Number of by-caught animals | Area (ICES area or more detailed) | Notes/(type of fishery) |
|---|---|---|---|
| - | 0 | 24,25,26 (Polish EEZ) | All types of Polish fishing fleet |

Polish fisheries regulations effective in 2006 did not obligate fishermen to report marine mammal by-catches. The only exception was the Council Regulation (EC) No 2187/2005 of 21 December 2005 for the conservation of fishery resources through technical measures in the Baltic Sea, the Belts and the Sound, amending Regulation (EC) No 1434/98 and repealing Regulation (EC) No 88/98. Article 10 of this Regulation imposed the obligation to report the daily cetacean by-catch on vessels fishing with drift gill nets. The most recent draft of a legislative resolution of the European Parliament on the Proposal for a Council Regulation amending Regulations (EC) No 894/97, (EC) No 812/2004 and (EC) No 2187/2005 as concerns drift nets(COM(2006)0511-C6-0327/2006-2006/0169(CNS)) introduces a new definition of drift nets, which will apply only to drifting nets ("Drift net means any gillnet held on the sea surface or at a certain distance below it by floating devices, drifting with the current either independently or with the boat to which it may be attached. It may be equipped with devices aiming to stabilise the net and/or to limit its drifting. It is worth noting that in the Polish Baltic zone harbour porpoise by-catch have been reported mostly from the coastal zone as the result of using anchored gillnets (not drifting ones), which, apart from set bottom nets, are the main way of by-catching marine mammals. The Observer Programme planned under Resolution EC 812/2004 was limited to only the last two months of 2006. The programme was organised by the Sea Fisheries Institute in Gdynia. The monitoring covered a small number of large cutters (>15m), fishing only with drift nets and far from the coast (outside the nominal harbour porpoise habitat). The probability of recording a by-catch, if we assume that 5% of the duration of fishing operations by these vessels was monitored, makes it almost impossible to estimate the by-catch, especially as the inspection programme did not cover fishing with set nets or trawl nets.

**SWEDEN**

No further information

**UNITED KINGDOM**

There has been no systematic study of porpoise bycatch rates in gillnet fisheries in the North Sea since 2000, but using bycatch rate data from 1996-2000 combined with current estimates of fishing effort an estimate of bycatch in 2005 was obtained. Bycatch monitoring in set nets has been focused on the southwest of Britain, but no estimates are yet available. As is usual, bycatch estimates of common dolphins in the bass pair trawl fishery have been produced for the winter fishing season (2005-2006), rather than for the 2006 calendar year.

| Species | Estimated number of by-caught animals | Area (ICES area or more detailed) | Notes (type of fishery, effort, seasonal variations, etc.) |
|---|---|---|---|
| Harbour porpoise | 386 (95% CI 293-619) | IVabc | All UK set net fisheries, based on 1996-2000 observations & 2005 effort |
| Common dolphins | 84 (95% CI 84-85) | VIIe | Bass pelagic pair trawl fishery |

### *d. Implementation of guidelines, new legislation, etc. to reduce bycatch*

| **DENMARK** |
|---|
| 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…). |

## 2. Reduction of disturbance to small cetaceans

### *a. Information on levels of disturbance (e. g. seismic surveys, new high-speed ferry routes, studies about acoustic impacts on cetaceans etc.)*

| **BELGIUM** |
|---|
| No more regular high-speed ferry routes between Belgium and the United Kingdom are in operation. |
| **DENMARK** |
| The National Environmental Research Institute has investigated 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. There is a recent paper published in 2006 on this topic by Carstensen et al (2006)[6]. Reports on the effect on harbour porpoises of the construction and operation phases are available at the following web page:<br>http://www.hornsrev.dk/Engelsk/default_ie.htm<br><br>Madsen et al. (2006)[7] reviewed the existing literature on how harbour porpoises and other marine mammals react to sounds from windmills and windmill construction work.<br><br>The University of Ruhr-Bochum (Germany) has resumed a project investigating the hearing sensitivity of harbour porpoises at the Fjord&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. |

[6]Carstensen, J., Henriksen, O.D. & Teilmann, J. (2006). Impacts of offshore wind farm construction on harbour porpoises: acoustic monitoring of echo-location activity using porpoise detectors (T-PODs). - Marine Ecology Progress Series 321: 295-308.
[7]Madsen, P.T., Wahlberg, M., Tougaard, J., Lucke, K. & Tyack, P. (2006). Wind turbine underwater noise and marine mammals: implications of current knowledge and data needs. - Marine Ecology Progress Series 309: 279-295.

**FINLAND**

No further information

**FRANCE**

Contacts are established between French marine biologists and the French Navy and are managed by the Ministry of the Ecology and Sustainable Development and the Admiralty. The aim of these contacts is to exchange knowledge on effects and mitigation measures. A workshop on marine environment characterisation was organised in Brest in September 2006 with small sessions on mitigation of disturbance.

A report on the seismic and acoustic activities of the French oceanographic fleet made by IFREMER is available (mailto: Xavier.Lurton@ifremer.fr). In 2006 IFREMER implemented its first seismic mitigation in the Mediterranean Sea.

Some experiments on the effect of some commercial pingers and prototypes were carried out on common dolphins by CRMM and IFREMER. These studies on acoustic impact are done through the EU NECESSITY project.

**GERMANY**

Between March and July of 2007, a seismic survey was conducted in the northwestern-most area of the German EEZ in the North Sea ("Entenschnabel"). Prior investigations for species protection resulted in mitigation measures as well as observations and the collection of available proof beyond the standards of the "Guidelines for minimizing acoustic disturbance to marine mammals from seismic surveys" of the British Joint Nature Conservation Committee. [M. Fricke]

Auditory studies on the effect of noise were conducted on captive harbour porpoises at the Fjord & Baelt Centre in Denmark to test the animal's tolerance to impulsive sounds. These tests were carried out as part of the joint research project MINOS+ which aimed at assessing the effect of offshore wind turbines on marine top predators. The resulting temporary hearing threshold in the harbour porpoise in response to airgun impulses was determined at an exposure level of 200 dB (peak-peak) re 1µPa and a SEL of 164 dB re 1µPa2s. [K. Lucke]

A mitigation measure was tested when an air bubble curtain was installed at the Fjord & Baelt Centre to protect the animals from ramming impulses from a nearby construction site. The acoustic attenuation reached 16 dB both in terms of sound pressure and energy. As soon as the air bubble curtain was in operation the animals' behaviour returned from strong aversive reactions to the ramming impulses to their normal behavioural pattern. [K. Lucke]

The project conducted by the Research and Technology Centre in Büsum on potential impacts of sound on ears of harbour porpoises using special histo-pathological methods was continued. [U. Siebert]

As a reaction to the projected detonation of up to 130 sea mines and torpedo heads (WWII) at the entrance of Kiel harbour (ammunition dumping site "Kolberger Heide") in September 2006, three German NGOs, the Nature and Biodiversity Conservation Union (NABU), the Society for the Conservation of Marine Mammals (GSM) and the Society for Dolphin Conservation (GRD), asked the authorities to stop these activities and make sure that harbour porpoises in the dumping site and neighbouring SACs are not affected by such detonating of underwater unexploded ordnance (UWUXO). The Ministry of the Interior of Schleswig-Holstein placed a moratorium to examine alternative clearing methods. On 19 October 2007, the NGOs held a symposium in Kiel, Schleswig-Holstein on alternatives to the blasting of UWUXO (results presented on www.NABU-meeresschutz.de) which was the first of its kind in Europe. Results: The shock wave and intense sound pressure of explosions of up to 350 kg gun cotton in each of the 130 warheads can kill marine mammals at a radius of up to 4 km. Hearing impairment can occur at a radius of 13 to 33 km. The protection

of harbour porpoises under the EC habitats directive requires the implementation of sufficient protection or mitigation measures such as bubble curtains, suitable deterrent strategies and the establishment of a safety zone to be visually and acoustically monitored before detonations. Top priority, however, should be given to the recovery of ordnance. Technical options for salvage operations are e.g. the freezing of explosives using supercooling equipment, the use of robotics for safe handling, dilution of explosive substances with hot water followed by photolytic treatment, underwater jet abrasive cutting and subsequent incineration in a mobile detonation chamber. As a result, authorities are planning test detonations with bubble curtains in March 2008 in Schleswig-Holstein and of jet-cutting in April 2008 in Mecklenburg-Prepommerania. [S. Koschinski]

**LITHUANIA**

No measures on disturbance reduction have been implemented

**NETHERLANDS**

*Impact study of a wind farm off the North Sea coast of The Netherlands*

The first phase of a study on the possible impact of a wind farm off the North Sea coast of the Netherlands (close to Bergen at Sea) has been finished. The outcome has provided reference data on abundance, occurrence and distribution of harbour porpoises in the wind farm area and two reference sites. Both boat surveys and the deployment of hydrophones (T-PODs) have been used to acquire the necessary baseline data. The construction of the wind farm has been finalised at the end of 2006. During the construction works, noise levels have been recorded and are being processed. Early 2007, the second phase of this study will start and continue for at least two years to investigate again abundance, occurrence and distribution of harbour porpoises.

*High speed ferry routes*

There are no longer high speed ferry routes under dutch control. In June 2006 Stena Line announced the termination of the high-speed service with the catamaran ferry *Stena Discovery* per 8 January 2007. It had been carrying the majority of the passenger traffic on the Hoek van Holland–Harwich route. This service was halted due to the excessive costs and competition from the budget airlines. The service is replaced by regular ferries.

*Acoustic impacts*

An interdepartmental working group is formed to discuss and survey the issue of acoustic impacts. There are plans to investigate the size of the problem in the Dutch continental shelf. There are also plans to investigate the acoustic sensitivity of Harbour porpoise in basins, but there are problems in the use of test animals.

*Effects of sonar on marine mammals*

In 2003 a study started on the effects of sonar on marine mammals. TNO developed software (SAKAMATA) that provides information on the marine mammals that may be expected in the operational area, as well as on the sensitivity of their hearing. SAKAMATA includes a database for the audiovisual monitoring of marine mammals. For each operational area the system will generate a so-called ramp-up scheme, that takes into account the sonar specifications, the environmental conditions and the species of marine mammals present in the area. With SAKAMATA it is possible to keep the hearing damage to marine mammals within limits.
http://www.tno.nl/content.cfm?&context=markten&content=product&laag1=178&laag2=177&item_id=580&Taal=2
During military exercises of the Royal Netherlands Navy there is the conduct that, when marine mammals are visually or acoustic observed, they turn to passive sonar (which means: only listening).
http://www.minlnv.nl/portal/page?_pageid=116,1640803&_dad=portal&_schema=PORTAL&p_news_item_id=20071 - 14k –

**POLAND**

*Wind farms*:
No project for constructing wind turbines in the sea has been implemented. No analyses are in progress to assess the possible impact of such investment projects on small cetaceans.

*Geological activity*.
No data.

*High-speed ferry routes*
The only vessels that make regular journeys at speeds close to 30 kt (1 kt = 1 Mm/h = 1,852 m/h) in Polish maritime areas were hydrofoils. Hydrofoils sailing in the Polish Baltic zone are passenger cruise vessels providing services between Gdansk Bay harbours. They only operate in the summer. In 2006, the hydrofoil services were the same as a year earlier. They sailed from Gdynia, Sopot and Gdansk to Hel and from Gdynia to Sopot. These vessels could make some 30 journeys a day, but their operation depended on the weather. The short sailing season and the few permanent services combined with the small number of harbour porpoises in Polish maritime areas make a collision between an animal and one of these vessels highly unlikely.

In 2006, no collisions of fast vessels with marine mammals fatal to the latter were recorded in the Gdansk Bay and other regions of the Polish territorial sea.

**SWEDEN**

*Fast Ferries*

| Name/type of craft | Route (return) |
|---|---|
| HSS Stena Carisma | Gothenburg-Fredrikshavn |
| HSC Gotlandia 2 | Nynäshamn-Visby-Oskarshamn |

**UNITED KINGDOM**

In 2006, the Institute of Zoology (IoZ), in collaboration with the Forschungs und Technologiezentrum Westkueste, Buesum (Germany), completed a Defra funded project to examine the feasibility of using formalin-fixed auditory tissue (ears) collected from UK stranded cetaceans to investigate potential auditory impacts of anthropogenic noise exposure. The final report can be found at: http://www.defra.gov.uk/wildlife-countryside/resprog/findings/index.htm

The Ceredigion County Council study of cetacean site-use and boat traffic along the Marine Heritage Coast and Cardigan Bay SAC is in its 14th year with over 8000 hours of volunteer effort. Compliance with codes of conduct for boat-users was lower at more remote boat launching points where public awareness efforts are less concentrated. Operators of speedboats, water skiers and jet-skis were most likely not to follow the code of conduct by travelling too fast when close to dolphins, whereas compliance from Visitor Passenger Boats was over 90%.

The Countryside Council for Wales (CCW), statutory nature conservation advisers to the Welsh Assemby Government, supported an accreditation scheme (WiSe) for over 90 wildlife-watching boat operators in Wales. Similarly, Scottish Natural Heritage, the statutory nature conservation advisors to the Scottish Executive, have supported accreditation of 11 vessels operating in the Moray Firth under the Dolphin Space Programme.

SMRU began monitoring the impact of a tidal turbine on harbour porpoise in Strangford lough, Northern Ireland, in 2006.

### *b. Implementation of guidelines, new legislation etc. to reduce disturbance*

| |
|---|
| **BELGIUM** |
| In April 2004 the construction and exploitation of an offshore windfarm was licenced. The windfarm of 60 turbines will be located on the Thorntonbank, approximately 27 km offshore. During the construction phase (probably starting in 2008), measures will have to be taken for avoiding disturbance of, or harming marine mammals (ramp up procedures for pile driving operations, deployment of pingers, …). On 22 September 2005 a change in the planning schedule, in the size of the turbines (up to 5MW each) and type of foundation (gravitary instead of monopole) was requested. This request was accompanied by an EIA. The change in the planning was authorized in 2006. More information is available at MUMM's website (http://www.mumm.ac.be). |
| **DENMARK** |
| No new guidelines or legislation implemented. |
| **FINLAND** |
| None |
| **FRANCE** |
| In 2006 Ifremer implemented its first seismic mitigation in the Mediterranean Sea. The protocol used was based on the NMFS recommendations. |
| **GERMANY** |
| 2006: Marine mammal risk mitigation procedures and sighting report forms were developed for the German Navy based on NATO URC diver and marine mammal risk mitigation rules. By means of a newly established marine mammal data base, a risk mitigation tool was implemented in Mocassin, a sonar performance program used by the German Navy. Besides the plotted extensions of the sound pressure level thresholds of 160 and 180 dB rel 1µPa, information is provided on the characteristics of the different species abundant in the area and on the required time for the slowest cetacean to leave the danger zone. [U. Velte]<br><br>2007: Instructions for the German Navy on protection of marine mammals and maritime habitats were enacted in September 2007. They are based on the NATO URC diver and marine mammal risk mitigation rules and adapted to feasibilities of the German fleet. They regulate sonar activities and blasting operations. [U. Velte] |
| **LITHUANIA** |
| Annually, new order of Minister of the Environment concerning the compensation for damage of wild fauna and their habitats, including harbour porpoise, was implemented. |
| **NETHERLANDS** |
| There are no guidelines or new legislation to reduce disturbances to small cetaceans. |
| **POLAND** |
| No new guidelines or legal regulations put into effect in maritime areas in 2006 to reduce disturbance. |
| **SWEDEN** |
| Nothing to report |
| **UNITED KINGDOM** |
| The Scottish Marine Wildlife Watching Code (SMWWC) was launched on 27 November 2006 at the Moray Firth Wildlife Centre. The code will help to protect and promote enjoyment and to raise awareness about how best to watch marine wildlife with minimal disturbance.<br><br>Jersey report that the existing code of conduct for dolphin watching has been reinforced through the launch of a web-based system to report marine mammal sightings and publicity of this through a range of media. http://www.gov.je/PlanningEnvironment/Environment/Marine+Management/Research+and+Monitoring/Marine+ Mammal+Recording/default.htm |

## 3. Protected areas for small cetaceans

### *a. Measures taken to identify, implement and manage protected areas*

| |
|---|
| **BELGIUM** |
| No areas were proposed specifically for protecting cetaceans. |
| **DENMARK** |
| 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 (The Wadden Sea), which is considered important for harbour porpoises. It will in the future be considered whether other areas should be included. A M. Sc. study on this topic was finished by Sveegaard (Copenhagen University / National Environmental Research Institute). |
| **FINLAND** |
| None |
| **FRANCE** |
| Natura 2000 marine site procedures in progress: 4 sites have been proposed to the E.C. on the Channel and Atlantic coast for Harbour porpoise and 12 for Bottlenose dolphin .<br><br>New law on Marine Protected Areas voted (march 2006). Marine Protected Area in Iroise Sea in project (public inquiry in autumn 2006).<br><br>Creation of a National Agency for Marine Protected Areas (Brest) |
| **GERMANY** |
| In 2007 the EU-Commission listed the following SCIs (Site of Community Importance) in the German EEZ on the Atlantic and Continental Biogeographic Lists, respectively: Atlantic Region: Doggerbank, Borkum Riffgrund, Sylter Außenriff; Continental Region: Fehmarnbelt, Kadetrinne, Westliche Rönnebank, Adlergrund, Pommersche Bucht mit Oderbank. All SCIs include the harbour porpoise as interest feature. [D. Boedeker]<br><br>Inside the Wadden Sea National Park of Hamburg (German Bight), all fishing activities are prohibited with the exception of shrimp fishery in three gullies by a small number of boats resulting in zero bycatch. Furthermore, no information on disturbances is known. [P. Körber] |
| **LITHUANIA** |
| No protected areas for cetaceans are identified in Lithuania. |
| **NETHERLANDS** |
| **Special Areas of Conservation (SACs) in the Dutch sector of the North Sea**<br>A study has been carried out by IMARES (the Institute for Marine Resources and Ecosystem Studies) in The Netherlands on request of the Dutch government, with the aim to identify candidate Special Areas of Conservation (SACs) under the Bird- and Habitat Directive and OSPAR in the Dutch sector of the North Sea. This study has been finalized and presented to the responsible authorities. In the Dutch Continental Shelf and Coastal Waters 4 areas have been identified as marine areas: Friese Front, Klaverbank, Doggerbank and parts of the coastal zone.<br><br>In 2008, these areas will be proposed to the EU commission as Special Areas of Conservation (SAC's) under the European Birds and Habitats Directives and will also be reported to the OSPAR Secretariat as MPA's according to the OSPAR Convention. Although it is not to be expected that these potential SACs will be designated for small cetaceans especially, they may well contribute to their protection. |

**POLAND**

The year 2006 saw the continuation of work to implement the NATURA 2000 system in Polish sea waters. Elaboration was started of renaturalization programmes for natural habitats and species habitats in NATURA 2000 areas and of management plans for selected species covered by the Bird and Habitat Directives. The harbour porpoise was covered by two plans: renaturalization of the Puck Bay area and the management of a species covered by the Habitat Directive in Poland. The project is to be completed in 2008.

**SWEDEN**

No area has been identified as a protective area for harbour porpoise in the Baltic. In the Skagerrak two Natura 2000 sites has been identified to harbour porpoises.
The sites are:
Vrångöskärgården and Koster-Väderöfjorden.

**UNITED KINGDOM**

CCW has contracted Sea Watch Foundation to monitor the bottlenose dolphins within the Cardigan Bay and Pen Llyn ar Sarnau SACs between 2004 and 2007. The results will include information on the number of dolphins in the SACs, trends in abundance and usage of the site and will be used by CCW to report on the condition of the bottlenose dolphins as a feature of the SAC.

CCW has grant-aided the Whale and Dolphin Cetacean Society to survey of Risso's dolphins and harbour porpoises in north Cardigan Bay and including Pen Llyn ar Sarnau SAC, 2005-2007. A conservation plan for Risso's dolphins will be produced and harbour porpoise data will support selection of a potential SAC..

CCW has grant-aided Friends of Cardigan Bay in 2006 to survey bottlenose dolphins in north Cardigan Bay, and including Cardigan Bay and Pen Llyn ar Sarnau SACs, in conjunction with diver habitat surveys in order to identify important foraging areas. Two offshore Sarns and estuary confluences were surveyed. Sarn Cynfelin was identified as a possible hotspot for cetacean activity, mainly foraging.

CCW has grant-aided Marine Awareness North Wales to undertake further land and boat based surveys of harbour porpoise, 2006-2009 to support selection of SACs for this species. Analysis of data gathered in a previous study period (2002-2004) showed that a relatively high density of porpoise is found during the summer months. Distribution is not homogeneous with particular areas showing higher densities than others.
Scottish Natural Heritage (statutory nature conservation advisers to Government in Scotland) has signed a Memorandum of Agreement with the University of Aberdeen for monitoring the bottlenose dolphins within the Moray Firth SAC between 2004 and 2012. The results will include information on the number of dolphins in the SAC, trends in abundance and usage of the site and will be used by SNH to report on the condition of the bottlenose dolphins as a feature of the SAC.

Proposals to monitor Jersey's 3 Ramsar sites are ongoing. Following an extensive consultation period a coastal zone management strategy is due to be finalized in 2007.

## 4. Further research on small cetaceans

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

**BELGIUM**

In 2006 a record number of harbour porpoises (live/dead stranded, bycaught, found at sea dead) was counted in Belgium: 92 (provisional data). Most of the carcasses were available for research, and were investigated according to the state of decomposition.

- 4 washed ashore alive; 2 of these died and 2 were refloated;
- 3 were found dead at sea (unknown cause of death);
- 27-31 washed ashore dead, and were found to have been caught in fishing gear (27 certain, another 4 most probably); of these, a number could be attributed to recreational fisheries, especially in March and April;
- 27 washed ashore dead, and were found to have - most probably - died from natural causes;
- 27 washed ashore dead, and a cause of death could not be determined.

Of the stranded animals that died or were already dead, and for which a cause of death could be identified (in total 60 animals), 45-52% had died due to bycatch in fishing gear. Bycatch is almost confined to the months of March to May, although 2 bycaught animals washed ashore in December. It is clear that absolute numbers of bycaught animals washing ashore is increasing.

In 2006 two dead white-beaked dolphins washed ashore: an adult and a juvenile. The cause of death of the adult was bycatch in (unknown) fishing gear.

On 5 March 2006 a humpback whale washed ashore. It concerned a young female. This was the first record of a humpback whale in Belgium since 1751 (Haelters *et al*., 2006). The animal had died as a result of the injuries inflicted most probably during the collision with a ship (Jauniaux *et al*., 2006).

In May 2005 a relatively high number of decayed harbour porpoise carcasses washed ashore in a short period of time. The most probable cause of death of most of these animals had been determined as bycatch. A model developed at MUMM demonstrated that the most probable region where the animals had died was the southern North Sea – eastern Channel. The results of this investigation were presented at the 2006 ICES Annual Science Conference (Haelters *et al*., 2006).

**DENMARK**

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 total number of stranded animals in Denmark were:

- 83 harbour porpoises
- 2 whitebeaked dolphins
- 1 whitesided dolphin

**FINLAND**

Look at point 5

**FRANCE**

National stranding network since 1970. National annual report, sample and tissue bank, data base, national coordination CRMM/University of La Rochelle.

**GERMANY**

In Lower Saxony, the system of incidental strandings and opportunistic sightings is continued (see http://www.nationalpark-wattenmeer.niedersachsen.de/master/C43559691_N28553490_L20_D0_I5912119.html)
It appears noteworthy, that a number of harbour porpoises have been reported from the rivers Weser and Elbe as well. The results regarding the river Weser are available at http://cdl.niedersachsen.de/blob/images/C43557725_L20.pdf.
[R. Czeck]

**LITHUANIA**

There is no such scheme implemented

**NETHERLANDS**

**Stranded harbour porpoises**

In September 2006, 64 harbour porpoises stranded earlier in that year on the Dutch North Sea coast, have been investigated. This was a joint study by the Institute for Marine Resources and Ecosystem Studies and the Royal NIOZ. Of the carcasses suitable for investigation, the percentage bycatch-victims are estimated at 64-70%. The majority of the studied animals were subadult, but the estimated percentage bycatch did not differ between young and old(er) animals.

Porpoises strand on the coast the entire year round, but there are two distinct periods when higher numbers were found. The first wave of strandings was observed in March and April. These animals were healthy, freshly dead, often with full stomachs. Of these spring strandings, around 84% are estimated to have died because of drowning in fishing gear (nets). A second wave was discernable in the summer. These animals were usually unhealthy, with very little blubber reserves and empty stomachs. Drowning as a cause of death of these summer strandings was estimated to amount to only 25%. Animals unsuitable for investigation (progressed state of decomposition) were not equally distributed over the year: few in the spring period when the estimated percentage bycatch was very high, and much more rotten animals in summer period with a lower estimated bycatch percentage. When the found bycatch percentages amongst the fresh carcasses were applied to all the collected stranded porpoises including the unsuitable ones, the percentage bycatch victims during the collection period, decreased to 53-57%.

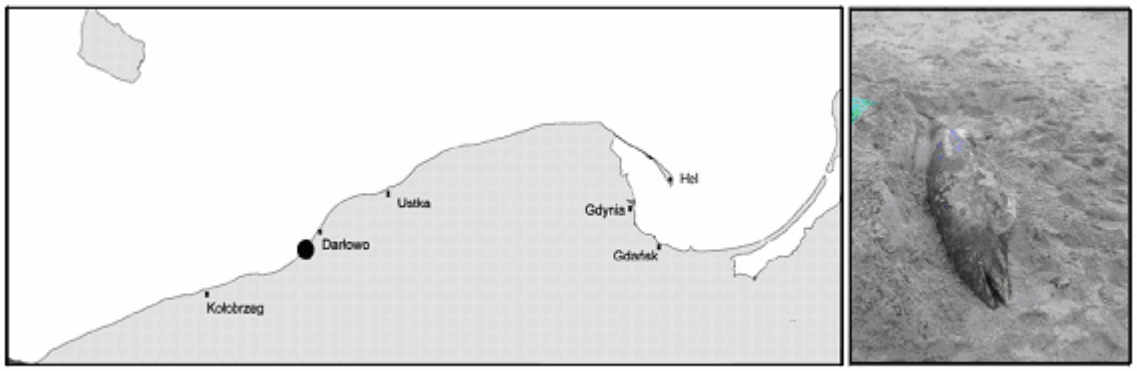
The outcome of this investigation reveals that the percentage bycatch amongst all collected animals is at least 53% (excluding animals which were suspected to be bycaught, but no conclusive evidence) and a maximum bycatch percentage (including the suspected possible bycatch victims).

The number of stranded porpoises on the Dutch North Sea coast has strongly increased in recent years. It is expected that in 2006 around 500 porpoises will strand. The increase runs parallel to the increase in numbers of porpoises observed alive off the Dutch coast. Porpoises are strictly protected under the Dutch Flora and Fauna Law, which is based on the EU Habitat Directive. The large amount and annually rapid increasing number of dead stranded animals, from which a high percentage are bycatch victims, is of great concern.
Leopold M.F. & C.J. Camphuysen 2006. Bruinvisstrandingen in Nederland in 2006: Achtergronden, leeftijdsverdeling, sexratio, voedselkeuze en mogelijke oorzaken. IMARES Rapport C083/06, NIOZ Report 2006_5, Wageningen IMARES en Koninklijk Nederlands Instituut voor Onderzoek der Zee, Texel
(see also: www.walvisstrandingen.nl).

**POLAND**

Five stranded harbour porpoises and one Atlantic white-sided dolphin (*Lagenorhynchus acutus*) (Grey, 1828) were found on the Polish sea coast in 2006. The find represented the first report of the species in Poland. The body of this dolphin was delivered to the Hel Marine Station. The system for collecting data on stranded harbour porpoise corpses did not change in 2006. The Hel Marine Station informs the public that they can find dead animals on beaches and how they proceed in such circumstances. The supporting institutions

include Coast Protection Districts of the Maritime Offices, the Border Guards, the state or municipal police.



Site where a dead atlantic white-sided dolphin was found (05.09.2006)

Cetacean corpses found on the Polish shore are almost always highly decomposed. If advanced analyses can be made, the corpse is transported to the Hel Marine Station which is the only institution in Poland possessing the appropriate permit of the Minister of the Environment. All the acquired information and documentation material is kept in the Station database.

**SWEDEN**

Post mortem investigations are carried out on all small cetaceans by-caught or found stranded in the Baltic. The animals should be brought fresh to the Swedish Museum of Natural History, Stockholm where the investigations are conducted. From harbour porpoises by-caught or stranded on the Swedish west coast, in most cases only a piece of tissues from the dorsal fin is sampled. In some cases whole specimen from the Swedish west coast is sampled. For further detail see prior information sent to ASCOBANS.
During 2006 four porpoises from the Baltic were collected whole. Tissue samples were taken and stored in the Environmental Specimen Bank at the Swedish Museum of Natural History. One of the porpoises was drown in fishing gear, the other three were stranded animals.

**UNITED KINGDOM**

During 2006, under the Defra funded UK Cetacean Strandings Project, a total of 739 cetacean strandings comprising 14 species were reported to the Natural History Museum (NHM) from England, Wales, Scotland, Northern Ireland, the Isle of Man and the Bailiwick of Jersey (see Annex 1). All UK cetacean strandings (together with by-caught cetaceans and those seen floating dead at sea) continue to be recorded on the NHM's National Cetacean Strandings database.

As part of this research the IOZ and the Scottish Agricultural College (SAC) are continuing to investigate diseases and causes of death in UK stranded cetaceans. Pathological, other data and tissue samples from these investigations continue to be archived centrally in the Poseidon database and tissue archives held jointly at the IOZ, SAC and NHM.

In 2006, 146 necropsies of stranded cetaceans (of nine species) were conducted in the UK and a cause of death was established in 131/146 cases. Harbour porpoises (n= 102) and common dolphins (n= 21) were the most commonly stranded species to be examined. By-catch was identified as the cause of death of 12/21 common dolphins, 11/102 harbour porpoises, 1/3 white beaked dolphins and 1/4 striped dolphins. As in previous years, the harbour porpoise and common dolphins diagnosed as by-catches predominantly originated from the southwest of England (mainly Cornwall and Devon) during the winter (December-March). In addition, 18/102 harbour porpoises were diagnosed as fatally attacked by bottlenose dolphins in Scotland (mainly within the Moray Firth-Firth of Forth area), west Wales and the south-west of England.

Another 14 harbour porpoises died due to heavy parasitic infections and/or pneumonias caused by

combinations of parasitic, bacterial and mycotic infections, five harbour porpoises died as a result of a heavy gastric parasite burden, three harbour porpoises had fatal generalized bacterial or fungal infections, one harbour porpoise died from a pneumonia of unknown aetiology and one harbour porpoise died as a result of an acute haemorrhagic enteritis. One northern bottlenose whale died as a result of meningo-encephalitis, one bottlenose dolphin had a fatal generalized bacterial infection, one white beaked dolphin died as a result of a pneumonia of bacterial that was fungal in origin, one white beaked dolphin died from a disseminate ear infection and one white sided dolphin died from a liver infection.

Starvation caused the death of 28 harbour porpoises, two common dolphins and one striped dolphin. Physical trauma (often of unidentified origin) caused the death of a further nine harbour porpoises and one common dolphin. Finally, five harbour porpoises, four Atlantic white-sided dolphins, three common dolphins, three northern bottlenose whales, two sperm whales and one striped dolphin that were apparently healthy died after stranding alive.

In addition to the strandings co-coordinators funded by Defra, the Welsh Assembly Government continues its funding of the Welsh strandings Co-ordinator in conjunction with CCW. The cetacean most commonly found stranded on the Welsh coast is the harbour porpoise and the most common cause of death for this species has changed from bycatch to attack from bottlenose dolphins over the duration of the project.

SMRU in collaboration with the IoZ began to examine dolphin carcasses where bycatch was the suspected cause of death in order to develop forensic techniques for the identification of the specific fisheries involved. Two common dolphins were examined in 2005 and 2006 and specific fishing gears were identified based on characteristic lesions on the skin.
SMRU, in collaboration with IoZ and the UK strandings scheme, has continued to section, stain and read teeth from porpoises and dolphins stranded and bycaught in the UK with the aim of establishing ages at death of the animals concerned. In addition to this, stomach contents of porpoises and dolphins have been quantified by prey species, and the reproductive status of female common dolphins has also been examined in order to address possible changes in pregnancy rates over a 15 year period. A presentation was made to the European Cetacean Society in which it was proposed that stable and relatively low pregnancy rates found in UK common dolphins, coupled with no apparent changes in ages at sexual maturity over the same period, suggest a population that may be close to its carrying capacity. Work on all of these topics relating to small cetacean life history is ongoing.

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

**BELGIUM**

**Sightings**

Numerous sightings of harbour porpoises were reported in 2006. INBO and others reported a few sightings of white-beaked dolphins to MUMM.

**Number of porpoises present in Belgian waters**

Researchers at INBO estimated (roughly) that between 2.000 and 5.000 porpoises were present in Belgian waters in late winter-spring 2005 (Eric Stienen, personal communication). From sightings during two aerial observation flights (modified pollution control flights) performed by MUMM it was (roughly) estimated that the average density of porpoises in Belgian waters in March and April 2004 was between 0.2 to 0.6 per square km, or 650 to 2100 animals (Haelters & Jacques, 2006). Numbers of porpoises in Belgian waters in summer and autumn are much lower.

**Research projects**

**WAKO**: Uitbreiding: Evaluatie van de milieu-impact van WArrelnet- en boomKOrvisserij op het Belgisch Continentaal Plat (WAKO-I): 2006–July 2007

This preliminary project aims at evaluating the environmental impact of beamtrawling against bottom set gill net fisheries in Belgian marine waters. Part of the project is the investigation of the temporal and spatial distribution of harbour porpoises in Belgian waters, and assessing the bycatch problem. One T-PoD is being deployed for some months. It is possible that this initial project is followed by a more extensive project from 2008 onwards.
(contact persons: Jochen Depestele: Jochen.Depestele@ilvo.vlaanderen.be and
Jan Haelters: j.haelters@mumm.ac.be).

**MARIN**

The Federal department of Science Policy is now funding a veterinary surgeon at the MUMM department of the Royal Belgian Institute of Natural Sciences. This veterinary surgeon will be dealing with the autopsies of marine mammals washing ashore in Belgium, the co-ordination with neighbouring countries, and the inventory of a tissue bank of marine mammals. Funding is provided for 2006-2007, with possible future extensions.
Systematic collection and preservation of marine mammal tissues started in 1990 and was extended since 1995 with samples from other regions in the southern North Sea through international co-operation with France and the Netherlands. This collection now constitutes the Belgian Marine Mammal Tissue Bank (BMMTB) placed under the joint management of RBINS and the University of Liège, with the purpose to provide high quality samples of marine mammals (small and large cetaceans as well as pinnipeds) to scientists in a non-profit scientific collaboration. Samples may be used for studies in pathology, microbiology, toxicology, life history, etc. The tissue bank should be considered as a tool to facilitate tissues exchange. Gathering samples of marine mammals from various European areas will help to have a geographical overview of variations and, given that some samples were already collected in 1990, temporal trends could also be investigated. Contact person: Thierry Jauniaux: t.jauniaux@mumm.ac.be).

**Publications, communications**

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**DENMARK**

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 available at: http://www.hornsrev.dk/Engelsk/default_ie.htm

Kyhn (2006) finished a M. Sc. thesis at Aarhus University / National Environmental Research Institute concerning the efficiency of using automated acoustic data loggers for estimating the abundance of harbour porpoises.

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/

The Danish Environmental Research Institute is also investigating if there are genetic differences between harbour porpoises in various parts of the Baltic Seas. To this investigation they also add genetic analysis of previously collected samples from Little Bælt in 1860 and in 1941-44.

**FINLAND**

In plan

**FRANCE**

Monitoring of the coastal group of bottlenose dolphins (Oceanopolis Brest in Iroise Sea), photo-identification, home range, population structure...

Photo identification of bottlenose dolphins of the Bay of Mont Saint Michel and Cotentin (GECC, GMN, Ocean-Ocean, AL Lark)

Boat surveys on cetaceans in the southern Bay of Biscay (GEFMA); relationship between cetacean populations and climate change (MNHN in the framework of a regional programme on the marine environment).

Data collection of opportunistic sightings (CRMM/ULR, GECC, GEFMA, Oceanopolis Brest).

Systematic boat survey of cetaceans in relation to oceanographic, planktonic and pelagic fish patterns in the Bay of Biscay (programme PELGAS, Ifremer, CRMM/ULR)

Ferry observer surveys between Roscoff and Cork , Portsmouth and Santander (Oceanopolis Brest/Orca).

**GERMANY**

Last estimate (2005) by SCANS II; aerial surveys in the German EEZ 2003 2006 (please see Herr et al. 2008: ASCOBANS AC15 Working Document) [K.-H. Kock]

Since 2002, the German Oceanographic Museum (inc. research & development projects funded by the Federal Agency for Nature Conservation) is studying the utilization of porpoises click detectors (so-called T-PODs) for monitoring. It presents the results of a five year monitoring of harbour porpoises with three measuring belt and Kadetrinne) plus addition proved to be valuable for accurately describing seasonal fluctuations. A variety of anchorage and surveillance systems was tested to safeguard the measuring devices. [M. Dähne]

In 2007, a monitoring scheme to evaluate the presence of harbour porpoises in the waters of Lower Saxony (German Bight) by line-transect surveys was initiated. First surveys will be performed in spring of 2008. [R. Czeck]

In the mouth of the river Elbe (German Bight), sightings of harbour porpoise are collected regularly by the crew of the ferry between Cuxhaven and Neuwerk. [P. Körber]

2006: A study on the possibility to detect cetaceans with military sonar systems used in a passive mode was completed. The results were presented in a final report and on various international conferences. A marine mammal data base was set up including sightings and strandings mainly from the Baltic and North Sea as well as characteristics of 126 species like vocalization, behaviour and appearance. The data base also contains worldwide maps of occurrence of each species on a 1°x1° grid based on literature data. The data base was compared with others and presented on various international meetings. To obtain seasonal predictions of marine mammal occurrence, the relative environmental suitability (RES) model was adjusted to seasonal input parameters and tested by means of two cetacean species, the harbour porpoise and the northern bottlenose whale. The results, presented in a FWG report, indicated that there is sufficient information to increase the temporal resolution of existing RES predictions. [U. Velte]

2007: For possible military sonar test areas, e.g. the Bay of Biscay and the Iberian Basin, studies concerning the abundance, distribution and migration of cetaceans were carried out. The German marine mammal data base of the German Navy, containing sightings, strandings, worldwide maps of occurrence and characteristics of 126 species like vocalization, behaviour and appearance, was extended. The relative environmental suitability (RES) model yielded seasonal predictions of habitat suitability, densities and uncertainties of the following six beaked whale species: Cuvier's beaked whale (*Ziphius cavirostris*), northern bottlenose whale (*Hyperoodon ampullatus*), Sowerby's beaked whale (*Mesoplodon bidens*), Blaineville's beaked whale (*Mesoplodon densirostris*), Gervais' beaked whale (*Mesoplodon europaeus*) and True's beaked whale (*Mesoplodon mirus*). The predictions allow the mapping of species occurrence in the form of relative occurrence (based on RES values ranging from 0.00 (unsuitable habitat/absence) to 1.00 (highly suitable habitat/presence) as well as absolute densities corresponding to the estimated number of animals per km2. The model results are inserted into the marine mammal data base. [U. Velte]

As a tribute to the International Year of the Dolphin, the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety in collaboration with the Federal Agency for Nature Conservation and the German Oceanographic Museum organized an international four-day conference on "Conservation of small

cetaceans and marine protected areas" in Stralsund, 29th October to 1st November 2007. Over 100 participants from 14 European countries came together to hear and discuss conservation problems such as bycatch in fishing gear, fast ferries, increasing underwater noise pollution from anthropogenic sources such as SONAR as well as industrial construction and pile-driving etc. The plight of the Baltic Sea harbour porpoise and implementation of the Jastarnia Plan were other important issues discussed. These discussions led to the formulation of five "Stralsund Recommendation" on how to improve EC Regulation No. 812 /2004 to prevent bycatch in fishing gear (http://www.habitatmarenatura2000.de/de/aktuelles-year-of-the-dolphin-conclusions.php).
[S. Bräger]

**LITHUANIA**

No research on abundance and population structure

**NETHERLANDS**

**Overview on occurrence harbour porpoises**

A historic overview has been produced on the past and present occurrence of harbour porpoises in Dutch coastal waters. This overview spans the 20th century till present, and is based on effort corrected sightings from sea-watching sites, and *ad hoc* observations.
Along the mainland North Sea coast in The Netherlands (i.e. south of Den Helder) several fixed effort sites exist, providing very frequent sightings and a clear-cut seasonal pattern.
Harbour porpoises initially were winter visitors in Dutch coastal waters, but are becoming year-round visitors. Adult females with small offspring have been observed with increasing regularity in recent years. Documented strandings show a similar trend: increasing numbers wash ashore, and more frequent strandings of young individuals. It is postulated that the same trends and seasonal patterns occur at the west-Frisian islands, which is corroborated by opportunistic sightings only.

The increase in harbour porpoises in the Dutch waters since the mid-1990s until now, is linked to a distributional shift of harbour porpoises in the North Sea rather than population fluctuations. The re-distribution may be triggered by local reductions or regional changes in principal prey available.

**POLAND**

So far, basic data on the distribution of cetaceans (mainly harbour porpoises) in the Polish Baltic zone has come from by-catch reports for these animals. It has been supplemented with the infrequent reports of observations and dead animals found on the shore.

Due to the radical reduction in the number of harbour porpoises, the information on the sites where their presence has been reported is accumulated in the database of the Marine Station over many years, and only then successively analysed.

In 2006, just as in 2005, efforts were put into developing the system for the hydro-acoustic monitoring of harbour porpoise presence. It is supposed to supplement the current resource of data from by-catches and in the future may become the leading method for acquiring such data.

No new data was obtained in 2006 for analyzing the harbour porpoise population structure.

**SWEDEN**

The Swedish Fishermen organisation and the Swedish Board of Fisheries are estimating the presence of harbour porpoises in the south Baltic sea, the areas covered by the 812 regulation. 35 Porpoise click detectors (PCL:s) have been placed close by fishing gear during the year 2006. The results from the study are being analysed.

A study concerning the effect of pingers on seals has been carried out, with the objective to investigate if the seal-fishery conflict increase with increasing use of pingers. The results are currently being analysed.

**UNITED KINGDOM**

The Scottish Executive, in partnership with Scottish Natural Heritage, is currently supporting a 3 year project to determine the distribution, abundance and population structure of bottlenose dolphins around the Scottish coast which is due to report in 2008/09.

SMRU coordinated the Small Cetaceans in the European Atlantic and North Sea (SCANS II) project funded by the European LIFE Nature programme and 12 European governments. The final report will be delivered in 2007. The project generated precise and unbiased estimates of abundance for the harbour porpoise, bottlenose, common and white-beaked dolphin and minke whale in European Atlantic shelf waters from 36°-62°N for July 2005. The abundance estimates will contribute to the development of a management procedure to set safe bycatch limits for the harbour porpoise. Recommendations for monitoring small cetacean populations in between major decadal-scale absolute abundance surveys will also be made by the project.

A further project, CODA, has been commissioned to extend this work into the European Atlantic in 2007 with a final report for the project expected in September 2008.

A variety of academic institutions and NGOs undertake work on abundance and distribution of cetaceans in UK waters. These include:

- University of Aberdeen Lighthouse field station conduct boat-based photo-ID surveys in northeast Scotland for bottlenose dolphins as well as land-based visual and acoustic surveys of behaviour and distribution of Tursiops and harbpur porpoises in the Moray Firth.
- The Cetacean Research and Rescue Unit conducting systematic line-transect surveys along 82km stretch of coastline in the southern Moray Firth, carried out annually between May and October, targeting mainly minke whales but recording all cetaceans
- Hebridean Whale and Dolphin Trusts in collaboration with SMRU and SNH carry our visual and passive acoustic surveys in the Inner and Outer Hebrides for harbour porpoise

CCW has grant-aided common dolphin surveys in the Celtic Deep and St Georges Channel from 2004 to 2007 in order to gain an abundance estimate and understand the importance of the area for this species. Information derived from acoustic monitoring using towed hydrophones shows significantly lower whistle parameters for Celtic Sea common dolphins than those in the English Channel. This suggests that either they represent two distinct populations or that dolphins in the Channel may have shifted their whistle frequencies upward to avoid masking by traffic noise.

### *c. Research on the effects of pollutants on cetacean health*

**BELGIUM**

**Publications, communications**


Das, K., De Groof, A., Jauniaux, T. & Bouquegneau, J.-M., 2006. Zn, Cu, Cd and Hg binding to metallothioneins in harbour porpoises *Phocoena phocoena* from the southern North Sea. BMC Ecology 2006, 6:2

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Schnitzler, J., Siebert, U., Jepson, P., Beineke, A., Jauniaux, T., Bouquegneau, J.-M. & Das, K., 2006. Biological trace element research, F.I.: 1,4440 Humana Press.


**DENMARK**

No new projects reported.

**FINLAND**

None

**FRANCE**

Transfer and bioaccumulation of heavy metals (mainly mercury, lead and cadmium) in cetaceans (CRELA/ULR)

**GERMANY**

A possible connection between the stranding of a northern bottlenose whale in a Swedish fjord and the test of a low frequency towed array sonar system (LFTAS) in the Skagerrak in August 2004 was studied in detail and published in a FWG report. A connection was suspected due to the spatial and temporal coincidence of both events and strandings of this species are very rare in that area. The sound pressure levels the whale might have received were probably low and no vital organs were immediately damaged. The sonar test was carried out using the best known mitigation procedures but the whale might have tried to escape and got lost in a region where it could not survive. [U. Velte]

**LITHUANIA**

None

**NETHERLANDS**

In order to assess consequences at the population level of exposure of marine mammals to contaminants, a study has been carried out using bottlenose dolphins as a sentinel species. It has shown that the annual accumulation rate of polychlorinated biphenyls (PCBs) in Sarasota bottlenose dolphins might be depressing the population growth rate.

*Hall, A.H., McConnell, B.J., Rowles, T.K., Aguilar, A., Borrell, A., Schwacke, L., Reijnders, P. J. H. & Wells, R. S. 2006. An individual based model framework to assess the population consequences of polychlorinated biphenyl exposure in bottlenose dolphins. Environ. Health Perspect. 114 (suppl.1): 60-64.*

**POLAND**

2006 saw the publication of results of work conducted by a team of scientists from the Medical University of Gdansk, the Gdansk University of Technology and the Hel Marine Station: Ciesielski T., Szefer P., Bertenyi Zs., Kuklik I., Skóra K., Namiesnik J., Fodor P. 2006. Interspecific distribution and co-associations of chemical elements in the liver tissue of marine mammals from the Polish Economical Exclusive Zone, Baltic Sea. Environment International 32: 524-532.

**SWEDEN**

See above

**UNITED KINGDOM**

In 2006, tissue samples collected by the IOZ and SAC from 100 UK-stranded cetaceans were analysed at the Centre for Environment, Fisheries & Aquaculture Science (CEFAS) Burnham Laboratory, Essex for the flame retardant compounds hexabromocyclododecane (HBCD) and tetrabromobisphenol A (TBBP-A)

A long-term dataset developed jointly by IoZ, SAC and CEFAS since 1989 now contains pathology and toxicology data for over 600 UK-stranded cetaceans (mainly harbour porpoises). In 2006, a case-control epidemiological study involving statistical analyses of 257 UK-stranded harbour porpoises was published (Hall et al. 2006). It demonstrated and quantified statistically significant associations between elevated Σ25CBs levels and increasing risk of infectious disease mortality (using physical trauma cases as controls).

Reference

Hall, A.J., Hugunin, K., Deaville, R., Law, R.J., Allchin, C.R., Jepson, P.D. (2006) The risk of infection from polychlorinated biphenyl exposure in harbour porpoise (*Phocoena phocoena*) – A case-control approach. *Environmental Health Perspectives* **114**, 704-711

## 5. Public awareness and education

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

| **BELGIUM** |
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| Information on stranded animals and on sightings, is given on the website of MUMM (in Dutch, English and French): http://www.mumm.ac.be/EN/Management/Nature/search_strandings.php. For reporting sightings, the following email account can be used: dolphin@mumm.ac.be<br><br>Natuurpunt, the Belgian partner of Birdlife International, has developed, together with Stichting De Noordzee, the RBINS (Royal Belgian Institute of Natural Sciences), the minister responsible for the North Sea and the Federal service Public health, Food chain safety and Environment, a folder on cetaceans in the North Sea, which was widely distributed (in Dutch and French). The folder contains information on what to do when observing cetaceans and whom to inform of sightings. It explains the goals of ASCOBANS and gives information about the declaration by UNEP/CMS of 2007 as the year of the dolphin.<br><br>In 2006 a book was written b by Kees Camphuysen and Gerard Peet on the cetaceans of Dutch and Belgian waters. RBINS co-operated by providing Belgian data. The book was presented in Belgium by the minister of the North Sea at a press conference on 17 January 2007. The book has been published in Dutch and English. |
| **DENMARK** |
| 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.fjord-baelt.dk) also contains information on harbour porpoise conservation.<br>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 reports on whales and whale sightings in Danish waters |
| **FINLAND** |
| Finland has continued the harbour porpoise sighting campaign and received information of only one sighting of single animal in year 2006. In July 2006 there was an observation of a humpback whale in Bothnian Bay (Himanka).<br>http://www.fimr.fi/en/itamerikanta/uutiset/1298.html<br><br>In late autumn, on 3rd November 2006, two common dolphins were first sighted off Korppo in the Archipelago Sea, in front of the Korppostörm Archipelago Center . After two weeks of swimming around in a bigger area they were found drowned in a fishing gear (salmon) in the 14th November near Kimito, 50 km eastwards from Korppoo. It was a cow and its calf, the calf was still suckling. The two carcasses where taken to Evira (Finnish Food Safety Authority) in Oulu for post mortem analysis.<br><br>The harbour porpoise working group has finalized its work in preparing the Finnish action plan for harbour porpoise. Below is the English summary of the publication:<br><br>**The harbour porpoise in Finland**<br>**Suggested actions for the protection of the harbour porpoise in Finland**<br><br>The goal of the working group has been to develop an operating plan regarding Finland's approach to harbour |

porpoise conservation, as mandated by international and national conservation obligations for the species. General information about the harbour tortoise, and its habitat and characteristics are
provided, and its occurrence in Finland since the mid 1800's. A harbour porpoise registry for the Finnish Environment Institute has been compiled from this information. The harbour porpoise has been observed in Finnish waters for at least 7000 years. Information about the occurrence of the harbour porpoise since the 1800's has been gathered from sightings reported in the Museum of Natural History archives, literature, news paper articles and collections of specimens. Based on these findings, the
harbour porpoise has, before the 1940's, been a fairly common sight on Finnish coasts. The advent of particularly harsh weather conditions during the winters of the 1940's on the Baltic Sea resulted in a crash in the harbour porpoise population. Since then, the revival of the harbour porpoise population has been hindered by environmental toxins, a decrease in the quality of their habitats and by the species being accidentally caught in fishing nets. Underwater noise pollution and increased marine traffic are other factors that may inhibit the reviving of the harbour porpoise population. In 2001, Finland's Ministry of the Environment started a harbour porpoise sighting campaign, and as a result, sightings
of the species have indeed increased. This does not imply, however, that the number of harbour porpoises is increasing. Rather, it is likely that people report their sightings more readily than before.
The harbour porpoise is classified as a threatened species world wide. Under EU legislation, whales, including harbour porpoises, are listed in annex IV of the Habitats Directive, and are thus classified as a species in need of special protection. Additionally, the species is protected under various international environmental conservation agreements. The purpose of the ASCOBANS Agreement is to protect the small whales that inhabit the Baltic and North seas, This agreement includes a specific plan, the
Jastarnia Plan, for the reviving of the Baltic harbour porpoise. Under Finland and Åland's legislation, the harbour porpoise is a protected species. Lately, the species has not been examined in reports by the Ministry of the Environment because there has been no evidence of its increase in Finland. Based on information collected for this study, the harbour porpoise may have increased in numbers also in
Finnish territorial waters. The working group maintains that the assessment of the harbour porpoises' endangered status should be reviewed. The report presents different ways in which the protection of the harbour porpoise can be furthered in Finland. The working group holds to the importance of surveying the occurrence of harbour porpoises in Finland's territorial waters, and to participating in international research projects related to the species. Some of the species' protection action is based on EU legislation. This is true, for example, for fishing restrictions and monitoring programs. Additional ways of increasing publicity to raise harbour porpoise awareness are also suggested.

**FRANCE**

Public conferences (Oceanopolis-Brest)

**GERMANY**

To promote public awareness for small cetaceans and their marine habitats i. a. the following activities took place:
- In November 2006 a disc "Habitat Mare Natura 2000 - Research and Protection for the North Sea and the Baltic Sea" was published by the federal Nature Protection Agency to inform about the proposed marine protected sites in Germany. Parts of this disc deal with the harbour porpoise and the need of its protection.
- On the occasion of the year of the dolphin BMU published a poster showing the small cetacean species of the ASCOBANS agreement area. - The activities in the frame of ASCOBANS were published in German language in the magazine of the BMU called "Umwelt", so:

- More protection for dolphins and small cetaceans in the North East Atlantic - legislation for the Enlargement of ASCOBANS past the parliament" (Umwelt 3/2006 / p.152 154)

- Small cetacean agreement ASCOBANS has a new team - the Meeting of parties in autumn 2006 and its implementation (Umwelt 6/2006 / p. 361-363). [O. Schall]

The project 'Meereslauschen', initiated by the National Park information centre Norderney, was started in the

Wadden Sea National Park of Lower Saxony in 2007. Within this project, sounds recorded by a submarine microphone will be transmitted to the information centre and offered to the visitors The project focuses mainly on educational purposes but will also be able to detect and evaluate the presence of harbour porpoises near Norderney over the year. The system will be operational by mid- 2008. [R. Czeck]

To promote the "International Day of the Baltic Harbour Porpoise" (3rd Sunday in May), a press release was distributed by the Society for the Conservation of Marine Mammals (GSM) in order to announce a painting competition for children up to the age of 12 years: "Children paint harbour porpoises". The model on the mini poster to attract the attention of young 'artists' -and the media, of course- has been created by the German artist Kim Schmidt. The best 25 drawings were selected and awarded by three judges (Kim Schmidt, Rüdiger Strempel and Prof. Wulf Schomer of the University of Osnabrück). The winner receives a one-week sail course in the Baltic harbour of Heiligenhafen. All winners will be announced during the upcoming "International Day of the Baltic Harbour Porpoise" 2008 during a press conference in the Zoological Museum of the University of Hamburg. [P. Deimer]

Following the annual tradition since 2002, the GSM has again approached 280 sailing clubs and marinas as well as several yachting magazines to raise awareness for its project "Sailors on the lookout for harbour porpoises". (The project received the ASCOBANS Award in 2007). As usual, the results of the project were excellent and will appear as German contribution probably to AC-16 in 2009. The media feedback is still very good, and the dissemination of the request for sightings is widespread. Since 2007 the sighting map also includes stranded animals (http://www.habitatmare.de/de/schweinswalsichtungen1m.php).
[P. Deimer]

**LITHUANIA**

The lectures for schoolchildren and students on protection of marine ecosystems including small cetaceans as well as local harbor porpoises are permanently organized in the Lithuanian Sea Museum display.
The International Harbour Porpoise Day mentioned in the Lithuanian Sea Museum in 2006 too. The postcards about harbor porpoise have been distributed among the Lithuanian Sea Museum visitors, ASCOBANS posters and a life-size model of harbour porpoise have been exhibited at the aquarium hall of the Lithuanian Sea Museum, moreover, a film and photos about harbour porpoise were demonstrated to the visitors.
The article in daily press and interview in the radio of Klaipėda were made on the International Harbor Porpoise Day.

**NETHERLANDS**

Whales and Dolphins of the North Sea
In 2006 the Foundation of the North Sea published a book "Walvissen en dolfijnen in de Noordzee", written by Kees Camphuysen and Gerard Peet. This book was sponsored by the ministry of Agriculture, Nature and Food Quality, VSBfonds, Prins Bernhard Cultuurfonds, ANWB, Natuurpunt, Federal public service, Kust en zee, UNEP en CMS. It is also available in English under the title: "Whales and Dolphins of the North Sea". This book will be presented to the members of the ASCOBANS meeting.

**POLAND**

No information

**SWEDEN**

The International Day of the Porpoises, in May 2006, was celebrated at "Havets Hus" (an aquarium in Lysekil, on the Swedish West Coast.

The Swedish Museum of Natural History in Stockholm has a web site where sightings of live porpoises are collected. The web site has been in force since 2003 and an increasing number of sightings have been registered. During 2006 a total of 184 sightings were reported to the web page (in 2005: 129, 2004 130 and in 2003 49). So far the webpage is in Swedish only (http://www.nrm.se/tumlare).
A poster was produced by the SEPA and the Swedish Museum of Natural History in Stockholm illustrating

the differences between seals and porpoises, some basic information about porpoises and information on how and where to report sightings. Out of 2000 copies, so far ¼ of the posters have been distributed to various institutions.

Posters regarding sighting harbour porpoises has been distributed to Fishermens organisations, marinas, museums, directly to fishermen by onboard observers and others.
A DVD with information about pingers and their effect have been distributed to museums, the fishermens organisation, the observers and others.

**UNITED KINGDOM**

CCW grant-aided a Marine Education Outreach Scheme 2003-2006 run by Marine Awareness North Wales involving visits to schools, press releases and events implementing community involvement in marine biodiversity action plans. Particular emphasis is given to harbour porpoise land and boat-based surveys involving the public and volunteers.

The Wales Marine Mammal Group contributed to the Wales Marine Mammal Newsletter that included updated species distribution maps and summaries of ongoing work.

The Marine and Coastal Interpretation Centre in Gorey, on the east of Jersey , which opened in 2005 has continued to provide information and education to large numbers of locals and visitors.

## C. NEW ACTIONS/MEASURES TAKEN BY NON-PARTY RANGE STATES

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

#### *a. Investigations of methods to reduce by-catch*

| **ESTONIA** |
|---|
| No investigations carried out |
| **LATVIA** |
| No investigation carried out |

#### *b. Implementation of methods to reduce by-catch*

| **ESTONIA** |
|---|
| No methods implemented |
| **LATVIA** |
| No methods implemented |

#### *c. Estimates of by-catch in set net and pelagic trawl fisheries*

| **ESTONIA** | | | |
|---|---|---|---|
| Species | Estimated number of by-caught animals | Area (ICES area or more detailed) | Notes (type of fishery, effort, seasonal variations, etc.) |
| | | | |
| *Phocoena phocoena* | No bycatch estimated | | |
| **LATVIA** | | | |
| Species | Estimated number of by-caught animals | Area (ICES area or more detailed) | Notes (type of fishery, effort, seasonal variations, etc.) |
| *Phocoena phocoena* | 0 | Coastal waters of Latvia | |
| | | | |
| | | | |

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

***a. Information on levels of disturbance (e. g. seismic surveys, new high-speed ferry routes, studies about acoustic impacts on cetaceans etc.)***

| **ESTONIA** |
|---|
| No new information |
| **LATVIA** |
| No further information |

***b. Implementation of guidelines, new legislation etc. to reduce disturbance***

| **ESTONIA** |
|---|
| No changes in legislation since the last reporting period. No guidelines implemented. |
| **LATVIA** |
| None |

**3. Protected areas for small cetaceans**

***a. Measures taken to identify, implement and manage protected areas***

| **ESTONIA** |
|---|
| No new activities since last reporting period. Works with trilateral (EST/LAT/LIT) LIFE-Nature project "Marine Protected Areas in the Eastern Baltic Sea" (Baltic MPAs)" launched in august 2005 is going on. Identification of areas important for harbour porpoises in Eastern Baltic Sea is part of project. Preparatory phase of harbour porpoise acoustic survey finished in march 2007. |
| **LATVIA** |
| No |

**4. Further research on small cetaceans**

***a. Implementation of schemes to use and gain information from stranded cetaceans***

| **ESTONIA** |
|---|
| Small scale public awareness campaign is going on. Part of named campaign is collection of data about any record of present and historical abundance of harbour porpoises, information about strandings included. |
| **LATVIA** |
| No |

***b. Research on abundance, population structure etc.***

| **ESTONIA** |
|---|
| Pilot acoustic survey with porpoise detectors carried out September 2004 – may 2006. New survey launched autumn 2006. |
| **LATVIA** |
| No |

***c. Research on the effects of pollutants on cetacean health***

| **ESTONIA** |
|---|
| Not planned in nearest future. |
| **LATVIA** |
| No |

**5. Public awareness and education**

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

| **ESTONIA** |
|---|
| No new activities since the last reporting period. |
| **LATVIA** |
| Celebration of International Day of the Baltic Harbour Porpoise 2006 |