Twelfth Compilation of Annual National Reports

Bonn, 2008



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

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Preface

The CMS/ASCOBANS Secretariat is pleased to present the 12th Compilation of Annual National Reports comprising reports from the ten ASCOBANS Parties and one Non-Party Range States, Estonia. Most of the information included in this Compilation of Annual National Reports relates to the year 2007.

The non-Party report was provided under the harmonised reporting scheme agreed on by ASCOBANS and HELCOM¹ 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 summarise 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, September 2008

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

A. GENERAL INFORMATION

Party	Period Covered	Report Compiler	Coordinating Authority
Belgium	2007	Jan Haelters (MUMM/RBINS); additional information provided by Thierry Jauniaux, Francis Kerckhof, Sigrid Maebe, Alexandre de Lichtervelde and Koen Van Waerebeek	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	2007	Magnus Wahlberg Fjord&Baelt Margrethes Plads 1 5300 Kerteminde Denmark	Fjord&Bælt, Margrethes Plads 1, 5300 Kerteminde, Denmark; magnus@fjord-baelt.dk
Finland	2007	Penina Blankett	Penina Blankett Ministry of the Environment P.O. Box 380 00131 Helsinki
France	2007	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	2007	Stefan Bräger	Oliver Schall Federal Ministry for the Environment, Nature Conservation and Nuclear Safety Postfach 120629 53048 Bonn
Lithuania	2007	Laura Janulaitienė	Sigute Alisauskiene Ministry of Environment/Biodiversity Unit A. Jaksto 4/9 2600 Vilnius

1. Summary of party details

Netherlands	2007	Meike Scheidat	Ministry of Agriculture, Nature &
		Wageningen Imares, meike.scheidat@wur.nl	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@minInv.nl
Poland	2007	Iwona Kuklik,	Monika Lesz
		Krzysztof E.Skóra	Ministry of the Environment.
			52/54 Wawelska Str.
			00-922 Warsaw Poland
	~~~		
Sweden	2007	Christina Rappe	Christina Rappe
			Swedish Environmental Protection
			Agency Blekholmsterrassen 36
			10648 Stockholm
United	2007	Leigh Drught (Department of	Ms Christine Rumble
Kingdom of	2007	Leigh Bryant (Department of Environment, Food & Rural	Dept. for Environment, Food
Great Britain		Affairs) and Eunice Pinn	& Rural Affairs (Defra)
and Northern		(JNCC)	Species Conservation Branch
Ireland			2 The Square
			Bristol BS1 6EB

# Summary of Range State Details

Range State	Period Covered	Report Compiler	Coordinating Authority
Estonia	April 2007 – April 2008	Ivar Jüssi	Coordinating authority has changed to State Nature Conservation Centre, appointed member to AC is Ivar Jüssi

Country	Name	Pages
BELGIUM	Century 21 Cocoon	29
	Federal department of Science Policy	29
	Management Unit of the North Sea Mathematical Models/Royal Belgium Institute for Natural Sciences (MUMM), Brussels	14, 22, 29, 30, 35
	Ministry of Environment	35
	Natuurpunt, Mechelen	35
	Royal Belgian Institute for Natural Sciences (RBINS), Brussels	29, 31
	Royal Yacht Club, Brussel	35
	University of Liège	29
DENMARK	Aarhus University	11
	Danish Fishermen's Association	11
	Fishery and Maritime Museum, Esbjerg	36
	Fjord & Bælt, Kerteminde	11, 19, 26, 36
	National Environmental Research Institute (NERI), Roskilde	11, 22, 24, 26
	National Institute of Aquatic Resources (DTU-Aqua), Lyngby	11, 14
	University of Southern Denmark	11, 26
FINLAND	Ministry of Agriculture and Forestry, Helsinki	11
FRANCE	AL Lark	31
	Centre de Recherche sur les Mammifères Marins (CRMM), La Rochelle	19, 26, 31
	French Navy	19
	French Research Institute for the Exploitation of the Sea (IFREMER), Issy-les-Moulineaux Cedex	19, 22, 31
	Groupe d'Etude de la Faune Marine Atlantique (GEFMA), Capbreton	31
	Groupe d'Etude des Cétacés du Cotentin (GECC), Cherbourg-Octeville	31
	Ministry of Ecology and Sustainable Development, Paris	19
	National Agency for the Marine Protected Areas, Brest	24
	Oceanopolis, Brest	31,36
	Ocean-Ocean – Eclosarium, Ile-de Houat	31

# 2. Institutions and Organizations mentioned in national reports

	University of Brest	31
GERMANY	Deutscher Bundestag	22
	Federal Agency for Nature Conservation (BfN), Bonn	12, 31, 32
	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Berlin	32, 36
	Federal Nature Protection Agency	36
	Forschungs und Technologiezentrum Westkueste, Buesum	19, 21
	German Oceanographic Museum	31, 32
	German Navy	22, 23, 32
	Ministry of the Interior Schleswig-Holstein, Kiel	20
	Nature and Biodiversity Conservation Union (NABU), Berlin	20
	Society for Dolphin Conservation (GRD), Munich	20
	Society for the Conservation of Marine Mammals (GSM)	20, 36, 37
	University of Kiel	19
	University of Osnabrück	37
	Wadden Sea National Park of Hamburg (German Bight)	24, 36
	Zoological Museum of the University of Hamburg	37
LITHUANIA	Dolphinarium	37
	Lithuanian Sea Museum, Klaipeda	37
	Ministry of the Environment, Vilnius	23, 32
NETHERLANDS	Ministry of Defense	20
	Royal Netherlands Institute for Sea Research (NIOZ)	30
	Royal Netherlands Navy	20
POLAND	Hel Marine Station, Institute of Oceanography of the University of Gdańsk	13, 17, 26, 33, 37, 39
	Ministry of Agriculture and Rural Development, Warsaw	15, 17
	National Fund for Environmental Protection and Water Management – NFOŚiGW	13
SWEDEN	Environmental Protection Agency (SEPA), Stockholm	40
	Havets Hus, Lysekil	40
	Kolmården	33
	Swedish Board of Fisheries, Gothenburg	33
	Swedish Fishermens organisation	33
	Swedish Museum of Natural History, Stockholm	27, 40
UK	British Joint Nature Conservation Committee, Peterborough	19

	Centre for Environment, Fisheries and Aquaculture Science (CEFAS), Essex	34
	Ceredigion County Council, Ceredigion	21
	Cetacean Research and Rescue Unit (CRRU), Banff	33
	Countryside Council for Wales (CCW), Bangor	21, 25, 27, 34, 40
	Department for the Environment, Food and Rural Affairs (DEFRA), Bristol	14, 21, 27
	Hebridean Whale and Dolphin Trust, Tobermory	34
	Institute of Zoology (IoZ), London	21, 27, 34
	Marine and Coastal Interpretation Centre, Gorey	40
	Marine Awareness North Wales (MANW), Bangor	25, 40
	Moray Firth Wildlife Centre, Moray	23
	Natural History Museum (NHM), London	27
	Scottish Agricultural College (SAC), Edinburgh	25, 27, 34
	Scottish Marine Wildlife Watching Code (SMWWC)	23
	Scottish Natural Heritage (SNH), Inverness	21, 25, 33, 34
	Sea Mammal Research Unit (SMRU), St Andrews	13, 21, 27, 33, 34
	Sea Watch Foundation, Oxford	25
	University of Aberdeen	25, 33
	Wales Marine Mammal Group	40
	Welsh Assembly Government, Cardiff	21, 27
INTERNATIONAL	European LIFE Nature Programme	33
	European Cetacean Society	28
	International Council for the Exploration of the Sea (ICES)	14
	International Fund for Animal Welfare (IFAW)	30. 35
	Global Marine Network (GMN)	31
	OSPAR	24
	North Atlantic Treaty Organization (NATO)	22, 23

## B. NEW MEASURES/ACTION TAKEN BY PARTIES

## 1. Direct Interactions of small cetaceans with fisheries

## Investigations of methods to reduce by-catch

BELGIUM
none
DENMARK
- The National Institute of Aquatic Resources (DTU Aqua; formerly Danish Institute for Fisheries Research) has conducted research on mitigation of harbour porpoise by-catch in Danish waters. More specifically:

Investigated the effects of alerting pingers on by-catch in bottom set gill net fisheries;

Investigated sound propagation from pingers under varying conditions;

Investigated durability and handling of commercially available pingers (with the Danish Fishermen's Association/Krog Consult)²;

Determined target strength of standard and high-density (iron-oxide and barium sulphate) gill nets (with Aarhus University) ³;

Studied gill net detection capabilities of captive harbour porpoises (with Fjord and Bælt and Aarhus University);

- Aarhus University and Fjord&Bælt completed several studies that may prove useful for reducing bycatch:

Measurements of the acoustic activity of free-ranging harbour porpoises⁴;

Detailed measurements of the frequency content of captive harbour porpoise signals ⁵;

Studies on harbour porpoise hearing abilities⁶, and pilot studies on how harbour porpoises react to sound.

- The University of Southern Denmark has in collaboration with the National Environmental Research Institute conducted a study on harbour porpoise biosonar using an acoustic tag developed by T Akamatsu⁷. This study may have an important impact on how we view harbour porpoise acoustic and foraging activities, and thereby how the by-catch problem may be alleviated.

## 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 Finnish observation scheme started 2006 and ended at 31.12.2007. No by-catches

² Krogh, C. (2007). Anvendelse af pingere I dansk garnfiskeri – overvågning, håndtering og effekt. Final report.

³ Larsen, F., O. R., Eigaard, J. Tougaard (2007). Reduction of harbour porpoise (Phocoena phocoena) bycatch by iron-oxide gillnets. Fisheries Research 85(3): 270-278.

⁴ Villadsgaard, A., M. Wahlberg, J. Tougaard (2007). Echolocation clicks of wild harbour porpoises, Phocoena phocoena. Journal of Experimental Biology 210: 56-64.

⁵ Hansen, M. (2007). M.Sc. thesis, Aarhus University.

⁶Beedholm, K., L. A. Miller (2007). Automatic Gain Control in harbour porpoises (Phocoena phocoena)? Central versus peripheral mechanisms. Aquatic Mammals 33(1): 69-75.

⁷ Lennenschmidt, M. (2007). M. Sc. thesis, University of Southern Denmark.

have been reported under this observation period. The Finnish report of 2006 to the European Commission can be downloaded from the MAF page: <u>www.mmm.fi</u> (in finnish). The final report of the observation scheme is under preparation.

## FRANCE

EU NECESSITY project to reduce cetacean by-catch in pelagic trawl fisheries , mechanical and acoustic devices (end of project in May 2007)

FR PROCET1 project to reduce cetacean bycatch in pelagic trawl with some commercial pingers (end of project in September 2006).

FR PROCET2 project: news trials on mitigation in pelagic trawling by using mechanical and acoustic systems. (end of project in September 2007)

Fishing industry is continuing some experiments with acoustic systems in pelagic trawling.

Some experiments planned for set nets equipped with pingers

#### 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]

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 harbour porpoises have been conducted so far.

## NETHERLANDS

World-wide many cetaceans drown incidentally in fishing nets. To reduce the unwanted bycatch in gillnets, pingers (acoustic alarms) have been developed that are attached to the nets. In the European Union, pingers were 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 in The Netherlands in 2006 (published 2007), 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.

To determine how well harbour porpoises can locate sound sources, and thus can locate acoustic alarms on gillnets, the ability of a porpoise to determine the location of a sound source was investigated by training an animal to indicate the active one of 16 transducers in a 16-m-diameter circle around a central listening station. The duration and received level of the narrowband frequency-modulated signals were varied. The animal's localization performance increased when the signal duration

increased from 600 to 1000 ms. The lower the received sound pressure level (SPL) of the signal, the harder the animal found it to localize the sound source. When pulse duration was long enough (  $\approx 1$  s) and the received SPLs of the sounds were high (34–50 dB above basic hearing thresholds or 3–15 dB above the theoretical masked detection threshold in the ambient noise condition of the present study), the animal could locate sounds of the three frequencies almost equally well. The porpoise was able to locate sound sources up to 124° to its left or right more easily than sounds from behind it.

In a further study the target strength as a function of aspect angle were measured for four species of fish using dolphin-like and porpoise-like echolocation signals. The polar diagram of target strength values measured from an energy flux density perspective showed considerably less fluctuation with azimuth than would a pure tone pulse. Using detection range data obtained from dolphin and porpoise echolocation experiments, the detection ranges for the Atlantic cod by echolocating dolphins and porpoises were calculated for three aspect angles of the cod. Maximum detection ranges occurred when the fish was broadside to the odontocete and minimum detection ranges occurred when the cod was in the tail aspect. Maximum and minimum detection ranges for the bottlenose dolphin in a noise-limited environment was calculated to be 93 and 70 m, respectively. In a quiet environment, maximum and minimum detection ranges for the bottlenose dolphin were calculated to be 173 and 107 m, respectively. The detection ranges for the harbor porpoise in a quiet environment were calculated to be between 15 and 27 m. The primary reason for the large differences in detection ranges between both species was attributed to the 36 dB higher source level of the bottlenose dolphin echolocation signals.

## New publications

Au, W.W.L., Benoit-Bird, K.J., and Kastelein, R.A. (2007) Modeling the detection range of fish by echolocating bottlenose dolphins and harbor porpoises. Journal of the Acoustical Society of America, 121(6), 3954-3962.

Kastelein, R. A., van der Heul, S., van der Veen, J., Verboom, W.C., Jennings, N., and Reijnders P. (2007) Effects of acoustic alarms, designed to reduce small cetacean bycatch, on the behaviour of North Sea fish species in a large tank. Marine Environmental Research 64, 160-180.

Kastelein, R.A., de Haan, D., Verboom, W.C. (2007) The influence of signal parameters on the sound source localization ability of a harbor porpoise (*Phocoena phocoena*). JASA 122, 1238-1248.

## POLAND

The pilot, three-year project for actively protecting porpoises from being by-caught in the Puck Bay (financed by: National Fund for Environmental Protection and Water Management – NFOŚiGW; implemented by: Hel Marine Station, Institute of Oceanography, University of Gdańsk) was developed to test the operating effectiveness of a pinger sound barrier across the entrance into the Puck Bay, a body of water from which almost 40% of Polish reports of porpoise by-catch originate. This method is based on a novel application of pingers as a temporary method of reducing porpoise mortality in Puck Bay fisheries while maintaining the traditional fishing from boats. The early stage of the project calls for an *in-situ* research of the fishing effort during the year and the occurrence of porpoises in this region, and for using pingers in subsequent years. It is also planned to conduct a broad education and publicity campaign to present the assumptions and expected results of the project to fishermen and the public. The complete results of the project can only be achieved with the full cooperation of fishermen fishing in the region covered by these activities.

## SWEDEN

Research for alternative fishing gear is carried out in Sweden.

Norwegian cod traps have been tried in the Baltic Sea. Results have been promising and shown that the traps do catch cod and that they, in certain areas, can be an alternative to gill nets. However further trials are needed and the project is continuing in 2008.

The pike perch fisheries in the Baltic sea have suffered from seal damages for a long time. In 2008 pike perch/white fish traps are being introduced as an alternative to gill nets in the purpose of reducing seal damage. However these traps are not a by-catch threat to Harbour Porpoise. A certain percent of the cost of the trap will be funded by the government when fishermen are investing in the 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. 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.

Implementation of pingers: Currently at least 9 fishermen have purchased pingers and are using them in the waters concerned by the regulation 812.

#### 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

## Implementation of methods to reduce by-catch

#### BELGIUM

The measures taken by the fisheries minister in the Ministerial Decision of 21 December 2006 (Official Journal of 28 December 2006 – see annual report for 2006) were assessed, and it was clear they did not eliminate bycatch in recreational fisheries. Although fewer porpoises seemed to have been bycaught in recreational gill nets, the reason for this reduction cannot be solely attributed to the new legislation. It is clear that less porpoises were present in the southern North Sea during spring 2007 than in previous years (Camphuysen, unpublished). The inconsistencies between the regional (recreational) fishery legislation and the local (municipal) legislation remains unresolved in certain local communities – eg. on the beaches of the community of Ostend, no gillnet fishing is allowed.

One of the 3 Belgian professional gillnet fishermen (the largest one, often active outside ICES Area IVc) did not succeed in obtaining pingers. Apparently it was difficult to find them on the market in 2007, and it seemed that the ones available did not meet their goals or had difficulties in their deployment. Therefore an information meeting was organised at Seamarco (Middelburg, The Netherlands) with 2 of the 3 gillnetters, and a researcher of the fisheries research station (ILVO) and MUMM (2 August 2007). In a constructive atmosphere, bycatch problems the use of pingers and EC Regulation 812/2004 were discussed. A demonstration was given of the undertaken at Seamarco (in which two porpoises are used). Seamarco (founded by Ron Kastelein) is a company performing research on anthropogenic noise related to the hearing of fish and marine mammals.

In 2007, a new fishing vessel, capable of setting gillnets, was launched (it started fishing in 2008). A steady increase in the number of gillnetters can be expected, given the ever increasing fuel prices. In 2007 fuel prices increased to  $0.50 \in /I$  in September, and peaked during the last two months of 2007 with  $0.57 \in /I$ . The average fuel price in 2007 was equal to the one in 2006:  $0.48 \in /I$ .

#### DENMARK

- In relation to EU Council Regulation 812/2004, DTU Aqua has had dedicated observers on board pelagic trawl fishery vessels for a total of 137 days at sea in the North Sea and 15 days at sea in ICES

subdivision 21. No by-catch of cetaceans was observed.

- The total number of reported stranded cetaceans along the Danish coasts in 2007 were:

95 harbour porpoises (Phocoena phocoena)

3 whitebeaked dolphins (Lagenorhynchus albirostris)

2 whitesided dolphin (Lagenorhyuncus acutus)

1 killer whale (Orcinus orca)

1 long-finned pilot whale (Globicephala melas)

3 minke whales (Balaenoptera acutorostrata)

Out of the 95 porpoises, three were definitely bycaught in gill nets. It is believed that a major part of the remaining 95 harbour porpoise strandings have been due to by-catch in gill-net fisheries, as several of the stranded animals had wounds characteristic of net entanglement.

## FINLAND

No further information

## 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

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## POLAND

In frames of implementation of methods to reduce by-catch, the reduction of the fishing fleet constituted an indirect method. According to the Ministry of Agriculture and Rural Development, in 2007, the Polish fishing fleet comprised 665 vessels, including 513 which fished with passive tackle, including gill nets (GNS+GND), of which 21 were registered as fishing with drift gill nets (GND). So a further reduction of the fleet was recorded, which could probably have led to a reduction in the quantity of fishing tackle of the fishing effort in the fishery. According to the "EU Fleet Register", this process took place as follows:

As of 1 January of:	2005	2006	2007	2008
Cutters fishing with GNS:	674	566	524	513
Cutters fishing with GND:	32	25	21	21

This data also covers the fleet fishing places where no porpoises occur (the Oder and the Vistula Lagoons), so the fleet fishing with gillnets in Baltic waters was actually even smaller in number.

## SWEDEN

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#### UNITED KINGDOM

#### Pingers

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.

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

	0	bserved bycatch in 200	17
		-	I
Species	Estimated number of	Area (ICES area or	Notes (type of fishery, effort,
opooloo	by-caught animals	more detailed)	seasonal variations, etc.)
	E	stimates are provision	al
Phocoena	6 (+)	IVc	Recreational beach fisheries
phocoena	0(1)	100	
Phocoena	6 (+)	IVc	Unknown fisheries
phocoena	0(1)	100	
DENMARK			
Species	Estimated number of	Area (ICES area or	Notes (type of fishery, effort,
Species	by-caught animals	more detailed)	or Notes (type of fishery, effort seasonal variations, etc.)
	No new estimate for		
	2006.		
Harbour	The most recent	22 22 24 IIIa IV/b	
porpoises	estimate is that from 2001-2002 presented	23, 23, 24, Illa, IVb	
	by Vinther and		
	Larsen (2004) ⁸		
	Few, but the exact		
Other species	number and species	23, 23, 24, Illa, IVb	
	involved unknown.		
FINLAND			
No further infor	mation		
FRANCE			
<b>- - - - - -</b>			year with the PETRACET p

⁸ 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.

Observers for the EC regulation (n° 812/2004) are deployed. Updated estimates for pelagic trawling in area VII and VIII and first estimates for set netting in area VIII should be available in June 2008. Bycatch of porpoise are observed in set nets of area VIII.

Investigations on the methodology problem to extrapolate bycatch to small size vessels when observers cannot be put on board.

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 2004-2005)	
Common dolphin	24< 575 <1125	VIII	FR Bass pelagic trawling (year 2004-2005)
Common dolphin	72 < 674 < 2694 (Petracet results)	All areas	All EU pelagic trawling (year 2004-2005)
Common dolphin	0<57<134 (2006 national report)	VII-VIII	FR tuna pelagic trawling (year 2006)
GERMANY			
Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Harbour porpoise	Unknown	Baltic Sea of Schleswig-Holstein	Notes (type of fishery, effort,

Harbour porpoise	(3 reported)	Schleswig-Holstein (III b)	seasonal variations, etc.)
Harbour porpoise	Unknown (5 reported)	Baltic Sea of Mecklenburg- Vorpommern (III d 24)	Gill nets
Harbour porpoise	Unknown (0 reported)	German North Sea	Gill nets

## LITHUANIA

No information supplied

## NETHERLANDS

No by-catches have been recorded in the ongoing monitoring programme on the incidental bycatch of cetaceans in Dutch pelagic fisheries under EU Council Regulation 812/2004 in 2007.

About 320 porpoises were found stranded in 2007. Stranded porpoises were collected for necropsies, to reveal bycatch percentages among the stranded animals. A total of 58 animals, ranging from freshly dead when stranded to severely putrefied, received a full (or as full as possible) necropsy. The final numbers of bycaught animals for 2007 are not available yet. However, in 2006, about 55% of the necropsied animals were certain or likely bycatch victims. Bycatch has apparently been a major cause of death during the last two decades.

Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Harbour porpoise	>150	Dutch North Sea coast	Presumably bottom set gillnets

## POLAND

The Hel Marine Station of the University of Gdańsk, which has been collecting occasional reports of porpoise observations and by-catch since 1990, received no by-catch notification in 2007. This can prove that the number of these animals decreased even further, but it can just as well prove that fishermen have not intention to notify their by-catch. The Cetacean By-Catch Monitoring Programme carried out in 2007 by the Ministry of Agriculture and Rural Development yielded no by-catch observations. It should be noted that the programme focused on assessing the impact of two types of fishing (with trawls and drift nets) considered to be relatively safe for porpoises in the Polish fisheries based on data from voluntary by-catch reports of 1990-2000.

At the same time, 5 dead porpoises found on the Polish coast were notified in 2007. These cases may result from unreported by-catch (not necessarily made in the Polish economic zone). The evidence that being by-caught could have been the root cause of those animals' death comes from the general condition of their bodies and signs of human tampering with their carcasses (abdomen cut open, internal organs removed).

Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Phocoena phocoena	5 stranded animals	25,26	No data
		24 Poland	

## SWEDEN

During 2007 there has been an ongoing observer program in the pelagic trawl and set net fisheries as asked for in the 812 regulation. Three observers have worked full time as observers. Starting September 2006, the observers have boarded pelagic trawlers above 15 meters in length in order to monitor bycatches of harbour porpoises. Sea areas that have been covered are North Sea, Skagerrak/Kattegatt, Southern, Eastern and Northern Baltic Sea. A total of 1342 trawl hours have been observed until end of December 2007 which corresponds to 4.61% of the fishing effort, needed to be observed, of the Swedish pelagic trawlers. No bycatch of harbour porpoise has been observed in any of the sea areas during the programme. In 2007, 3 219 227 net meter hours were observed and this corresponds to 9.2 % of the fishing effort concerned in the 812 regulation. No by-catch of harbour porpoises was observed.

No further estimate of by-catch was made 2007. An interview survey was conducted in 2001. Swedish fishermen were interviewed regarding by catches of seals, harbour porpoises and birds gave the following estimates:

#### Estimations from the survey conducted in 2001.

Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort,
---------	---------------------------------------	-----------------------------------	---------------------------------

Phocena phocena	About 89 per year	IIIa, Swedish Kattegat Sea	Gillnets and trammel nets and pelagic trawls				
Phocena phocena	About 25 per year	III a, in the Swedish part of Skagerrak.	Bottom trawls				
			seasonal variations, etc.)				

## 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.

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

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

## 2. Reduction of disturbance to small cetaceans

# a. <u>Information on levels of disturbance (e. g. seismic surveys, new high-speed ferry</u> 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. A report on shipping in Belgian waters was submitted to ASCOBANS AC 2008.

#### DENMARK

K. Lucke (University of Kiel) finished a study in 2007 on temporary changes in the hearing abilities of a captive harbour porpoise at Fjord & Bælt, Kerteminde, when exposed to sounds resembling those generated during pile driving in shallow waters. Results from this investigation are to be published during 2008 or 2009.

#### FINLAND

No information

## FRANCE

Contacts have been 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 report on the seismic and acoustic activities of the French oceanographic fleet made by IFREMER is available from Xavier.Lurton@ifremer.fr

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 were done through the EU NECESSITY project. A directional pinger is experimented on trawls in order to fit the exclusion area to the trawl and to avoid a too large exclusion area.

#### GERMANY

Between March and July 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 minimising 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 1 $\mu$ Pa and a SEL of 164 dB re 1 $\mu$ Pa2s. [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

The first phase of a study on the possible impact of a wind farm off the North Sea coast of The Netherlands (close to Egmond 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. Early 2007, the second phase of this study started and continued to investigate again abundance, occurrence and distribution of harbour porpoises. The construction of the wind farm was finalised at the end of 2006. During the construction works, noise levels have been recorded and are being processed. Patterns of strandings of porpoises near the construction site and at greater distances along the Dutch coastline have been studied to reveal any construction-related peaks in strandings (none were found).

A study on the behavioural avoidance threshold level of a harbour porpoise for a continuous 50 kHz pure tone has been finalized and the results will be published in 2008.

Kastelein, R.A., Verboom, W.C., Jennings, N., and de Haan, D. (2008) Behavioral avoidance threshold level of a harbor porpoise (*Phocoena phocoena*) for a continuous 50 kHz pure tone. J. Acoust. Soc. Am. (*submitted*)

Contacts have been made with the Ministry of Defence of The Netherlands to investigate options for mitigating and investigating of acoustic activities of the Dutch Navy (this will feed into a inter-ministerial working group to mitigate potential effects).

#### POLAND

No geological seismic surveys using detonations that could disturb cetaceans were conducted in 2007. Fast vessels (hydrofoils) operated in the Gulf of Gdańsk no more frequently than in 2006 and preceding years.

#### SWEDEN

Name/type of craft	Route (return)	No. of round trips per day	Speed (kph/knots)	Capacity (passengers/cars)	Size/tonnage	Engine power
HSC Stena Carisma	Gothenburg- Fredrikshavn	2-3 roundtrips/ day pending	40.0 knots	900 / 210	GT/ NT 8631/2589	36000 kW
HSC Gotlandia	Nynäshamn- Visby- Oskarshamn	2-4 roundtrips/ day pending	32.0 knots	700 / -	GT/ NT 5632/1689	28300 kW
HSC Gotlandia 2	Nynäshamn- Visby- Oskarshamn	2-4 roundtrips/ day pending	32.0 knots	780 / 155	GT/ NT 6554 / 1996	36000 kW

M/S Gotland	Nynäshamn- Visby- Oskarshamn	2-3 roundtrips/ day pending	28.5 knots	1500 / -	GT/ NT 15302/ -	50400 kW
M/S Visby	Nynäshamn- Visby- Oskarshamn	2-3 roundtrips/ day pending	28.5 knots	1500 / -	GT/ NT 15302/ -	50400 kW

• All types of vessels (including hovercraft) capable of travelling at speeds in excess of 30 knots (cf. AC7 Report, item 5.3, page 8)

Report submitted by: Sjöfartsverket

## 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: <a href="http://www.defra.gov.uk/wildlife-countryside/resprog/findings/index.htm">http://www.defra.gov.uk/wildlife-countryside/resprog/findings/index.htm</a>

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 Assembly 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.

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

## BELGIUM

The construction and exploitation of two offshore wind farms has been licensed (situation January 2008). The construction of one of the wind farms (on the Thorntonbank – 300MW), for which gravity foundations will be used, will commence in spring 2008. The construction of another wind farm (on the Bligh Bank – 330MW), for which monopiles will be used, will start in December 2008.

During the construction phases of the two projects, measures will have to be taken for avoiding disturbance of, or harming marine mammals (ramp up procedures for pile driving operations, deployment of acoustic deterrents, ...). Although MUMM, carrying out the Environmental Impact Assessment, advised that in order to avoid disturbance of porpoises pile driving should not take place

between January and April, this was not accepted in the licence. For both projects the impact on cetaceans will be monitored. More information concerning the offshore wind farm projects in Belgium is available at MUMM's website (http://www.mumm.ac.be).

## DENMARK

An environmental impact assessment from the National Environmental Research Institute was made regarding the impact on harbour porpoises and harbour seals of the Rødsand 2 offshore wind farm construction. The report suggests that animals are likely to be affected during construction phase at larger long distances, but they are most likely not affected during operation of the wind farm⁹.

#### FINLAND

None

#### FRANCE

In 2006 Ifremer implemented its first seismic mitigation in the Mediterranean Sea. The protocol used was based on the NMFS recommendations.

Ifremer and the French Navy are developing new programmes on this item

#### GERMANY

The German parliament, "Deutscher Bundestag", passed a law for the Enlargement of ASCOBANS on 19.01.2006 in a large consensus covering all parties represented in the Bundestag.

Several German activities took place in 2006 and 2007 to promote the asscession of Russia to CMS and its respective Agreements like ASCOBANS: One of the last activities was the invitation of a Russian delegation from the Ministry of Natural Resources in Moscow to Bonn in late summer 2007 and respective talks of a German delegation in Moscow in autumn 2007, where the Russian intention was announced to start - if possible - the legislative process for accession within the new legislative period after the election in March 2008. [O. Schall]

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]

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

A new order from the Minister of the Environment concerning the compensation for damage of wild fauna and their habitats, including harbour porpoise, is implemented annually.

## NETHERLANDS

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³ Tougaard, J. & Teilmann, J. (2007): Rødsand 2 Offshore Windfarm. Environmental Impact Assessment - Marine Mammals. Commissioned Report to DONG Energy. National Environmental Research Institute. 77 pp.

## POLAND

According to Polish law, Baltic harbour porpoise *(phocoena phocoena)*, cetaceans generally and all seal species which occurs in Polish Baltic zone are protected.

No new legal regulations eliminating disturbance to cetaceans in the Polish zone of the Baltic were implemented. Drafting work was completed on two documents which lay down guidelines for restricting the disturbance potentially harmful to porpoises - the porpoise protection plan and the Puck Bay (PLH220032) protection plan - written as part of a project to develop plans of renaturalising natural habitats and species habitats in NATURA 2000 areas and management plans for selected species covered by the Birds Directive and the Habitat Directive (PL2004/IB/EN-03).

#### SWEDEN

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## 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.

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.

(<u>http://www.gov.je/PlanningEnvironment/Environment/Marine+Management/Research+and+Monitoring/Marine+Mammal+Recording/default.htm</u>)

## 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.

## **Publications and communications**

Decleer, K., Anselin, A., Bauwens, D., Ronse, A., Van Landuyt, W., Stieperaere, H., Coeck, J., Buysse, D., Van Thuyne, G., Belpaire, C., Stienen, E., Courtens, W., Haelters, J., Kerckhof, F., Thomaes, A., & De Knijf, G., 2007. Dieren en planten: Bijlage 2 en 4 habitatrichtlijn, in: Decleer, K. (Ed.), 2007. Europees beschermde natuur in Vlaanderen en het Belgisch deel van de Noordzee: habitattypen: dieren plantensoorten. Mededelingen van het Instituut voor Natuur- en Bosonderzoek, 2007.01: 361-419.

## DENMARK

A study was conducted to identify high density areas for harbour porpoises based on satellite tracking, aerial surveys and acoustic ship surveys. 16 areas have been identified and ranked. Project leader: Jonas Teilmann, National Environmental Research Institute.¹⁰¹¹

¹⁰ Sveegaard, S., J. Teilmann, (2007). Identifying areas of high porpoise density using satellite telemetry. In: ICES : Report of the Workshop on Fisheries Management in Marine Protected Areas (WKFMMPA), 10-12 April 2007. International Council for the Exploration of the Sea. ICES. - ICES CM 2007/MHC 06: 33-34.

#### **FINLAND**

None

#### FRANCE

Natura 2000: Bottlenose dolphin is present in 13 existing sites, and Harbour porpoise in 5, both on the Channel and Atlantic coast.

Natura 2000 marine site procedure in progress.

Creation of a Marine Protected Area in Iroise Sea (West Brittany).

National Agency for the Marine Protected Areas (Brest): work has been started for the creation of others MPA, through the strategy for the creation of marine protected areas.

#### 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]

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

A study started in 2006 to identify candidate Special Areas of Conservation (SACs) under the Habitats Directive and OSPAR in the Dutch sector of the North Sea. In the Dutch Continental Shelf and Coastal Waters 4 sites have been identified as marine areas: Doggersbank, Klaverbank and two parts of the coastal zone, Noordzeekustzone in the north and Vlakte van de Raan in the south. In 2008, these areas will be proposed to the EU commission as Special Areas of Conservation (SACs) under the European Habitats Directives and will also be reported to the OSPAR Secretariat as MPA's according to the OSPAR Convention. Although these future SACs will not be designated for small cetaceans especially, they will contribute to their protection.

## POLAND

A pilot plan to renaturalise natural habitats and species habitats in a NATURA 2000 area for the Puck Bay (PLH220032) and a species protection plan for the porpoise were completed. These documents indicate areas of importance for protecting these animals.

#### 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.

¹¹ Sveegaard, S., J. Teilmann (2007). Marsvin *Phocoena phocoena*. I: Søgaard, B. & Asferg, T. (red): Håndbog om dyrearter på habitatdirektivets bilag IV – til brug i administration og planlægning. Danmarks Miljøundersøgelser, Aarhus Universitet. - Faglig rapport 635: 101-105.

## 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 finalised in 2007.

## 4. Further research on small cetaceans

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

#### BELGIUM

In 2007 in total 86 porpoises washed ashore, were bycaught or were found dead at sea. Among the washed ashore carcasses, many were in an advanced state of decomposition. Most of the carcasses were available for research, and were investigated according to the state of decomposition. The following figures are preliminary, given that some carcasses still need to be investigated.

4 washed ashore alive; 3 of these died on the beach (and are included in natural mortality), and 1 was returned to sea alive;

1 was found dead in the river Scheldt (unknown cause of death);

At least 12 stranded animals were found to have been caught in fishing gear; of these, 6 of the bycatches were attributed to recreational fisheries (all in March and April); 6 bycaught animals could not be attributed to recreational or professional fisheries;

1 of the animals bycaught in recreational beach gillnet fisheries was removed from the net alive, but injured, and was returned to sea; pictures were taken from this event, but the bycatch was not reported

by the fishermen (although required by the legislation);

At least 17 animals died of natural causes (including 3 live stranded animals that died on the beach);

The cause of death of 56 animals could not be identified (yet) due to an advanced state of decomposition, the unavailability of the carcass, or the fact that the autopsy has not taken place yet (situation 5 March 2008).

In 2007 one white-beaked dolphin washed up ashore (decomposed).

#### DENMARK

- One harbour porpoise was instrumented with an acoustic tag, a time depth logger, and a satellite tag, by Jonas Teilmann, National Environmental Research Institute, and Lee Miller, University of Southern Denmark. The animal (female 166 cm, 62 kg) was bycaught in a weir net at Fjellerup Strand, Denmark (N61°30', E9°47'). The purpose was to study the acoustic behaviour and movements of harbour porpoises.

- At Fjord&Bælt in Kerteminde, a harbour porpoise calf was born on the 8th of August, 2007. This is the first time there has been reported a successful harbour porpoise birth under human care. This event has triggered a range of studies on the development, acoustics, physiology, anatomy and the behaviour of a neonate and young harbour porpoise and its mother. Results will be published during 2008 and 2009.

- The population structure based on genetic microsatellites and mitochondrial DNA has been conducted to investigate the present structure in the Danish waters. Furthermore, a comparison with samples collected during the 1800s and during the 1940s is included. Results from this investigation are soon to be published by L.W. Andersen (Nantional Environmental Research Institute) et al.

#### FINLAND

Finland has continued the harbour porpoise sighting campaign and received information of three sightings of 8 animals in year 2007.

#### 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 has been reported from the rivers Weser and Elbe as well. The results regarding the river Weser are available at <a href="http://cdl.niedersachsen.de/blob/images/C43557725">http://cdl.niedersachsen.de/blob/images/C43557725</a> L20.pdf. [R. Czeck]

## LITHUANIA

No protected areas for cetaceans are identified in Lithuania.

## NETHERLANDS

Porpoises will be collected for necropsies again in 2008 and in the following years, to follow the development of bycatch percentages and for other studies into porpoise biology, such as gathering dietary information.

## POLAND

The system has not changed. Just as before, all information about cetacean carcasses washing up on

the shore is collected by the Hel Marine Station of the University of Gdańsk. This station also conducts autopsies and keeps biological samples in a deposit.

#### 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 tissue from the dorsal fin is sampled. In some cases a whole specimen from the Swedish west coast is sampled. For further detail se prior information sent to ASCOBANS.

## 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. Bycatch 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.

## Research on abundance, population structure etc.

#### BELGIUM

#### Sightings

#### Harbour porpoises:

Numerous sightings of harbour porpoises were reported in 2007, although numbers were lower than in 2006 (an observation also made in The Netherlands).

#### White-beaked dolphins:

Only few sightings of white-beaked dolphins were reported (2 sightings of respectively 5 and 2 animals, and 1 sighting of 8 animals in France, near the border with Belgium).

#### Pilot whales:

A sighting of a group of 3 pilot whales was reported.

#### Common dolphins:

Two sightings were reported: a solitary (and sociable) animal, and a group of 10.

#### Bottlenose dolphins:

Numerous observations were reported. In January 2007 2 animals were observed very close inshore. At the end of July 2 animals were observed near the coastline, and from the beginning of August until October (with a break in September) a sociable bottlenose dolphin was present off Ostend. This animal was injured by a ships' propeller around 11 August, but the injuries proved not to be fatal; the wounds were apparently healed by the end of August. During the whole month of November a bottlenose dolphin (the same one?) resided near an offshore mussel farm off Nieuwpoort. It was last observed at the end of November. At the end of November a solitary bottlenose dolphin was observed in the river Scheldt (the same animal?), and 3 bottlenose dolphins were reported from northern French waters, near the border with Belgium.



Picture of the bottlenose dolphin injured by a ships' propeller. Off Ostend, 11 August 2007 (image by Century 21 Cocoon).

# Research projects *WAKO*

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

This project aims at evaluating the environmental impact of beam trawling against bottom set gill net fisheries in Belgian marine waters. It is possible it will be followed up by a more extensive project. (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 funding a veterinary surgeon at the MUMM department of the Royal Belgian Institute of Natural Sciences (2006 – 2008). This veterinary surgeon is 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.

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 cooperation 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. So far, 9703 tissue samples have been cataloged. 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.

## Harbour porpoises in the southern North Sea

The project "Harbour porpoises in the southern North Sea: trends, threats and research & management proposals" is a small project funded by IFAW. It is executed by MUMM together with Royal NIOZ (The Netherlands). The report will deal with the decline and increase of porpoises in the 20th and 21st century, focus on the related conservation problems, and propose realistic management measures. Contact persons: Jan Haelters (j.haelters@mumm.ac.be) and Kees Camphuysen (camphuys@nioz.nl).

#### Investigations of impacts of offshore windfarms on cetaceans

Some studies on the impact of the construction and operation of offshore wind farms will be started in 2008. Contact person: Jan Haelters: j.haelters@mumm.ac.be.

#### **Publications, communications**

Depestele, J., Courtens, W., Degraer, S., Derous, S., Haelters, J., Hostens, K., Moulaert, I., Polet, H., Rabaut, M., Stienen, E. & Vincx, M. (in prep.). WaKo: Evaluatie van de milieu-impact van Warrelneten boomKOrvisserij op het Belgisch Continentaal Plat: Eindrapport. ILVO-Visserij: Oostende, België.

Fontaine, M.C., Baird, S.J.E., Piry, S., Ray, N., Tolley, K.A., Duke, S., Birkun, A.J., Ferreira, M., Jauniaux, T., Llavona, À., Öztürk, B., Öztürk, A.A., Ridoux, V., Rogan, E., Sequeira, M., Siebert, U., Vikingsson, G.A., Bouquegneau, JM. & Michaux, J.R., 2007. Rise of oceanographic barriers in continuous populations of a cetacean: the genetic structure of harbour porpoises in Old World waters. BMC Biology 5, 30.

## Abstract

#### Background

Understanding the role of seascape in shaping genetic and demographic population structure is highly challenging for marine pelagic species such as cetaceans for which there is generally little evidence of what could effectively restrict their dispersal. In the present work, we applied a combination of recent individual-based landscape genetic approaches to investigate the population genetic structure of a highly mobile extensive range cetacean, the harbour porpoise in the eastern North Atlantic, with regards to oceanographic characteristics that could constrain its dispersal.

#### Results

Analyses of 10 microsatellite loci for 752 individuals revealed that most of the sampled range in the eastern North Atlantic behaves as a 'continuous' population that widely extends over thousands of kilometres with significant isolation by distance (IBD). However, strong barriers to gene flow were detected in the south-eastern part of the range. These barriers coincided with profound changes in environmental characteristics and isolated, on a relatively small scale, porpoises from Iberian waters and on a larger scale porpoises from the Black Sea.

#### Conclusion

The presence of these barriers to gene flow that coincide with profound changes in oceanographic features, together with the spatial variation in IBD strength, provide for the first time strong evidence that physical processes have a major impact on the demographic and genetic structure of a cetacean. This genetic pattern further suggests habitat-related fragmentation of the porpoise range that is likely to intensify with predicted surface ocean warming.

Haelters, J., Kerckhof, F. & Jacques, T., 2007. Strandvisserij en strandingen van bruinvissen tussen 1995 en juni 2007. Rapport van de Beheerseenheid van het Mathematisch Model van de Noordzee (BMM), Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussel. 9p.

Jauniaux, T., Haelters, J. & Jacques, T.G., 2007. Espèces marines strictement protégées (mammifères): prise en charge de l'acroissement des échouages et mise au point de la banque de tissus. Rapport scientifique IRSNB/UGMM, période 2006 - 2007, 18 p., 4 fig.

Rappé, K., 2007. Strandvisserij in de kijker. De Grote Rede 18: 17-20.

#### DENMARK

none

## FINLAND

Finland has taken part in a shared BONUS + application for SAMBAH (Static Acoustic Monitoring of the Baltic Harbour porpoise) project.

## FRANCE

Monitoring of the coastal group of bottlenose dolphins (Oceanopolis Brest in Iroise Sea), photoidentification, 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).

Genetic study on harbour porpoise started within a collaboration between the University of Brest and Oceanopolis.

Participation to the synthesis on common dolphin made through the NECESSITY project.

## 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 "EMSON", "MINOS+", "Implementation of the Jastarnia Plan", "AMPOD"; mostly 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 positions deployed in each of two proposed "Natura 2000" sites (Fehmarnbelt and Kadetrinne) plus additional five measuring positions in nearby coastal waters. The unit "porpoise positive hours per month 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 Recommendations" 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

Order of Minister of the Environment concerning the Programme of biological diversity protection and protection areas planning and administration dedicated of EU Structural assistance priority axis in 2007-2013, including the research of harbour porpoise migration routs in the Lithuanian Baltic Sea part, was implemented.

#### NETHERLANDS

A research project has been approved to cover part of the southern coastal Dutch waters to estimate abundance of harbour porpoises during different times of the year. The first aerial surveys using distance sampling methodology are planned for May and August 2008.

A pilot study to use a towed hydrophone array in Dutch waters has been finished. The results indicated that the array could be useful in collecting data on harbour porpoise occurrence, especially in weather conditions when visual surveys can not be conducted. Data continues to be collected on an ad hoc basis whenever adequate vessels are available.

## POLAND

A group of common dolphins moving through the Baltic Proper was observed.

http://hel.hel.univ.gda.pl/aktu/2007/wizpolbrz.htm

http://hel.hel.univ.gda.pl/aktu/2007/delfinynadal.htm

http://www.hel.univ.gda.pl/aktu/2007/delnazach.htm

http://www.hel.univ.gda.pl/aktu/2007/delnazach.htm



Sightings of the group of common dolphins (2-4 individuals) observed in south part of Baltic Proper

## SWEDEN

The Swedish Fishermen's organisation, The Swedish Board of Fisheries and Kolmården have studied the presence of harbour porpoises in the south Baltic sea, the areas covered by the 812 regulation. 50 Porpoise click detectors (PCL:s) have been placed on or close by fishing gear on a total of 185 positions from July 2006 until September 2007. 2492 days were registered on the PCL:s and on 20 of these days (0,8 %) Harbour Porpoises were detected on 13 different positions. All detections were made during July to November.

## 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 36o-62oN 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 harbour 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.

## Research on the effects of pollutants on cetacean health

### BELGIUM

#### none

DENMARK

none

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

none

### POLAND

No research of this subject was conducted in 2007.

### SWEDEN

The Swedish Fishermens organisation, The Swedish Board of Fisheries and Kolmården have studied the presence of harbour porpoises in the south Baltic sea, the areas covered by the 812 regulation. 50 Porpoise click detectors (PCL:s) have been placed on or close by fishing gear on a total of 185 positions from July 2006 until September 2007. 2492 days were registered on the PCL:s and on 20 of these days (0,8 %) harbour porpoises were detected on 13 different positions. All detections were

made during July to November.

### 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  $\Sigma$ 25CBs 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. <u>Measures taken in the fields of public awareness and education to implement or</u> promote the Agreement

### BELGIUM

Information on stranded animals and on sightings, is given on the website of MUMM (in Dutch, English and French): <u>http://www.mumm.ac.be/EN/Management/Nature/search_strandings.php</u>. For reporting sightings, the following email account can be used: dolphin@mumm.ac.be.

From 15 till 17 March 2007, the Brussels harbour welcomed the cetacean research sailing ship 'Song of the Whale'. This state of the art sailing ship belongs to the International Fund for Animal Welfare (IFAW). An event was organised by IFAW on 15 March at the Brussels Royal Yacht Club in collaboration with the Ministry of Environment and in presence of the Federal Minister of the Environment; cetacean experts and the press got the opportunity to receive first-hand information on the research performed from the vessel as well as on threats to whales. A visit of the sailing ship allowed the participants, which included scientists, the general public and school children, to meet the international crew.

In the framework of the international year of the dolphin (CMS), a major event was organised by Natuurpunt, together with some other partners. It was attended by 2 Belgian ministers, the former Belgian minister of the North Sea, a former Dutch minister, the lord mayor of the city of Nieuwpoort, and his royal highness Prince Laurent, son of the Belgian king. The contributions for the Dolphin fund gathered by school children were handed over to the executive secretary of CMS, Dr. Robert Hepworth. A side event was the "North Sea Market", in which key institutes for the North Sea presented their activities. The event was covered by all media.

### Publications, communication

In the framework of the year of the dolphin, a book on "101 questions about dolphins" was published by

Clavis Publishers; profits were partly transferred to the Dolphin Fund.

Haelters, J. (2007). Walvisachtigen in Belgische wateren: vreemde luizen of toch niet? De Grote Rede 20: 2-7

### DENMARK

- An international conference on the effects of noise on aquatic life, Nyborg, 13-18th of August, 2007. This conference attracted some of the 200 most prominent underwater bioacousticians in the world to discuss the impact on cetaceans, fish and other underwater animals on human-induced noise.

- The round-the-world trip with the research vessel Galathea 3, finished in March 2007, generated public awareness of conservation of cetaceans and other marine organisms.

- The smaller boat expeditions Danmark Galathea, September 2007, included plenary discussions among harbour porpoise scientists about harbour porpoise biology.

- Fjord&Bælt houses four harbour porpoises for research purposes and public education and awareness. Through exhibition and talks, the centre provides information to the general public and special groups on harbour porpoises and harbour seals in general, and on the by-catch problem and the ongoing efforts undertaken to mitigate these issues. The Fjord&Bælt web page (<u>www.fjord-baelt.dk</u>) also contains information on harbour porpoise conservation.

- The Fishery and Maritime Museum in Esbjerg is a public museum, which offers lessons on cetaceans as well as exhibitions on whales and whale strandings. Its homepage; <u>www.hvaler.dk</u> reports on whales and whale sightings in Danish waters.

### FINLAND

Finland has continued the harbour porpoise sighting campaign and received information of three sightings of 8 animals in the year 2007.

### FRANCE

Public conferences (Oceanopolis-Brest)

Movie on cetaceans and ferries survey produced by Brittany Ferries and Oceanopolis broadcasted aboard the ferries+ conference.

Information on the "Year of the Dolphin" on Océanopolis website.

## GERMANY

To promote public awareness for small cetaceans and their marine habitats, 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", namely :

More protection for dolphins and small cetaceans in the North East Atlantic – legislation for the Enlargement of ASCOBANS passed 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 – was 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

Lectures for schoolchildren and students on protection of marine ecosystems including small cetaceans as well as local harbour porpoises are permanently organized in the Lithuanian Sea Museum display.

The International Harbour Porpoise Day mentioned in the Lithuanian Sea Museum in 2007 too. ASCOBANS posters and a life-size model of harbour porpoise have been exhibited at the aquarium hall of the Lithuanian Sea Museum, a film and photos about harbour porpoise were demonstrated to the visitors.

The theatrical picket for harbour porpoise protection in the Baltic Sea took place near the Dolphinarium. The free show "All truth about harbour porpoise" took place in the Dolphinarium too.

### NETHERLANDS

The necropsy findings, particularly the high bycatch percentage has been broadly presented in Dutch newspapers, fisheries bulletins, and national television. Fishermen have been invited to give their views and to join the scientists in an effort to identify the particular type of fishery that is responsible for the high numbers of bycatch.

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

An article about ASCOBANS was published in the magazine "Kust & Zee Gids 2007-2008". This publication was focussed on the Year of the Dolphin.

# POLAND

The main activities in this field were carried out by the Hel Marine Station of the University of Gdańsk. Just as every year, 2007 saw the organisation of the International Porpoise Day: an exhibition entitled "Baltic - the Home of the Porpoise" was opened in Gdynia and in Hel, while hydro-acoustic research on porpoises was presented at the Baltic Science Festival. [www.hel.univ.gda.pl/aktu/2007/bfn2007];



and on World Animal Day, an event for children entitled "Let's Save the Baltic Porpoises" was organised in the MADISON shopping mall in Gdańsk [www.hel.univ.gda.pl/aktu/2007/morsmadis].

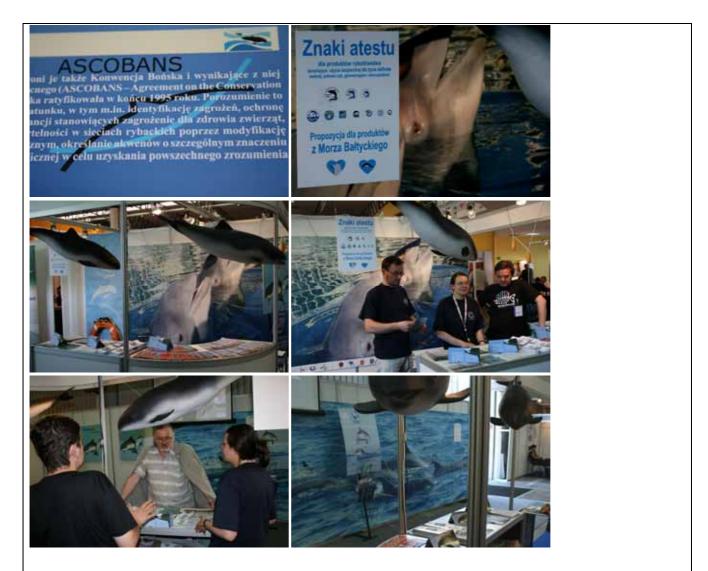




There have been 3 meetings organized with drift nets fishermen to discuss the national protection plan for harbour porpoise.



Hel Marine Station presented the worldwide known methods of bycatch reduction at the fish fair "POLFISH" in May in Gdańsk. [http://hel.hel.univ.gda.pl/aktu/2007/Polfish2007.htm]



When dolphins made several sensational forays into the Polish waters in 2007, this offered many opportunities to talk to the media of the Year of the Dolphin that was celebrated [e.g. hel.hel.univ.gda.pl/aktu/2007/wizpolbrz].

A similar opportunity to present the role of the ASCOBANS and to extend its activities to include all European cetacean species was offered by the presence of a fin whale in the Gulf of Gdańsk and the huge media interest in the presence of small and big cetaceans in the Baltic.

### SWEDEN

The International Day of the Porpoises 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 page has been active since 2003 and an increasing number of sightings have been noted.

A poster and an information brochure, produced by the SEPA and the Swedish Museum of Natural History in Stockholm, are continually being distributed to the general public, shipping and boating associations, fishermen, the coastguard etc. One objective with these information efforts is to achieve

more reports on porpoise observations, particularly in the Baltic sea.

### 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.

### 6. Other relevant news

### BELGIUM

In the framework of the 59th International Whaling Commission annual meeting held in Anchorage in Alaska from 4 to 30 May 2007, Belgium succeeded to get consensus on its Vaquita proposal. The proposal 'The Vaquita, from critically endangered to facing extinction' was sponsored by 27 countries. The Vaquita is a small cetacean found only in the Gulf of California in Mexico.

Publications, communications

Haelters, J., de Lichtervelde, A. & Van Waerebeek, K., 2007. Belgian progress report on cetacean research, May 2005 to April 2007, with statistical data for the calendar years 2005-2006. National Report to the International Whaling Commission (IWC) 2007. 5p.

Goffin, A., Lescrauwaet, A.-K., Calewaert, J.-B., Mees, J., Seys, J., Delbare, D., Demaré, W., Hostens, K., Moulaert, I., Parmentier, K., Redant, F., Mergaert, K., Vanhooreweder, B., Maes, F., De Meyer, P., Belpaeme, K., Maelfait, H., Degraer, S., De Maersschalck, V., Derous, S., Gheskiere, T., Vanaverbeke, J., Van Hoey, G., Kuijken, E., Stienen, E., Haelters, J., Kerckhof, F., Overloop, S. & Peeters, B., 2007. MIRA (2006) Milieurapport Vlaanderen, Achtergronddocument 2006, Kust & zee. [MIRA (2006) Environmental report Flanders, Background paper 2006, Coast and sea]. Vlaamse Milieumaatschappij: Erembodegem, Belgium. 180 p.

### NETHERLANDS

In order to improve the conservation status of harbour porpoises in the North Sea, the meeting of parties and the North Sea ministers have decided that a Conservation Plan for harbour porpoises in the North Sea should be developed. After compiling a background document (expert paper by Eisfeld & Kock), a draft conservation plan has now been written and will be discussed at the next AC meeting.

Reijnders, P.J.H., G.P. Donovan, A. Bjorge, K.H. Kock & M.L. Tasker. 2008. ASCOBANS Conservation Plan for Harbour Porpoises (Phocoena phocoena) in the North Sea. AC15, doc. 14, 28pp.

# UNITED KINGDOM

Table 1: Cetacean Strandings in United Kingdom & Bailiwick of Jersey during 2006

	ENGLAND, WALES, ISLE OF MAN & BAILIWICK OF JERSEY	SCOTLAND	NORTHERN IRELAND	TOTAL
FAMILY BALAENOPTERIDAE				
Minke Whale	5	13	-	18
Fin Whale	2	1	-	3
Humpback whale	3	1	-	4
Unidentified rorqual	-	-	1	1
FAMILY DELPHINIDAE				
Short-beaked common dolphin	126	5	-	131
Common/striped dolphin indet.	2	1	-	3
Long-finned pilot whale	5	6	-	11
Risso's dolphin	1	4	-	5
White-sided dolphin	1	13	1	15
White-beaked dolphin	3	9	-	12
White-sided/white-beaked indet.	-	1	-	1
Striped dolphin	7	1	1	9
Bottlenose dolphin	8	2	-	10
Unidentified dolphins	25	5	1	31
FAMILY PHOCOENIDAE				
Harbour porpoise	302	113	3	418
FAMILY PHYSETERIDAE				
Sperm whale	5	5	-	10
FAMILY ZIPHIIDAE				

Sowerby's beaked whale	1	1	-	2	
Northern bottlenose whale	3	1	-	4	
Beaked whales sp. indet.	1	-	1	2	
Unidentified toothed whales	10	8	-	18	
Unidentified cetaceans	27	4	-	31	
TOTALS	537	194	8	739	-

# 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

# b. Implementation of methods to reduce bycatch

# **ESTONIA**

No methods implemented

# c. Estimates of bycatch in set net and pelagic trawl fisheries

ESTONIA							
Estimates of bycatch in set net and pelagic trawl fisheries							
Species	Estimated nu of by-caught anim	umber nals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)			
Phocoena phocoena	No byo estimated	vcatch					

# 2. Reduction of disturbance to small cetaceans

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

### ESTONIA

Strategic environmental impact assessment for military training areas at costal sea was carried out in February 2008.

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

### **ESTONIA**

No changes in legislation since the last reporting period. No guidelines implemented.

### 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 the 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. Harbour porpoise acoustic survey is going on.

### 4. Further research on small cetaceans

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

### **ESTONIA**

No stranding network implemented

### b. <u>Research on abundance, population structure etc.</u>

### **ESTONIA**

Pilot acoustic survey with porpoise detectors carried out September 2004 – May 2006. New survey launched autumn 2006.

### c. <u>Research on the effects of pollutants on cetacean health</u>

### **ESTONIA**

Not planned in nearest future.

## 5. Public awareness and education

# a. <u>Measures taken in the fields of public awareness and education to implement or promote the Agreement</u>

# **ESTONIA**

No new activities since the last reporting period.