Agenda Item 5.3 and 5.4

Review of Implementation of the ASCOBANS Triennial Work Plan (2007-2009)

Annual National Reports of ASCOBANS Parties

Reports from Non-Party Range States

Document 5-03

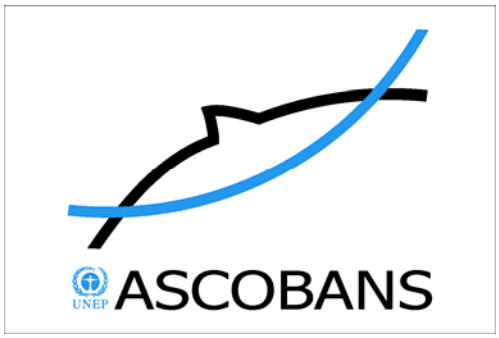
Compilations of Annual National Reports for 2006, 2007 and 2008

Action Requested

- Take note of the reports

Submitted by

Secretariat



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

Eleventh Compilation of Annual National Reports

Bonn, 2008

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

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Preface

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

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

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

Bonn, April 2008

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

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

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

A. GENERAL INFORMATION

1. Summary of Party Details

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

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

Summary of Range State Details

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

2. Institutions and Organizations mentioned in national reports

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

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

B. NEW MEASURES/ACTION TAKEN BY PARTIES

1. Direct Interactions of small cetaceans with fisheries

a. Investigations of methods to reduce by-catch

BELGIUM

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

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

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

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

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

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

DENMARK

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

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

the EU-funded project NECESSITY (Contact: fl@dfu.min.dk). In addition, DIFRES currently performs a M. Sc. project at Fjord&Bælt investigating the detection abilities of harbour porpoises to synthesized echoes of various kinds of gill nets (Contact: fl@dfu.min.dk). Teilmann et al. (2006)[4] published a paper on how harbour porpoises at Fjord&Bælt react on sounds from pingers, showing habituation effects after prolonged exposure. Wahlberg (2006)[5] quantified the loss in sound intensity for pingers in shallow waters, showing that the sound field can be highly variable depending on bottom substrate and bathymetry. Jørgensen (2006) finished a M.Sc. at the Copenhagen University / Danish National Protection Agency showing effects of large-scale usage of pingers on the distribution of harbour porpoises.
FINLAND
No further information
FRANCE
EU NECESSITY project to reduce cetacean by-catch in pelagic trawl fisheries , mechanical and acoustic devices (end of project in May 2007) 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)
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 harbor porpoises have been conducted so far.

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

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

NETHERLANDS

Effects of pingers on the behaviour of North Sea fish species

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

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

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

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

Effects of pingers on the behaviour of bottlenose dolphins

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

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

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

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

POLAND

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

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

SWEDEN

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

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

UNITED KINGDOM

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

b. Implementation of methods to reduce by-catch

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

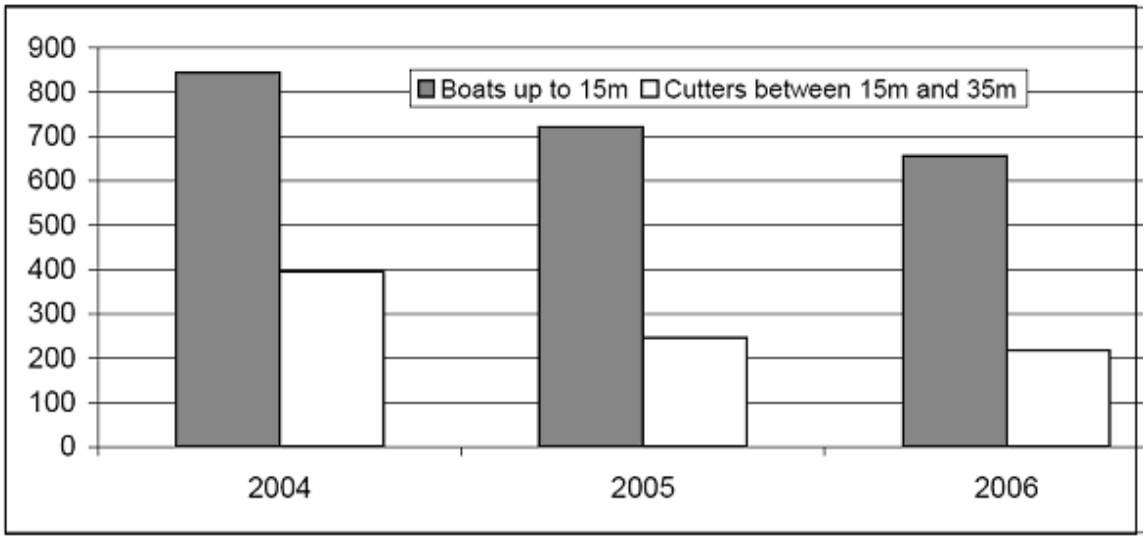


Fig.1. Trends in changes to the number of Polish cutters and boats, 2004-2006 (data based on the register of the Fisheries Department, Ministry of Agriculture and Rural Development)

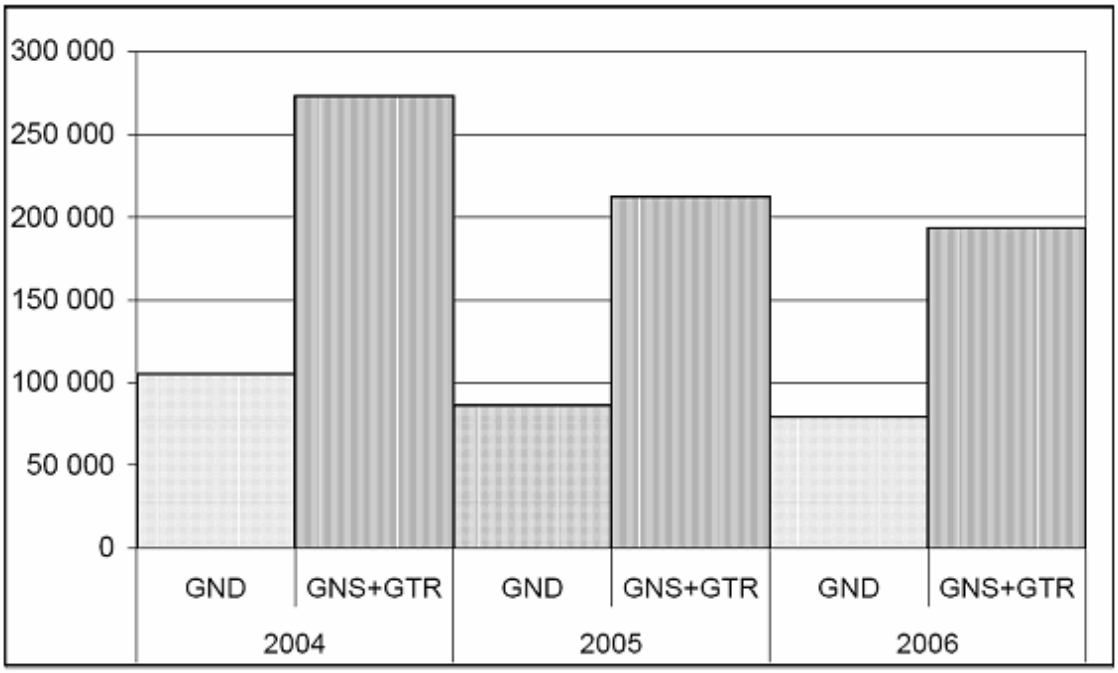


Fig. 2. Number of gill nets available to the Polish Baltic fisheries, 2004 – 2006 (Data based on a register of the Department of Fisheries, Ministry of Agriculture and Rural Development).
Legend:
GND - drift nets
GNS – set gill nets
GTR – set trammel nets

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

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

BELGIUM			
Observed bycatch in 2006			
Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Estimates are provisional			
Phocoena phocoena	27-31 (+)	IVc	Both recreational fisheries from the beach as professional fisheries at sea.
Lagenorynchus albirostris	1 (+)	IVc	Unknown gear
DENMARK			
Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Harbour porpoises	No new estimate for 2006. The most recent estimate is that from 2001-2002 presented by Vinther and Larsen (2004)[1]		
Other species	Few, but the exact number and species involved unknown.		

[1]Vinther and Larsen (2004). Updated estimates of harbour porpoise by-catch in the Danish bottom set gillnet fishery. J.Cetacean Res. Manage. 6(1): 19-24.

FINLAND

No further information

FRANCE

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

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

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

GERMANY

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

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

LITHUANIA

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

NETHERLANDS

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

POLAND

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

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

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

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

SWEDEN

No further information

UNITED KINGDOM

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

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

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

DENMARK
The council of the European Union has on March 22, 2004 adopted common regulations in order to reduce incidental by-catches of small cetaceans. Acoustic deterrent devices will progressively become mandatory in all European waters for gillnet fisheries carried out with vessels over 12m of length. These regulations also recommend 'research on new mitigation measures'. Denmark has taken these new regulations into account in its revised Action Plan for Reducing Incidental By-catches of Harbour Porpoises endorsed in March 2005 (cf. below Implementation of guidelines…).

2. Reduction of disturbance to small cetaceans

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

BELGIUM
No more regular high-speed ferry routes between Belgium and the United Kingdom are in operation.
DENMARK
The National Environmental Research Institute has investigated the effects on harbour porpoises of wind farm constructions and operations at Nysted Offshore Wind farm and Horns Reef Offshore Wind Farm since 1999. The monitoring programs are based on stationary acoustic recordings (T-PODs) at both farms and in addition ship surveys at Horns Reef. The monitoring programs finish by the end of 2005. The final report on the projects will be available in 2006. There is a recent paper published in 2006 on this topic by Carstensen et al (2006)[6]. Reports on the effect on harbour porpoises of the construction and operation phases are available at the following web page: http://www.hornsrev.dk/Engelsk/default_ie.htm Madsen et al. (2006)[7] reviewed the existing literature on how harbour porpoises and other marine mammals react to sounds from windmills and windmill construction work. The University of Ruhr-Bochum (Germany) has resumed a project investigating the hearing sensitivity of harbour porpoises at the Fjord&Bælt, for looking at the effect of man-made noise on harbour porpoise hearing, especially offshore windmill construction works, and to provide guidelines for safe intensity level for sound emissions during underwater operations.

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

FINLAND

No further information

FRANCE

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

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

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

GERMANY

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

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

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

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

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

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

LITHUANIA

No measures on disturbance reduction have been implemented

NETHERLANDS

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

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

High speed ferry routes

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

Acoustic impacts

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

Effects of sonar on marine mammals

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

POLAND

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

Geological activity.
No data.

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

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

SWEDEN

Fast Ferries

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

UNITED KINGDOM

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

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

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

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

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

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

3. Protected areas for small cetaceans

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

BELGIUM
No areas were proposed specifically for protecting cetaceans.
DENMARK
The Danish implementation of the EU Habitat Directive included previously the designation of several sites, which were considered important for harbour porpoises (cf. National Report 1998). However, new findings led to a revision of this list and the Danish implementation of the EU Habitat Directive includes now the designation of only one site (The Wadden Sea), which is considered important for harbour porpoises. It will in the future be considered whether other areas should be included. A M. Sc. study on this topic was finished by Sveegaard (Copenhagen University / National Environmental Research Institute).
FINLAND
None
FRANCE
Natura 2000 marine site procedures in progress: 4 sites have been proposed to the E.C. on the Channel and Atlantic coast for Harbour porpoise and 12 for Bottlenose dolphin . New law on Marine Protected Areas voted (march 2006). Marine Protected Area in Iroise Sea in project (public inquiry in autumn 2006). Creation of a National Agency for Marine Protected Areas (Brest)
GERMANY
In 2007 the EU-Commission listed the following SCIs (Site of Community Importance) in the German EEZ on the Atlantic and Continental Biogeographic Lists, respectively: Atlantic Region: Doggerbank, Borkum Riffgrund, Sylter Außenriff; Continental Region: Fehmarnbelt, Kadetrinne, Westliche Rönnebank, Adlergrund, Pommersche Bucht mit Oderbank. All SCIs include the harbour porpoise as interest feature. [D. Boedeker] Inside the Wadden Sea National Park of Hamburg (German Bight), all fishing activities are prohibited with the exception of shrimp fishery in three gullies by a small number of boats resulting in zero bycatch. Furthermore, no information on disturbances is known. [P. Körber]
LITHUANIA
No protected areas for cetaceans are identified in Lithuania.
NETHERLANDS
Special Areas of Conservation (SACs) in the Dutch sector of the North Sea A study has been carried out by IMARES (the Institute for Marine Resources and Ecosystem Studies) in The Netherlands on request of the Dutch government, with the aim to identify candidate Special Areas of Conservation (SACs) under the Bird- and Habitat Directive and OSPAR in the Dutch sector of the North Sea. This study has been finalized and presented to the responsible authorities. In the Dutch Continental Shelf and Coastal Waters 4 areas have been identified as marine areas: Friese Front, Klaverbank, Doggerbank and parts of the coastal zone. In 2008, these areas will be proposed to the EU commission as Special Areas of Conservation (SAC's) under the European Birds and Habitats Directives and will also be reported to the OSPAR Secretariat as MPA's according to the OSPAR Convention. Although it is not to be expected that these potential SACs will be designated for small cetaceans especially, they may well contribute to their protection.

POLAND

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

SWEDEN

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

UNITED KINGDOM

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

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

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

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

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

4. Further research on small cetaceans

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

BELGIUM

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

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

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

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

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

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

DENMARK

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

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

The total number of stranded animals in Denmark were:

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

FINLAND

Look at point 5

FRANCE

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

GERMANY

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

LITHUANIA

There is no such scheme implemented

NETHERLANDS

Stranded harbour porpoises

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

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

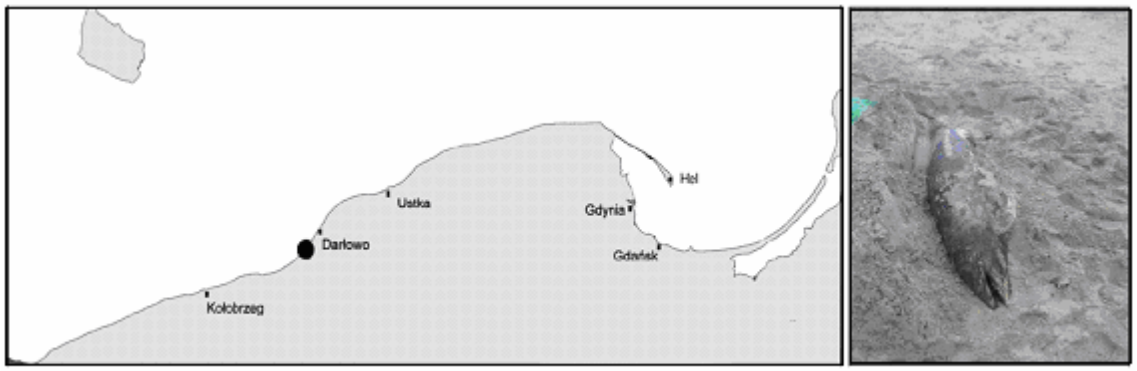
The outcome of this investigation reveals that the percentage bycatch amongst all collected animals is at least 53% (excluding animals which were suspected to be bycaught, but no conclusive evidence) and a maximum bycatch percentage (including the suspected possible bycatch victims).

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

POLAND

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

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



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

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

SWEDEN

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

UNITED KINGDOM

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

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

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

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

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

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

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

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

b. Research on abundance, population structure etc.

BELGIUM

Sightings

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

Number of porpoises present in Belgian waters

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

Research projects

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

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

MARIN

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

Publications, communications

Camphuysen, K & Peet, G., 2006. Walvissen in de zuidelijke Noordzee – Whales and dolphins of the North Sea. Fontaine Uitgevers BV, 's Graveland, Nederland. 160 p.
Courtens, W., Stienen, E.W.M. & Vanermen, N., 2006. Zeevogels en zeezoogdieren van de Vlakte van de Raan, in: Coosen, J. *et al*. (Ed.), 2006. Studiedag: De Vlakte van de Raan van onder het stof gehaald, Oostende, 13 oktober 2006. VLIZ Special Publication, 35: 59-72.
Drouget, O., 2006. Écologie trophique du marsouin commun (*Phocoena phocoena*) (L.) en baie sud de la Mer du Nord: Étude préliminaire sur base de la composition en acides gras et en isotopes stables. Master thesis (Oceanography), University of Liège, 2006.
Fontaine, M.C., Baird, S.J.E., Piry, S., Ray, N., Tolley, K.A., Duke, S., Birkun, A.J., Ferreira, M., Jauniaux, T., Llavona, A., Öztürk1, B., Öztürk, A.A., Ridoux, V., Rogan, E., Sequeira, M., Siebert, U., Vikingsson, G.A., Bouquegneau, J.-M. & Michaux, J.R. (submitted). Rise of oceanographic barriers in continuous populations of a cetacean: the genetic structure of harbour porpoises in Old World waters. BMC Biology.
Haelters, J. & Jacques, T.G., 2006. De bescherming van walvisachtigen in Belgische wateren: bijkomende informatie gericht aan DG Leefmilieu van de federale Overheidsdienst volksgezondheid, veiligheid van de voedselketen en leefmilieu, m.b.t. de uitvoering door België van de Habitatrichtlijn Art. 11 en 12 voor wat betreft walvisachtigen. KBIN (BMM), Brussel. 15 p.
Haelters, J., Jauniaux, T. & Kerckhof, F., 2006. Bultrug op Belgisch strand. Zoogdier 17(2): 3-5.
Haelters, J., Jauniaux, T., Kerckhof, F., Ozer, J. & Scory, S., 2006. Using models to investigate a harbour

porpoise bycatch problem in the southern North Sea–eastern Channel in spring 2005. ICES CM 2006/L:03. 8p.
Haelters, J. & Kerckhof, F., 2006. Strandingen van bruinvissen tussen 1995 en 2006 (31 mei): doodsoorzaken. Nota KBIN (BMM), sectie 15, 9 juni 2006, 5p.
Jauniaux, T., Brenez, C., Das, K., Haelters, J. & Coignoul, F., 2006. By-caught cetaceans stranded along the Belgian and northern French coastline: are they a good control population? 20th annual conference of the European Cetacean Society, Gdynia, Poland, April 2006 (presentation).
Jauniaux, T., Brenez, C., Haelters, J., Jacques, T., Ozer, J. , Scory, S. & Coignoul, F., 2006. Stranding of a humpback whale (*Megaptera novaeangliae*) on the Belgian coast. International Council for the Exploration of the Sea; Annual Science Conference, Maastricht, The Netherlands, September 2006 (poster).
Jauniaux, T., Brenez, C., Haelters, J., Kiszka, J. & Lastavel, A., 2006. Evolution des échouages et des causes de mortalité des mammifères marins dans le nord de la France (1995-2005). Séminaire du Réseau National d'Echouages, Lancheres, France, Novembre 2006 (presentation).
Van Waerebeek, K., Sequeira, M., Williamson, C., Sanin, G.P., Gallego, P. & Carmo, P., 2006. Live-captures of common bottlenose dolphins *Tursiops truncatus* and unassessed bycatch in Cuban waters: evidence of sustainability found wanting. Lajam 5(1): 39-48, June 2006 ISSN 1676-7497
Van Waerebeek, K. Conservation status of the northwest African population of the harbour porpoise. Convention on the Conservation of Migratory Species of Wild Animals, 14th Meeting of the CMS Scientific Council, Bonn, Germany, 14-17 March 2007, doc. cms/scc14/doc.7, 10p.

DENMARK

NERI conducts regular ship surveys for harbour porpoises at Horns Reef as part of the monitoring program for Horns Reef Offshore Wind Farm. Annual status reports are available and the final report will be available at: http://www.hornsrev.dk/Engelsk/default_ie.htm

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

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

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

FINLAND

In plan

FRANCE

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

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

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

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

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

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

GERMANY

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

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

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

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

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

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

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

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

LITHUANIA

No research on abundance and population structure

NETHERLANDS

Overview on occurrence harbour porpoises

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

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

POLAND

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

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

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

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

SWEDEN

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

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

UNITED KINGDOM

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

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

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

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

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

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

c. Research on the effects of pollutants on cetacean health

BELGIUM

Publications, communications

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

Fontaine, M.C, Galan, M., Bouquegneau, J.-M. & Michaux, J.R., 2006. Efficiency of Fluorescent Multiplex Polymerase Chain Reactions (PCRs) for rapid Genotyping of Harbour Porpoises (*Phocoena phocoena*) with 11 Microsatellite Loci. Aquatic Mammals 32(3): 301-304

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

DENMARK

No new projects reported.

FINLAND

None

FRANCE

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

GERMANY

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

LITHUANIA

None

NETHERLANDS

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

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

POLAND

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

SWEDEN

See above

UNITED KINGDOM

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

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

Reference

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

5. Public awareness and education

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

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

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

FRANCE

Public conferences (Oceanopolis-Brest)

GERMANY

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

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

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

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

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

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

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

LITHUANIA

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

NETHERLANDS

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

POLAND

No information

SWEDEN

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

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

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

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

UNITED KINGDOM

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

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

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

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

1. Direct Interactions of small cetaceans with fisheries

a. Investigations of methods to reduce by-catch

ESTONIA
No investigations carried out
LATVIA
No investigation carried out

b. Implementation of methods to reduce by-catch

ESTONIA
No methods implemented
LATVIA
No methods implemented

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

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

2. Reduction of disturbance to small cetaceans

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

ESTONIA
No new information
LATVIA
No further information

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

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

3. Protected areas for small cetaceans

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

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

4. Further research on small cetaceans

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

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

b. Research on abundance, population structure etc.

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

c. Research on the effects of pollutants on cetacean health

ESTONIA
Not planned in nearest future.
LATVIA
No

5. Public awareness and education

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

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

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 HELCOM[1] with the kind support of the Secretariat of the Helsinki Convention.

The Secretariat would like to stress once more the importance of the submission of the Annual National Reports pursuant to Article 2.5 of the ASCOBANS Agreement. The compilations 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

1. Summary of party details

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

Netherlands	2007	Meike Scheidat Wageningen Imares, meike.scheidat@wur.nl	Ministry of Agriculture, Nature & Food Quality , focal person is Drs. M.H.W (Maaike) Moolhuijsen. Post address P.O. Box 40201 NL-2500 EK Den Haag. Telephone (+)31 70 378 5315. E-mail: m.h.w.moolhuijsen@minlnv.nl
Poland	2007	Iwona Kuklik, Krzysztof E.Skóra	Monika Lesz 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 Kingdom of Great Britain and Northern Ireland	2007	Leigh Bryant (Department of Environment, Food & Rural Affairs) and Eunice Pinn (JNCC)	Ms Christine Rumble Dept. for Environment, Food & Rural Affairs (Defra) Species Conservation Branch 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

2. Institutions and Organizations mentioned in national reports

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

	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 by-catch: Measurements of the acoustic activity of free-ranging harbour porpoises[4]; Detailed measurements of the frequency content of captive harbour porpoise signals [5]; Studies on harbour porpoise hearing abilities[6], 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 Akamatsu[7]. 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.
[6]Beedholm, 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: www.mmm.fi (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 (≈ 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€/l in September, and peaked during the last two months of 2007 with 0.57€/l. The average fuel price in 2007 was equal to the one in 2006: 0.48€/l.

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

BELGIUM			
Observed bycatch in 2007			
Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Estimates are provisional			
Phocoena phocoena	6 (+)	IVc	Recreational beach fisheries
Phocoena phocoena	6 (+)	IVc	Unknown fisheries
DENMARK			
Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Harbour porpoises	No new estimate for 2006. The most recent estimate is that from 2001-2002 presented by Vinther and Larsen (2004)[8]	23, 23, 24, IIIa, IVb	
Other species	Few, but the exact number and species involved unknown.	23, 23, 24, IIIa, IVb	
FINLAND			
No further information			
FRANCE			
For pelagic trawl fisheries, estimates have been provided last year with the PETRACET project and NECESSITY project-(pelagic trawling in area VII and VIII).			

[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 (year 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 (3 reported)	Baltic Sea of Schleswig-Holstein (III b)	Notes (type of fishery, effort, 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

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,

			seasonal variations, etc.)
Phocena phocena	About 25 per year	III a, in the Swedish part of Skagerrak.	Bottom trawls
Phocena phocena	About 89 per year	IIIa, Swedish Kattegat Sea	Gillnets and trammel nets and pelagic trawls
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 routes, studies about acoustic impacts on cetaceans etc.)</u>

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 1µPa and a SEL of 164 dB re 1µPa2s. [K. Lucke]

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

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

As a reaction to the projected detonation of up to 130 sea mines and torpedo heads (WWII) at the entrance of Kiel harbour (ammunition dumping site "Kolberger Heide") in September 2006, three German NGOs, the Nature and Biodiversity Conservation Union (NABU), the Society for the Conservation of Marine Mammals (GSM) and the Society for Dolphin Conservation (GRD), asked the authorities to stop these activities and make sure that harbour porpoises in the dumping site and neighbouring SACs are not affected by such detonating of underwater unexploded ordnance (UWUXO). The Ministry of the Interior of Schleswig-Holstein placed a moratorium to examine alternative clearing methods. On 19 October 2007, the NGOs held a symposium in Kiel, Schleswig-Holstein on alternatives to the blasting of UWUXO (results presented on www.NABU-meeresschutz.de) which was the first of its kind in Europe. Results: The shock wave and intense sound pressure of explosions of up to 350 kg gun cotton in each of the 130 warheads can kill marine mammals at a radius of up to 4 km. Hearing impairment can occur at a radius of 13 to 33 km. The protection of harbour porpoises under the EC habitats directive requires the implementation of sufficient protection or mitigation measures such as bubble curtains, suitable deterrent strategies and the establishment of a safety zone to be visually and acoustically monitored before detonations. Top priority, however, should be given to the recovery of ordnance. Technical options for salvage operations are e.g. the freezing of explosives using supercooling equipment, the use of robotics for safe handling, dilution of explosive substances with hot water followed by photolytic treatment, underwater jet abrasive cutting and subsequent incineration in a mobile detonation chamber. As a result, authorities are planning test detonations with bubble curtains in March 2008 in Schleswig-Holstein and of jet-cutting in April 2008 in

Mecklenburg-Prepommerania. [S. Koschinski]

LITHUANIA

No measures on disturbance reduction have been implemented.

NETHERLANDS

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: http://www.defra.gov.uk/wildlife-countryside/resprog/findings/index.htm

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

The Countryside Council for Wales (CCW), statutory nature conservation advisers to the Welsh 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 farm[9].
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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[9] 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. (http://www.gov.je/PlanningEnvironment/Environment/Marine+Management/Research+and+Monitoring/Marine+Mammal+Recording/default.htm)

3. Protected areas for small cetaceans

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

BELGIUM
No areas were proposed specifically for protecting cetaceans. **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: dier- en 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.[10][11]

[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 (N61º30', E9º47'). 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 http://cdl.niedersachsen.de/blob/images/C43557725_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:

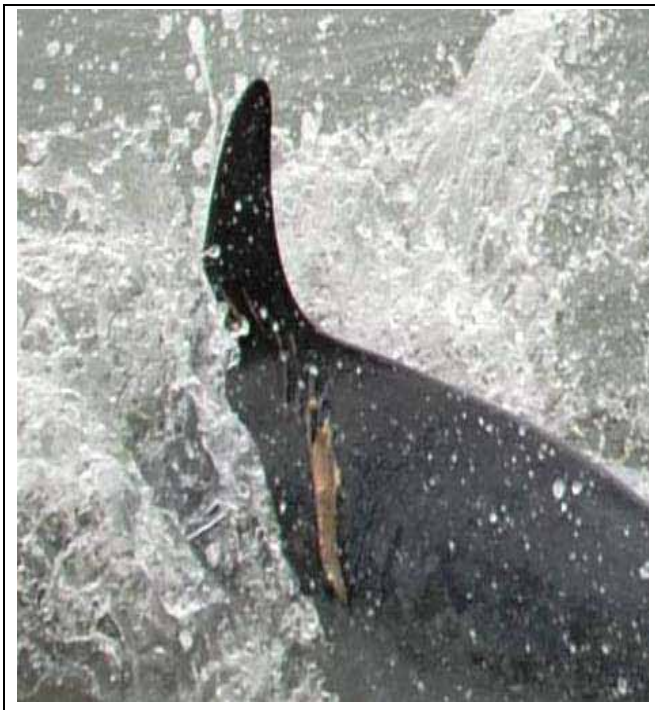
A sighting of a group of 3 pilot whales was reported.

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 co-operation with France and the Netherlands. This collection now constitutes the Belgian Marine Mammal Tissue Bank (BMMTB) placed under the joint management of RBINS and the University of Liège, with the purpose to provide high quality samples of marine mammals (small and large cetaceans as well as pinnipeds) to scientists in a non-profit scientific collaboration. Samples may be used for studies in pathology, microbiology, toxicology, life history, etc. 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), photo-identification, home range, population structure...

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

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

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

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

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

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), Blainevill□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

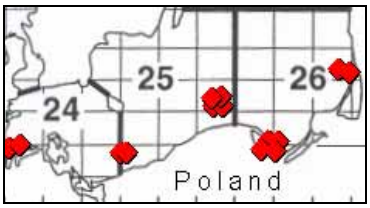
A group of common dolphins moving through the Baltic Proper was observed.

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 Σ25CBs levels and increasing risk of infectious disease mortality (using physical trauma cases as controls).

Reference

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

5. Public awareness and education

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

BELGIUM

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

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 (www.fjord-baelt.dk) 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; www.hvaler.dk reports on whales and whale sightings in Danish waters.

FINLAND

Finland has continued the harbour porpoise sighting campaign and received information of 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 number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Phocoena phocoena	No bycatch estimated		

2. Reduction of disturbance to small cetaceans

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

ESTONIA
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. Research on abundance, population structure etc.

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

c. Research on the effects of pollutants on cetacean health

ESTONIA
Not planned in nearest future.

5. Public awareness and education

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

ESTONIA
No new activities since the last reporting period.

Thirteenth Compilation of Annual National Reports

Bonn, 2009

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 13^{h} Compilation of Annual National Reports comprising reports from the ten ASCOBANS Parties. Most of the information included in this Compilation of Annual National Reports relates to the year 2008

The Secretariat would like to stress once more the importance of the timely 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 2009

A. GENERAL INFORMATION

1. Summary of party details

Party	Period Covered	Report Compiler	Coordinating Authority
Belgium	2008	Jan Haelters (MUMM/RBINS); additional information provided by Thierry Jauniaux, Francis Kerckhof, Sigrid Maebe, Alexandre de Lichtervelde, Dominique Verbelen, Paul Van Daele and Geert Raeymaekers	Mr Paulus TAK Federal Public Service for Health, Food Chain Safety and Environment Place Victor Horta 40 Box 10 1060 Brussels paulus.tak@health.fgov.be Tel. +32 2 524 9631 Since 2006 the national co-ordinating authority is the Federal Public Service for Health, Food Chain Safety and Environment The RBINS (MUMM) participates on behalf of Belgium to the work of the Advisory Committee.
Denmark	2008	Magnus Wahlberg Fjord&Bælt, Margrethes Plads 1 5300 Kerteminde, Denmark; magnus@fjord-baelt.dk	Maj F. MUNK The Danish Forest and Nature Agency Haraldsgade 53 2100 København mfm@sns.dk Tel. +45 39 47 24 28
Finland	2008	Penina Blankett	Penina BLANKETT Ministry of the Environment P.O Box 35 00023 Government penina.blankett@ymparisto.fi Tel. +358 9 160 39 518
France	2008	Sami Hassani Océanopolis Port de Plaisance du Moulin Blanc	Martine BIGAN Ministère de l´Ecologie et du Développement durable 20, avenue de Ségur 75302 Paris martine.bigan@ecologie.gouv.fr Tel. +33 1 4219 1870
Germany	2008	Stefan Bräger Deutsches Meeresmuseum	Oliver SCHALL Federal Ministry for the Environment, Nature Conservation and Nuclear Safety Robert-Schuman-Platz 3 53175 Bonn oliver.schall@bmu.bund.de Tel. +49 228 305 2632
Lithuania	2008	Laura Janulaitienė	Laura JANULAITIENE Nature Protection Departure

			Ministry of Environment of the Republic of Lithuania A. Jaksto st. 4/9 LT-01105 Vilnius l.janulaitiene@am.lt Tel. +370 5 266 35 48
Netherlands	2008	Meike Scheidat Wageningen Imares, meike.scheidat@wur.nl	Folchert R. van DIJKEN Department of Nature Ministry of Agriculture, Nature and Food Quality Address: P.O.Box 20401, 2500 EK The Hague The Netherlands f.van.dijken@minlnv.nl Tel: +31703785509
Poland	2008	Iwona Kuklik, Krzytzstof E. Skora Hel Marine Station, University of Gdansk	Monika LESZ Ministry of the Environment Department of National Forms of the Nature Protection 52/54 Wawelska St. 00-922 Warsaw Monika.Lesz@mos.gov.pl Tel. +48 22 5792667 Fax. +48 22 5792730
Sweden	2008	Christina Rappe	Christina RAPPE Swedish Environment Protection Agency Blekholmsterrassen 36 10648 Stockholm christina.rappe@naturvardsverket.se Tel. +46 8 698 1085
United Kingdom of Great Britain and Northern Ireland	2008	James Gray Marine Biodiversity Division, Department For Environment Food and Rural Affairs (Defra)	Jim GRAY Marine and Freshwater Biodiversity Division, Marine and Fisheries Directorate Department for Environment Food and Rural Affairs (DEFRA) Area 2D Nobel House, 17 Smith Square London SW1P 3JR James.Gray@defra.gsi.gov.uk Tel: +44 207 238 4392

2. Institutions and Organizations mentioned in national reports

Country	Name	Pages
BELGIUM	Agentschap voor Natuur en Bos	25
	Belgian Marine Mammal Biobank (BMMB)	34
	Dienst voor de Zeevisserij	15
	Flanders Marine Institue (VLIZ)	33
	FPS Public health, Food Chain Safety and Environment	26
	Management Unit of the North Sea Mathematical Models/Royal Belgium Institute for Natural Sciences (MUMM), Brussels	25, 26, 33, 34, 40
	Ministry of Environment	56
	Natuurpunt, Mechelen	40
	Research Institute for Nature and Forest (INBO)	29
	Royal Belgian Institute for Natural Sciences (RBINS), Brussels	34
	University of Liège	34, 56
DENMARK	University of Aarhus	26
	Danish Ministry of Environment	40
	Danish Ministry of Food and Agriculture	12
	Fjord & Bælt, Kerteminde	12, 40, 42
	Krog Consult	12
	National Environmental Research Institute (NERI), Roskilde	26, 35
	National Institute of Aquatic Resources (DTU-Aqua), Lyngby	12
	University of Copenhagen	12
FINLAND	Ministry of Agriculture and Forestry, Helsinki	15
	Ministry of Environment	15
FRANCE	Centre de Recherche sur les Mammifères Marins (CRMM), La Rochelle	21, 29, 35, 41
	French Research Institute for the Exploitation of the Sea (IFREMER), Issy-les-Moulineaux Cedex	12, 21, 25, 35
	Groupe d'Etude de la Faune Marine Atlantique (GEFMA), Capbreton	29, 35
	Groupe d'Etude des Cétacés du Cotentin (GECC),	29, 35

	Cherbourg-Octeville	
	Ministry of the Fisheries	12
	National Agency for the Marine Protected Areas, Brest	27
	National Committee of the Fisheries	12
	Oceanopolis, Brest	35, 41
	University of La Rochelle	29, 34, 41
GERMANY	Federal Agency for Nature Conservation (BfN), Bonn	22
	Federal Agency for Shipping and Hydrography (BSH)	22
	Federal Armed Forces Underwater Acoustics and Marine Geophysics Research Institute (FWG)	22
	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Berlin	21, 41
	Research and Technology Centre (FTZ), Büsum	12, 29, 37
	German Oceanographic Museum, Stralsund	29
	Landesamt für Bergbau, Energie und Geologie	25
	Nature and Biodiversity Conservation Union (NABU), Berlin	21, 22
	Society for Dolphin Conservation (GRD), Munich	21
	Society for the Conservation of Marine Mammals (GSM)	21, 22, 41
	Veterinary Institute for Fish and Fishery Products, Cuxhaven	29
LITHUANIA	Dolphinarium	42
	Lithuanian Sea Museum, Klaipeda	41, 42, 43
	Ministry of the Environment, Vilnius	42
NETHERLANDS	Ministry of Agriculture, Nature and Food Quality	18, 30, 37
	Ministry of Transport, Public Works and Water Management	37
	University of Luik	18
	University of Utrecht	18, 30
POLAND	Ministry of Agriculture and Development of Rural Areas	16
	Ministry of Environment	23, 25
	The Friends of Hel	43
	University of Gdańsk, Institute of Oceanography	13, 28, 31, 42, 43

SWEDEN	Environmental Protection Agency (SEPA), Stockholm	19, 24, 38, 55, 56
	Gothenburg National Museum	31
	Swedish Board of Fisheries, Gothenburg	19
	Swedish Museum of Natural History, Stockholm	31, 39, 56
	Swedish Veterinary Institute, Uppsala	31
UK	The Joint Nature Conservation Committee	26, 38
	Ceredigion County Council	24
	Countryside Council for Wales (CCW), Bangor	28, 37, 38
	Department for the Environment, Food and Rural Affairs (DEFRA), Bristol	14, 32, 56
	Ministry of Defence	32
	Scottish Association for Marine Science (SAMS)	37
	Scottish Natural Heritage (SNH), Inverness	28
	Sea Mammal Research Unit (SMRU), St Andrews	37
	Sea Watch Foundation, Oxford	37
	University of Aberdeen	37
	Marine Awareness North Wales	28
INTERNATIONAL	European LIFE Nature Programme	35, 36
	European Cetacean Society	35, 39
	Global Marine Network (GMN)	29, 35
	International Council for the Exploration of the Sea (ICES)	16
	International Fund for Animal Welfare (IFAW)	34
	IUCN	42
	OSPAR	25, 27, 39

B. NEW MEASURES/ACTION TAKEN BY PARTIES

1. Direct Interactions of small cetaceans with fisheries

a. Investigations of methods to reduce by-catch

BELGIUM
None
DENMARK
Fjord&Baelt, DTU-AQUA and Krog Consult investigated the behaviour of porpoises around gill nets, hearing of porpoises, function and efficiency of pingers, and estimated the present extent of bycatch of porpoises in Danish waters (project funded by the EU structural fishery fund and the Danish Ministry of Food and Agriculture). Reported in October, 2008 in Danish report: *Udvikling og afprøvning af foranstaltninger til afværgning af bifangst af småhvaler I garnfiskeriet*. Further analysis will be made through M.Sc. study at Copenhagen University and separate scientific publications.
FINLAND
None
FRANCE
Pilot study in progress in Iroise sea (EC 812/2004): species and level of by-catch + implementation of 3 acoustic deterrents (Aquamark, VO2, DDD) ; Iroise Marine Protected Area/Ifremer/Ocenopolis/Local fisherman representative are the participants involved in this study. The fishing Industry worked to prepare an observer programme (Filmancet) dedicated to set nets in the Channel, the aim is to determine the level of by-catch in this area and to test acoustic deterrents(decision of the National Committee of the Fisheries (CNPMEM: French industry) and the National Head of the Fisheries (French administration)). The Ministry of fisheries will also dedicate some additional observations on vessels in 2009 included in the project Obsmer. All those observation programmes planned by the Fishing Industry, the ministry of Fisheries and Ifremer have started in 2009 in the area VII in order to determine seasons, fishing grounds and fisheries having the highest bycatch rate. A standardization of a protocol for all the observation programs has been done and in 2009 the tasks will be similar in all the observations at sea (whatever is the regulation asking for observers). This means that cetacean bycatch will be recorded now for all gears and fisheries. Following the EU NECESSITY project to reduce cetacean by-catch in pelagic trawl fisheries, experiments of the acoustic deterrent CETASAVER on commercial vessels were carried on in 2007 and 2008 by Ifremer and the fishing industry. The methodology consists in having combined tows to compare control tows and test tows in several trips in the sea bass fisheries. A report has been published on internet by Morizur et al. (2008) (http://www.ifremer.fr/docelec/notice/2008/notice4506.htm) Some experiments planned for set nets equipped with pingers in a marine protected area in the Iroise Sea (project PingIroise).
GERMANY
The project conducted by the Research and Technology Centre (Büsum) on potential impacts of sound on ears of harbour porpoises using special histo-pathological methods was continued. [U. SIEBERT]

LITHUANIA

None

NETHERLANDS

A number of studies have taken place on captive harbour porpoises to investigate how they use acoustics, what they hear as well as how they react to sounds in water. This information is needed to better understand how porpoises use their sonar and to develop adequate devices (so called pingers) that will reduce bycatch of porpoises in nets.

Kastelein et al. (2008a) conducted a study in which they describe the echolocation effort number and duration of echolocation click trains produced by a harbour porpoise in relation to target presence, strength and distance, and performance of the detection task. The porpoise was presented with two target sizes at five distances 12–20 m, or no target, and had to indicate whether it could detect the target. Small, distant targets required long and multiple click trains. Multiple click trains mostly occurred when the small target was far away and not detected, and during target-absent trials in which the animal correctly responded. In target-absent trials, an incorrect response was linked to short click trains. Click train duration probably increased until the animal's certainty about the target's presence or absence exceeded a certain level, after which the porpoise responded.

Another study by Kastelein et al. (2008b) investigated the hearing of harbour porpoises. The 50% detection hearing thresholds of a harbour porpoise for a 4.0 kHz narrow-band FM signal, presented at the background noise level in a pool and with two masking noise levels, were measured using a go/no-go response paradigm and an up-down staircase psychometric method. The masker consisted of a 1/6-octave noise band with a centre frequency of 4.25 kHz. Its amplitude declined at 24 dB/octave on both sides of the spectral plateau. The absolute hearing threshold of the porpoise, found previously, was confirmed. The animal's auditory system responded in a linear fashion to the increase in masking noise. Since the narrow-band noise was off-centre of the test frequency, the critical ratio of a harbour porpoise for 4.0 kHz tonal signals in white noise can at present only be estimated to be between 18 and 21 dB re: 1 µPa.

Kastelein, R.A., Verlaan, M., Jennings, N. 2008a. Number and duration of echolocation click trains produced by a harbour porpoise (*Phocoena phocoena*) in relation to target and performance (L). J. Acoust. Soc. Am. 124, 40-43.

Kastelein, R. A., and Wensveen, P. J. 2008d. Effect of Two Levels of Masking Noise on the Hearing Threshold of a Harbour Porpoise (*Phocoena phocoena*) for a 4.0 kHz Signal. Aquatic Mammals 34(4), 420-425.

POLAND

A 3-year pilot project: "Active protection of harbour porpoise against the by-catch" has been commenced in the Puck Bay. The project is financed by the National Fund of Environmental Protection and Water Management and the University of Gdansk. The program is carried out by the Hel Marine Station. The project framework envisages that the effectiveness of pinger acoustic barrier will be applied and its effects investigated. The method is a temporary measure for the reduction of the mortality of harbour porpoises on fishing grounds in the Puck Bay and allows to preserve the traditional methods of small fishery. At the initial phase of the project, that seasonal changes in the deployment of gill nets and the size of fishing quotas will be investigated along with the timing of the occurrence of harbour porpoises in the area. It is assumed that in the next years the subject of research will be the pinger barrier and its effectiveness in the hindering of harbour porpoises from entering fishing grounds which may be dangerous to them. An integral part of the project is broad action for the delivery to local fishermen and the public, of information, ideas and anticipated effects of research and protective actions. The purpose of the action is to receive reports on by-catches, observations and the findings of dead harbour porpoises on shores.

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 show that the traps do catch cod and that they, in certain areas, can be an alternative to gill nets.

During 2008 modifications have been made on the traps to increase catch efficiency. Ten fishermen have tested fishing with cod traps in the south Baltic. The results from the tests showed that there is a possibility to catch large amounts of cods in the traps. However, further trials are needed and the project is continuing in 2009.

The pike perch fisheries in the Baltic sea have been suffered from seal damages for many years. In 2008 pike perch/white fish traps were being introduced as an alternative to gill nets with the purpose of reducing seal damage. A certain percent of the cost for the trap is 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.

UNITED KINGDOM

Acoustic deterrent devices (model DDD-02F) have been tested in the bass pair trawl fishery following on from earlier work in 2006-2007. No cetacean bycatches were observed (though sample sizes are still relatively small) and these results lend further support to the notion that these devices represent an effective way of minimising or eliminating bycatch in this fishery. Investigations on the use of exclusion devices in the pelagic pair trawl fishery have been shelved at present because of the apparently greater degree of bycatch reduction that can be achieved using these acoustic devices.

Gillnet pingers (model DDD-02) that are somewhat louder than the pingers mandated in Annex II of Council regulation 812/2004 have been tested in conjunction with T-Pods on a standard tangle net in Cornwall in order to determine how far porpoises and dolphins might be displaced by such devices. This study followed a similar one in 2007. The 2007 experiment suggested that the degree of exclusion was inversely related to distance from the devices out to about 1.5-2km from source. The 2008 experiments suggested a slightly greater degree of exclusion, again inversely related to distance (i.e. not complete exclusion) out to around 2.5-3km. Following these results DDD-02 devices have been deployed with three UK registered gill and tangle net boats in order to test the effectiveness in reducing bycatch of porpoises and dolphins.

Results from these trials are expected in the Spring of 2009, but early indications are that they are indeed an effective means of minimising porpoise bycatch at a spacing of 2km. Use of this model would mean using far fewer devices while maintaining an appropriate level of bycatch mitigation, which in turn would mean that devices can be attached and detached from nets before and after hauling, thereby minimising breakages. These devices are also rechargeable on board and this should help ensure that battery replacement is not an issue. These three studies are being carried out by the Sea Mammal Research Unit at the University of St. Andrews and are funded by Defra.

The Scottish Government is currently funding a project to investigate the occurrence and causes of minke whale entanglement in Scottish waters. Using photo-identification techniques and strandings data, the project aims to discover how widespread such events are and whether there are any simple measures that might be taken to lessen the risk. The results of this project will be available in Autumn 2009.

b. Implementation of methods to reduce by-catch

BELGIUM
No concrete measures were taken with the objective to avoid bycatches in recreational or professional fisheries. The inconsistencies between the regional fishery legislation concerning the use of static gear in recreational fisheries and the local (municipal) legislation remains unresolved in certain local communities. At the Community of De Haan (11 kms of coastline) the use of gillnets for recreational use was restricted in early 2009 to 2 stretches of beach of 300 m each – recreational beach gillnet fishermen started a petition in 2009 to obtain changes to this restriction; up to 20 March 2009 73 recreational fishermen had requested authorisation to use gillnets at this community. Although the European Commission sent a 'reasoned opinion' to Belgium (on 16 October 2008) in the framework of the infraction number 2003/2081 (on the non-compliance with article 12, 1a, of Directive 92/43), indicating a term of 2 months to take additional measures for recreational beach gillnet fisheries (known to incidentally kill harbour porpoises), no concrete measures were taken by 20 March 2009. The Flemish authorities responsible for nature conservation prepared a draft ministerial decree concerning species protection; this might form the basis for future measures to address bycatch of harbour porpoise in recreational beach fishing, although the competence for taking concrete fisheries measures remains with the administration dealing with fisheries. The infraction was an article 226 of the EC Treaty proceeding, initiated for not implementing Community law correctly. In 2008 four Belgian fishing vessels deploying static gear were active in and outside Belgian waters: Inside and outside territorial waters (small vessels): 3 vessels, on average active 107 days per year, although mostly not 100% of their fishing days with static gear (also potting for cuttlefish, angling for seabass, etc.); outside territorial and/or outside Belgian waters 1 larger vessel active for 143 days (data provided by Dienst voor de Zeevisserij, Flemish Community).
DENMARK
None
FINLAND
The Ministry of the Environment and the Ministry of Agriculture and Forestry have established a common practice of recommending fishermen to avoid fishing with nets in coastal areas where harbour porpoises have been sighted.
FRANCE
Modification of practices in pelagic trawling (headline at 5 m depth)
GERMANY
None
LITHUANIA
None
NETHERLANDS
None
POLAND
Actions for the reduction of by-catches, implemented in Poland, are based on Regulation 812/2004/EU. Since January 1, 2008, the drift nets use has been banned and that type of nets is no longer declared in fishing licenses of Polish Baltic fishermen. The number of driftnets has been reduced in polish fishery on phased basis; in the first year – by almost

18%, in the second year by 24% and in the third year directly preceding the imposition of the ban – by further 2%. The use of set gill nets has achieved the level of 71% of 2004 and such level has prevailed for the last two years.

Table

The rate of reduction of the number of gill nets – GND and GNS types – declared to be owned by Polish fishermen in years 2004-2008 (2004 year as a 100%). Data based on the registers held by the Ministry of Agriculture and Development of Rural Areas for 2004-2008)

Year	2004	2005	2006	2007	2008
GND	100%	82%	76%	74%	-
GNS	100%	79%	77%	74%	71%

And further, the Fishery Department of the Ministry of Agriculture and Development of Rural Areas purchased 500 pingers and delivered them to fishermen so that the pingers are applied on fishing grounds of ICES 24. It's estimated that when all these devices are delivered to local fishermen, the pingers purchased will cover only one fifth of the whole demand for pingers needed by gill set nets (GSN) which may be used by local fishery.

SWEDEN

Implementation of pingers: Currently at least 9 fishermen have purchased pingers and use them in the waters covered by the EU regulation 812. The fishermen on the west coast of Sweden believe the pingers are effective in reducing by-catch of harbour porpoises. However, there is an increase in numbers of by-caught harbour seals.

UNITED KINGDOM

All vessels involved in the bass pair trawl fishery are now voluntarily using DDD-02F devices to minimise dolphin bycatch. Skippers are convinced that these devices are an effective solution to this problem. Scientific investigations continue alongside this voluntary deployment in a collaborative study with industry (see above). Three static net vessels are also using DDD-02s in the gill and tangle net fisheries in ICES Division VII. Two of these are over 12m and are required to use pingers under Council regulation 812/2004 and are using these devices as part of a scientific study under the derogations specified under Article 2 para 3 and Article 3 para 2 of Council regulation 812/2004.

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

BELGIUM			
Observed bycatch in 2008			
Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Estimates are provisional			
Phocoena phocoena	13 (+); this is the number of bycaught animals obtained; this number has not been extrapolated to stranded	IVc	Recreational beach fisheries and professional fisheries (indirect evidence)

	animals with unknown cause of death or to an estimation of actual bycatch		
DENMARK			
Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Observer program for marine mammals	0	IIIabcd, IVb	Pelagic trawl (single and pair), 5.9% of the fishery is covered
FINLAND			
No further information			
FRANCE			

Observers for the EC regulation (n° 812/2004) are deployed for vessels greater than 15 meters and for vessels less than 15 m. As it is not possible to put observers on boats less than 8m for security reason, a correction has been used by using a relationship between vessel size and length of nets.

The table below brings the2007 bycatch estimates available for pelagic trawl fisheries and set nets observed under the Reg 812/2004 (national report delivered in 2008; the report is available on internet http://agriculture.gouv.fr/sections/publications/rapports/captures-accidentelles8343/downloadFile/FichierAttache_1_f0/Cetaces_rapport2007_

DPMA_mai2008.pdf?nocache=1134040585.85)

Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Phocoena phocoena	600	VIIIa,b	Set net (all size vessels) (all the year)
Delphinus delphis	240	VII&VIII	pelagic trawling (winter mainly)
Stenella coeruleolba	40	VII&VIII	pelagic trawling (summer)
Tursiops truncatus	50	VII&VIII	pelagic trawling (summer)
Globicephala melas	10	VII&VIII	pelagic trawling (summer)

GERMANY	
No information supplied	
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 2008.

A monitoring programme financed by the LNV (Ministry of Agriculture, Nature and Food Quality) for part of the set net fishery targeting cod and turbot, took place in 2008. One animal was by-caught. Extrapolation to the fleet gives 2-30 specimens during the period covered (week 7-22).

Just over 300 porpoises stranded on Dutch beaches in 2008. Eighty-one of these were secured for detailed necropsies and stored frozen. The University of Utrecht hosted an international necropsy session to work through these animals, from 7-12 December 2008. An international team of some 25 necropsy experts, lead by Prof. Dr. Andrea Gröne of the Veterinary Department of Utrecht University, Dr Thierry Jauniaux (Vet. Dept., Univ. Luik) and Mardik Leopold (Wageningen Imares) performed the necropsies. As in the two previous years, bycatches in -presumed- fishing gear and various diseases were the main obvious causes of death. Fine-tuning of necropsy results will follow later, after all samples taken for lab-analyses (histology) will have been processes.

The incidence of bycatch in 2008 seems slightly lower than in previous years, partly due to the fact that very few porpoises stranded in Spring 2008. Springtime was the peak of both strandings and bycatch percentages among strandings in previous years; the pattern of strandings was very different in 2008 as compared to 2006 and 2007. Shortly after the necropsy session, from end December 2008 and through March 2009, a relatively large number of by-caught animals stranded on Texel and the northern part of Noord-Holland, again a pattern in strandings previously unknown. First analyses indicates that a large proportion of these animals were by-caught.

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

POLAND

Year 2008 was another year following the implementation of regulation 812/2004/EU, when no reports on by-catches were delivered on a voluntary basis, which may indicate that the population of animals dropped or that fishermen are not willing to deliver such reports.

Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Phocoena phocoena	0	–	In 2008, the – so called – "Observers Programme" – for the monitoring of by-catches of whales was not carried out.

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 worked full time. Starting September 2006, the observers boarded pelagic trawlers exceeding 15 meters in length in order to monitor bycatch of harbour porpoises. The North Sea, Skagerrak / Kattegatt, Southern, Eastern and Northern Baltic Sea were covered. A total of 1342 trawl hours were observed until the end of December 2007 which corresponds to 4,61% of the fishing efforts(with mandatory monitoring) of the Swedish pelagic trawlers. No bycatch of harbour porpoise was 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.

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

Study of by-catches of birds and marine mammals in the recreational fisheries

The bycatch rate of recreational fisheries in Sweden is largely unknown. Bycatch rates have therefore been estimated mainly from various fishing trials and studies within the commercial sector.

The Swedish Board of Fisheries has investigated bycatch of birds and mammals in the recreational fisheries in Sweden by gathering material from different available sources. The investigation was funded by SEPA. The study is largely putting existing information from previous studies together, most of which are not directly concerned with the question of bird and mammal bycatch in the recreational fishing sector.

The study has concentrated on the net and trap fisheries, where the is particular cause for concern about bycatch. Although the available data is insufficient by normal standards, all estimates of bycatch frequencies gave similar results, in the order of 0.001 to 0.01 birds per km of net per day. Total loss in the recreational sector, due to bycatch, for the country as a whole works out to be less than 10,000 birds and 600 seals per year. These amounts are not considered to constitute a threat to any individual species. Comparing fishing effort in the commercial and recreational sectors show that in most areas the recreational sector is responsible for bycatch of the same magnitude as the professional fishermen. Future bycatch studies should encompass all sectors of the net and trap fisheries, and the bycatch debate should encompass all stakeholders in our marine environment, not just the licensed fishermen.

Pilot study of Electronic Monitoring (EM) system for fisheries control on smaller vessels

The cetacean by-catch programme set up in response to EU council regulation no. 812/2004 requires the monitoring of fisheries by-catches by independent observers. The purpose of this pilot study was to see if remote Electronic Monitoring (EM) using onboard cameras could meet the requirement more effectively than maintaining fisheries personnel onboard the fishing vessels. The regulations only require monitoring of vessels over 15m length, for both practical and economic reasons, but they encourage member states to carry out pilot studies on smaller vessels as well. This is what the Swedish Board of Fisheries has done, with trials involving two gillnetters in the central Baltic Sea during the summer of 2008. The trials were cofunded by SEPA.

The system was tested for 4 months, including 71 days of fishing operations, and proved to be reliable, with only a few days of data lost due to technical problems. The same set-up lends itself to recording bycatches of seabirds and seals; to the documenting of seal-induced damage to catches; and even to monitoring by-catches of non-target fish species.

UNITED KINGDOM

Bycatch monitoring is being undertaken to meet the requirements of EU Council Regulation 812/2004 and the Habitats Directive (92/43/EC). Bycatch estimates for 2008 are not yet available, but will be produced for the Report on Regulation 812/2004 that is due for submission to the Commission in June 2009. Data for 2007 are presented in the Annual Report of the United Kingdom to the European Commission on the implementation of Council Regulation 812/2004 on cetacean by-catch for 2007 and are summarised below.

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	592	VIIadefghj	All set gillnet and tangle net fisheries
Common dolphins	114	VIIadefghj	Hake gillnet and Tangle net fisheries (turbot, monkfish, skates, rays, crayfish, spider crabs)

2. Reduction of disturbance to small cetaceans

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

BELGIUM
The monitoring of the effects of the construction and operation of offshore windfarms has started. In 2008, 6 wind turbines of 5 MW each were constructed offshore on the Thornton Bank. Underwater noise measurements were made, and a monitoring programme for marine mammals was initiated. Given that gravity foundations were used, no important disturbance effects originating from underwater noise over large areas were expected to occur in 2008. From 2009 onwards, the construction of more wind turbines is planned, amongst which a number which will be based on monopiles, driven into the seafloor. Next to the monitoring of underwater noise, also basic information was gathered about the presence of porpoises in Belgian waters, inside and outside the (future) windfarm areas, using different methods: aerial surveys, collection of ad hoc information about sightings (info collected during seabird surveys – effort related, reports of opportunistic sightings), use of C-PoDS (from 2009 onwards). A first estimation of harbour porpoise abundance in Belgian waters was made from observations during an aerial survey on 8-9 April 2008. It was estimated that in Belgian waters an average density of 0.61 (0.40-0.92) animals/km² occurred, or in total (in 3.600 km²) 2.192 (1.449-3.316) animals (preliminary data; 90% confidence limits; Haelters et al., in prep.). An aerial survey on 5 May 2008 yielded lower numbers (0.19 animals/km²), but large confidence limits. Aerial surveys will be continued in 2009.
DENMARK
Recent data on acoustic disturbance of marine mammals from wind farms and other sources are collected in the volume Popper, A. N., A. D. Hawkins, M. Wahlberg (2008). Bioacoustics, Vol. 17, Special edition on effects of noise on underwater wildlife.
FINLAND
A preliminary research of underwater noise in Archipelago Sea related to ship (ferry) noise and leisure boat noise.
FRANCE
A study (bibliography, part of a post-doc work) is currently under way for refining the (sonar/seismics) risk threshold definition, in terms of parameters (species, frequencies, signals). Models for predicting the radiated level of sonar and seismic systems are being improved. 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 restrict the exclusion area to the trawl only in order to avoid a too large exclusion area. The pinger (CETASAVER) is now commercialized.
GERMANY
NGOs (NABU, GRD, GSM) highlighted the risk of foreseen ammunition detonations for harbour porpoises at the Baltic sea coast close to Schleswig Holstein and asked the responsible authorities for avoidance or at least comprehensive mitigation measures to substantially reduce the risks for cetaceans. In this context the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) initiated the contact between the responsible State Ministry for the Interior of Schleswig-Holstein and its respective service ("Kampfmittelräumdienst") and marine experts of the Federal Agency for Nature Protection

(BfN Vilm) to help mitigate the impact of underwater explosions of ammunition in Kiel Bight. Due to the constant support of NGOs, which organized a specific symposium on ammunition removal, these efforts finally reached a successful testing of so-called bubble curtains to reduce the emitted sound pressure levels. [O. SCHALL]

Responding to an initiative of three German non-governmental organisations (NABU, GRD, GSM) to reduce the impact of ammunition removal on marine mammals, the Federal Armed Forces Underwater Acoustics and Marine Geophysics Research Institute (FWG) investigated means of reducing the shock wave of underwater detonations. Using a double bubble curtain, in test detonations (of 1 kg charges) a noise reduction by 14 to 18 dB was achieved. This could reduce the area of impact by up to 98 %. [S. KOSCHINSKI]

A research project funded by the Federal Agency for Shipping and Hydrography (BSH) has started to investigate effects of the construction noise in the first German Offshore test-field for windfarms “Alpha Ventus” close to Borkum Reef, Germany. Visual surveys by airplane and ship as well as acoustic surveys with a towed hydrophone and stationary acoustic monitoring using C-PODs are carried out. [U. SIEBERT]

Concerns exist in Lower Saxony regarding the disturbance due to heavy dredging for harbour constructions in the estuary of the river Elbe. [R. CZECK]

LITHUANIA

No measures on disturbance reduction have been implemented.

NETHERLANDS

Several studies continued in 2008 investigating the possible impact of an offshore wind park in the North Sea on porpoise habitat use. Both boat surveys and the deployment of hydrophones (T-PODs) have been used. The study is ongoing and will finish in 2009 and results will be published.

Two further studies by Kastelein et al. (2008c and 2008d) were addressing the effect of acoustics on harbour porpoise behaviour:

First of all the use of ultrasonic sounds in alarms for gillnets may be advantageous, but the deterring effects of ultrasound on porpoises are not well understood. Therefore a harbour porpoise in a large floating pen was subjected to a continuous 50 kHz pure tone with a source level of 122 3 dB re 1 Pa, rms . When the test signal was switched on during test periods, the animal moved away from the sound source. Its respiration rate was similar to that during baseline periods, when the sound was switched off. The behaviour of the porpoise was related to the sound pressure level distribution in the pen. The sound level at the animal’s average swimming location during the test periods was approximately 107 3 dB re 1 Pa, rms. The avoidance threshold sound pressure level for a continuous 50 kHz pure tone for this porpoise, in the context of this study, is estimated to be 108 3 dB re 1 Pa, rms. This study demonstrates that porpoises may be deterred from an area by high frequency sounds that are not typically audible to fish and pinnipeds and would be less likely masked by ambient noise.

Additionally, two harbour porpoises in a floating pen were subjected to five pure tone underwater signals of 70 or 120 kHz with different signal durations, amplitudes and duty cycles (% of time sound is produced). Some signals were continuous, others were intermittent (duty cycles varied between 8% and 100%). The effect of each signal was judged by comparing the animals’ surfacing locations and number of surfacings (i.e. number of respirations) during test periods with those during baseline periods. In all cases, both porpoises moved away from the sound source, but the effect of the signals on respiration rates was negligible. Pulsed 70 kHz signals with a source level (SL) of 137 dB had a similar effect as a continuous 70 kHz signal with an SL of 148 dB (re 1 lPa, rms). Also, a pulsed 70 kHz signal with an SL of 147 dB had a much stronger deterring effect than a continuous 70 kHz signal with a similar SL. For pulsed 70 kHz signals (2 s pulse duration, 4 s pulse interval, SL 147 dB re 1 lPa, rms), the avoidance threshold sound pressure level (SPL), in the context of the present study, was estimated to be around 130 dB (re 1 lPa, rms) for porpoise 064 and

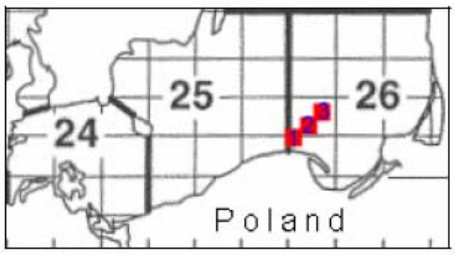
around 124 dB (re 1 lPa, rms) for porpoise 047. This study shows that ultrasonic pingers (P70 kHz) can deter harbour porpoises. Such ultrasonic pingers have the advantage that they do not have a ‘‘dinner bell” effect on pinnipeds, and probably have no, or less, effect on other marine fauna, which are often sensitive to low frequency sounds.

Kastelein, R. A., Verboom, W. C., Jennings, N., de Haan, D., van der Heul, S. 2008c. The influence of 70 and 120 kHz tonal signals on the behaviour of harbour porpoises (*Phocoena phocoena*) in a floating pen. Marine Environmental Research 66, 319-326.

Kastelein, R.A., Verboom, W.C., Jennings, N., and de Haan, D. 2008d. Behavioural avoidance threshold level of a harbour porpoise (*Phocoena phocoena*) for a continuous 50 kHz pure tone (L). J. Acoust. Soc. Am. 123, 1858-1861.

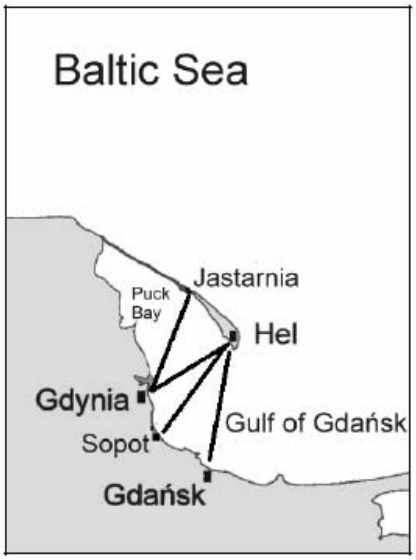
POLAND

According to information obtained from the Department of Geology and geological Licenses and Concessions of the Ministry of Environment, geological investigations using acoustic seismic methods were carried out in December 2008 in the area of basins situated in the 26 ICES square. Field investigation of natural gas and oil beds were carried out by CGG Veritas being a French company. For the purpose of investigation three ships were used, namely Ventur, Maggie M and Ramco Energy.



№	Licence / Object	Type of works	Size
1	№ 34/2001/p „Gaz Południe”, B22	2D	205 km^2
2	№ 37/2001/p „Łeba”, B101	2D	191 km^2
3	№ 38/2001/p „Rozewie”, B28	2D	87 km^2
		3D	44 km^2

The only basin in the Polish Baltic Zone in which high speed ferries are used and harbour porpoises appear is the Gulf of Gdansk including the Puck Baz. The number of hydrofoils does not increase and in the top of the summer season hydrofoils are exploited on lines from Gdansk, Sopot and Gdynia to Hel and Jastarnia.



SWEDEN

Sweden participates in an international project (MINUS) of mapping the distribution of underwater noise in coastal water with the aim of :

- Identifying areas where special attention to marine mammals should be given by shipping.
- Studying how and to what degree anthropogenic noise in coastal waters has impact on marine mammals
- Describing different propeller types, engines etc. and finding a way to reduce the impact on marine mammals.
- Increasing public awareness of the noise problems through a campaign, “Silent Sea”.
- Creating and promoting an eco-labelling, which informs the user how much underwater noise is being created by different marine equipment.

SEPA is funding investigations on noise and the presence of harbour porpoise in Skälderviken in the Kattegat. The research is going to be carried out in 2009.

UNITED KINGDOM

Further trials have been completed to assess the extent to which acoustic deterrent devices (pingers, model DDD-02) may displace porpoise and dolphins. Such devices may be used in certain fisheries to minimise bycatch and there is a concern that widespread usage may have an impact on foraging success of dolphins and porpoises in the area whilst also protecting them from entanglement. Trials in 2008 suggested that displacement effects are detectable out to at least 2km for both porpoises and dolphins, but if all over 12m UK – based vessels were to deploy such devices the area of affected would likely be less than 1% of the area available for foraging in the Celtic Sea.

The Ceredigion County Council Study of cetacean site use and boat traffic along the Marine Heritage Coast and Cardigan Bay SAC is in its 16th year with over 8000 hours of volunteer effort.

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

BELGIUM

For both licensed offshore windfarm projects the impact on cetaceans is being/will be monitored. For pile-driving operations, measures such as ramp-up procedures and the deployment of pingers are in force. More information concerning the offshore windfarm

projects in Belgium is available at MUMM's website (http://www.mumm.ac.be).

Flemish authorities are planning a review of the legislation in Flanders, dating from 1980, on the protection of species (see above). It will take account of the original legislation and the requirements in the Habitats Directive, and will most probably enter into force in 2009 (notified by Véronique Verbist, Agentschap voor Natuur en Bos, Flemish authorities).

The federal public environment authority has prepared a new Royal Decree for permits of non-industrial and non-commercial activities in the Belgian Part of the North Sea (formal adoption and publication in OJ foreseen in 2009). This allows the competent administration to assess the impact of non-industrial and non-commercial activities on the marine environment, i.c. protected species.

DENMARK

None

FINLAND

None

FRANCE

An Ifremer report entitled "Analysis of the risks for marine mammals caused by acoustical methods in oceanography" published in 2007 is now made available on internet (http://www.ifremer.fr/docelec/doc/2007/rapport-2390.pdf)

IFREMER now applies on his seismic surveys mitigation measures, based on the classical international recommendations (MMOs onboard, amplitude ramp-up for airgun arrays). The development and installation of a PAM system on oceanographic vessels is under way. Contacts have been taken for cooperation with oil companies R&D departments.

GERMANY

OSPAR (BDC /EIHA) is presently working on a modular "Comprehensive overview of the impacts of anthropogenic underwater noise in the marine environment" (Paper BDC 09/16/12-E draft). Module 7 focuses on "seismic surveys". The potential mitigation measures described there would be considered already in an approval procedure by LBEG if there would be a project; but the latter was not the case in 2008. [M. FRICKE]

Following the instructions for the German Navy on the protection of marine mammals and maritime habitats that were enacted in September 2007, marine mammal sightings are collected by the German fleet and recorded in a data base to improve knowledge about the distribution and habitat use of abundant species and take into account the information for further planning of trials. [S. LUDWIG]

The Federal Republic of Germany (BMU) initiated and helped to table the draft resolution on "Adverse Anthropogenic Marine/Ocean Noise Impacts on Cetaceans and Other Biota" adopted as UNEP/CMS/Resolution 9.19 at the ninth Conference of Parties. [O. SCHALL]

LITHUANIA

No new guidelines or legislation implemented.

NETHERLANDS

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POLAND

No new legal regulations intended to reduce disturbances for whales in the Polish Baltic Zone (EEZ) were implemented. But, at the end of 2008, the project for detonating 500 kg ammunition in the Puck Bay was halted on request by the Ministry of Environment having regard to a potential risk to the health and lives of harbour porpoises. The project was

postponed until a relevant plan for the reduction of its impact is developed.
SWEDEN
-
UNITED KINGDOM
The Joint Nature Conservation Committee (JNCC) has produced statutory guidance relating to the deliberate disturbance and injury offences contained in the Conservation (Natural Habitats, &c.) Regulations 1994 and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 in the marine area. The primary focus of the guidance is on the deliberate disturbance and injury of cetaceans, as these are the most prevalent Annex II species found in UK waters. We expect the guidance will be published on the JNCC website shortly. The UK Government has introduced the Marine and Coastal Access Bill in Parliament. Subject to parliamentary approval we anticipate the Bill receiving royal assent later this year. The Bill includes proposals for a new system of marine planning and licensing, modernized inshore fisheries management, and new tools to designate and protect areas as Marine Conservation Zones (MCZs) for nature conservation purposes.

3. Protected areas for small cetaceans

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

BELGIUM
The Special Area of Conservation Trapegeer-Stroombank, ((181 km²) has been designated by Royal Decree (KB14.10.2005) under the EU-Habitats Directive, but it was not designated specifically for porpoises. Management / policy plans for the marine protected areas in the Belgian part of the North Sea have been drawn up in 2008 by the FPS Public Health, Food Chain Safety and Environment, Marine Unit, and have gone through public consultation. These plans propose a number of actions, a.o. to maintain or restore the harbour population to a 'favourable state of conservation', taking into account the socio-economical and recreational requirements. The competent authority (FPS Public health, Food Chain Safety and Environment, Marine Unit) has contracted the KBIN-BMM (IRSnB-MUMM) to draw up a list of potential sites of community importance (pSCIs – EU Habitats Directive) for Annex I Habitat types and Annex II species (e.g. harbour porpoise) in the Belgian part of the North Sea. The report of this project will be available by fall 2009.
DENMARK
The following report was used as background information to propose new Natura 2000 areas for harbour porpoises in Danish waters: Teilmann, J., Sveegaard, S., Dietz, R., Petersen, I.K., Berggren, P. & Desportes, G. 2008: High density areas for harbour porpoises in Danish waters. National Environmental Research Institute, University of Aarhus. 84 pp. – NERI Technical Report No. 657. http://www.dmu.dk/Pub/FR657.pdf After a public hearing the final areas will be decided and submitted by the Danish Government to EU by summer 2009.

FINLAND

None

FRANCE

During the year 2008, 76 Natura 2000 marine sites has been designated by France.

Among all existing Natura 2000 sites in the ASCOBANS area, Bottlenose dolphin is present in 33 and Harbour porpoise in 31, both on the Channel and Atlantic coast.

Council Management Plan of the Marine Protected Area in Iroise Sea (West Brittany) has started to work.

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

GERMANY

In spring 2008 the first two monitoring surveys covering the waters of the Lower Saxonian coastal zone were carried out by using a standard line-transect-method. The results showed a higher concentration of harbour porpoises in the western part of this area than in the eastern part. In April 2008, a concentration of about 1 animal/km² was detected between Borkum and Langeoog and a concentration of about 0,34 aminals/km² was found in the eastern part. The monitoring results are published on the internet, see "Monitoringergebnisse" at http://www.nationalparkwattenmeer.niedersachsen.de/master/C43559691_N28553490_L20_D0_I5912119.html. It is planned to continue this monitoring. Caused by the high sediment loading there are difficulties to find the appropriate number in the big estuaries as shown by the high number of carcasses found in the Elbe estuary (eastern part of LS wadden sea) and the low level of sightings in this region. [R. CZECK]

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. 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

In establishing Natura 2000 areas in the Polish Baltic Zone (EEZ), basins in which harbour porpoises appeared and by-catches occurred were taken into consideration. These areas are:

1. Refugium in the Pomerania Bay – PLH 990002
2. Waters covered by the Wolin National Park – PLH 320019
3. Slupsk Bank – PLC 990001
4. Slowinski Bank – PLH 220023
5. The Puck Bay and the Hel Peninsula – PLH 220032

There are also areas of Polish Baltic waters the importance of which for the protection of harbour porpoises is not confirmed by recent data:

6. The Vistula Mouth Shoal –PLH 220044
7. Vistula Lagoon and the Vistula Sandbar – PLH 280007
8. The Mouth of the Odra River and the Szczecin Basin – PLH 320018

Advanced operations for the identifications of those areas in the aspect of the harbour porpoises protection have been implemented furthest in the Puck Bay where the Hel Marine Station of the University of Gdansk, Institute of Oceanography has been carrying out a 3-year project for the active protection of these animals against by-catch. The operations include the monitoring of fishing activities with regard to seasonal changes in the strategies of gillnet fishing. The results of and conclusions derived from the research works are to help to manage the nature protection activities in that area and will enable a more accurate description of the south and east border zones of the Natura 2000 habitat area established in that basin.

It should be noted that amendments to the *Act on environmental protection* and certain other acts strengthened the supervisory powers and competence of the directors of Marine Offices over Nature 2000 areas established in the Polish EEZ.

SWEDEN

No area has been identified as a protective area for harbour porpoise in the Baltic. In the Skagerrak, two Natura 2000 sites has been identified to harbour porpoises.

The sites are: Vrångöskärgården and Koster-Väderöfjorden.

UNITED KINGDOM

Scottish Natural Heritage (SNH) has a Memorandum of Agreement until 2012 with the Lighthouse Field Station, Aberdeen University, to monitor the bottlenose dolphin feature of the Moray Firth SAC. The latest report (2008) indicates that the number of dolphins using the Moray Firth is stable, although variable between years. Individuals from this population are known to travel outside the SAC, along the east coast of Scotland at least as far as the Firth of Forth, but the SAC still remains a core area for the population.

The Countryside Council for Wales (CCW) had 6 TPODs deployed in coastal locations in the Cardigan Bay SAC. The use of acoustic data loggers such as TPODs provide a method of collecting data continuously irrespective of light and weather conditions and is particularly useful for collecting data on rates of habitat use and revealing diel cycles of activity about which we currently know little. Bottlenose dolphin and harbour porpoise detection rates are negatively correlated and increased competition for limited prey may be a factor that may also be a reason for the rise in porpoise deaths resulting from attacks by bottlenose dolphin.

The report of Cardigan Bay and Pen Llyn a'r Sarnau SAC bottlenose dolphin and harbour porpoise monitoring from 2005 to 2007 has been produced along with a photoID catalogue. CCW continued to grant-aid Seatrust to conduct a small cetacean survey of the Bristol Channel (2007-2010).

CCW has grant-aided Seawatch to carry out a baleen whale survey of the Irish Sea (2007-2010). CCW has grant-aided West Wales Divers to survey harbour porpoise around Pembrokshire Islands. The surveys are conducted on an opportunistic basis as part of tourist wildlife trips and has resulted in some novel statistical analysis.

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.

Connectivity of Bottlenose Dolphins in Welsh Waters has also been produced: A Bottlenose Dolphin PhotoID study conducted in collaboration with CCW, Seawatch Foundation and Marine Awareness North Wales. As a result of CCW funding for Bottlenose Dolphin PhotoID studies in North Wales, we now know a significant proportion of the Cardigan Bay SAC population use these waters during autumn and winter.

4. Further research on small cetaceans

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

BELGIUM
Preliminary data for 2008 indicate that in total 62 porpoises washed ashore, were bycaught or were found dead at sea. 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. - For 31 porpoises the cause of death is (still) unknown - For 18 porpoises the cause of death was probably natural - For 13 porpoises the cause of death was probably or certainly bycatch; amongst these at least 4 can be attributed to recreational beach fisheries (March and April); for the others it is unclear in which fishery they were caught, but at least some were taken in professional fisheries None of the bycatches was reported by fishermen, although reporting bycatch in Belgian waters is required by legislation. The number of porpoises washing ashore has decreased for 2 consecutive years, but remains high compared to a decade ago. In 2008 one white-beaked dolphin washed ashore alive; the animal died on the beach. Another white-beaked dolphin was observed floating at sea (decomposed; notified by INBO).
DENMARK
None
FINLAND
Finland has continued the harbour porpoise sighting campaign and received information of two sightings of totally 6 animals in year 2008.
FRANCE
The French stranding network is nationally coordinated by CRMM/ULR (Centre de Recherche sur les Mammifères Marins, Université de La Rochelle) under an agreement with the Ministry in charge of the Environment. Local voluntary observers, generally under local supervision by various institutions or NGOs (Oceanopolis, GEFMA, GECC, GMN, OCEAM, CMNS, Picardie Nature, ONCFS…), have been trained to process stranded cetaceans under a common standardized protocol. An annual synthesis of all strandings reported in France is produced by CRMM/ULR. Statistics of stranding for the coast of France in 2008 indicate more than 800 cetaceans reported, data input in progress (CRMM/ULR and all National Stranding Scheme field correspondents). Stranding data provides information on mortality causes, demographic structure (age and reproductive status), diet (stomach content), trophic levels (stable isotopes) and subpopulation structure or movement pattern (stable isotopes, heavy metals and contaminants).
GERMANY
The stranding network for cetaceans along the German coasts of the North and Baltic Seas operated routinely to its full extent. Necropsies of all stranded and by-caught cetaceans were carried out as usual by the Research and Technology Centre (Büsum), the Veterinary Institute for Fish and Fishery Products (Cuxhaven) and the German Oceanographic Museum (Stralsund). The German Oceanographic Museum collaborated also with the State Veterinary Agency of Mecklenburg-Vorpommern (Rostock). Projects of the Research and Technology Centre (Büsum) to investigate the genetic structure of parasites from the

respiratory tract of harbour porpoises were continued. [U. SIEBERT]

The collecting of information on incidental strandings and sightings-by-chance is continued (see http://www.nationalparkwattenmeer.niedersachsen.de/master/C43559691_N28553490_L20_D0_I5912119.html). Pathological investigations were limited by decay of most of the stranded animals. [R. CZECK]

LITHUANIA

None

NETHERLANDS

Porpoises were collected for necropsies in 2008 and in the following years, to follow the development of by-catch percentages and for other studies into porpoise biology, such as gathering dietary information. Since 2006 LNV (Ministry of Agriculture, Nature and Food Quality) is conducting research on stranded cetaceans with the help of veterinary pathologists from the University of Utrecht. One of the main results so far is that for about half of the animals the cause of death is drowning in fishing nets. Increasingly carcasses that strand show signs of cuts or are partly cut up. The reasons for this are unclear. A second result is that in the winter months in general the overall health status is good (few lethal diseases, full stomachs, large blubber layer). However, in the summer months more animals died because of disease and showed empty stomachs as well as small blubber layers. Finally, the results show a clear spring peak in the percentage of by-catch in the years 2006 and 2007 of the analysed animals. In 2008 this peak was not visible, but in December 2008 to March 2009 a new peak of strandings of by-caught animals occurred.

A PhD project started in 2007, investigating whether food availability is a governing factor for the abundance of porpoises in Dutch coastal waters, unravelling possible links between shifts in the feeding ecology and changes in their distribution and relative abundance in the Southern North Sea. In this project, 3 methods of diet analysis are used: [1] stomach contents analysis (identification of recently ingested and undigested prey remains, [2] fatty acid analysis (QFASA, discerning the diet of the last 3-4 month) and [3] stable isotope analysis (C13:C12 and N15:N14 ratios). This combination of techniques will provide information on prey species, relative prey composition and trophic level, both in space (e.g. estuarine versus open sea) and time (e.g. short, mid and long term).

A study by Osinga et al. (2008) analysed stranding data and recorded post-mortem findings for 153 harbour porpoises (*Phocoena phocoena*), which were collected by the Seal Rehabilitation and Research Centre (SRRC; Pieterburen, The Netherlands) in the period 1984–2006. Special consideration was given to 'by-catch' listed as a major cause of death. A distinct increase in the numbers of strandings of porpoises along the Dutch coastline has occurred in the recent years of the studied period. This corresponds to the number of porpoises observed in Dutch waters in the same period. Although strandings occurred throughout the entire year, they were most frequent during the January to July period. By-catch and drowning were noted most frequent in the winter and spring seasons (December–April). By-catch and drowned porpoises were found along the entire Dutch coastline. The numbers of animals per area varied depending on the collection efforts. At post-mortem investigation, three probable causes of death were identified most frequently: pneumonia, emaciation and by-catch/drowning. The by-catch and drowning rate was calculated to vary between 7% and 19%.

Osinga, N., 't Hart, P. and Morick, D. 2008. By-catch and drowning in harbour porpoises (*Phocoena phocoena*) stranded on the northern Dutch coast. Eur. J. Wild. Res 54:667-674

Implementation of schemes to use and gain information from stranded cetaceans

An overview of strandings between 1998 and 2007 in the Netherlands has been published by Camphuysen et. al. (2008). In total 2063 cetaceans were found stranded, representing at least 14 species of which two species are additions to the Dutch list. All individual cases other than harbouw porpoises are listed in this paper, reporting species, date, locality,

reporter, sex, total length (TL), collected remains, and remarks. For porpoises (n= 1968), overall stranding patterns by means of frequencies, seasons, sex ratios and age classes are discussed. The role of by-catch as a cause of death is discussed and a dialogue with fisheries organisations is proposed to explore the issue further and to try and mitigate the problem.

POLAND

The Hel Marine Station of the University of Gdansk, Institute of Oceanography continues its action of previous years in order to collect information about stranded whales and samples of their tissues are collected by the Station. All dead whales that are brought to the Station are examined to the extent possible. Minimum scope of sampling includes the collection of fat tissues for genetic examination and teeth needed to determine the age of the animal. In 2008, only one case of stranded harbour porpoise was reported to the Hel Marine Station. That animal was found near Mechelinki, in the area of the Puck Bay.

SWEDEN

The Baltic: Post mortem investigations are carried out on all small cetaceans by-caught or found stranded in the Baltic. The animals are sent to the Swedish Museum of Natural History, Stockholm, where the investigations are conducted. Often the specimens are too rotten to be sent to the museum for investigations. During 2008 the museum received 5 harbour porpoises (or parts of) from the Baltic. The museum also received a report of a dead porpoise in the Baltic.

The west coast: The museum received samples (or whole animals) from 21 porpoises found dead in 2008 from the Swedish west coast (via Gothenburg Natural Museum). Most of these porpoises were found dead (stranded), often with signs of prior being caught in fishing gear. In most cases only a piece of tissue from the dorsal fin is sampled from harbour porpoises by-caught or stranded on the Swedish west coast.

In some cases whole specimen from the Swedish west coast are sampled so a full necropsy can be conducted. During the fall of 2008 a research-cooperation with the Swedish veterinary Institute in Uppsala has been initiated. From now on all whole small cetaceans that are sent to the Swedish Museum of Natural History undergo a detailed necropsy by a veterinarian.

For further details see report to ASCOBANS on Post Mortem Research Schemes.

UNITED KINGDOM

In 2008, 583 cetaceans were reported to the UK Cetacean Strandings Investigation Programme (CSIP), 6.2% higher than the number reported in 2007. Of these, 485 were found stranded and dead, 81 were seen to have stranded alive and 17 were dead cetaceans found at sea. Consistent with previous years, the most common UK-stranded cetacean species in 2008 were the harbour porpoise (*Phocoena phocoena*, n=270) and the short-beaked common dolphin (*Delphinus delphis*, n=113). In addition, reports of 27 stranded marine turtles and six basking sharks (*Cetorhinus maximus*) were also received in 2008.

In 2008, 136 cetacean strandings (comprising 13 species), 10 loggerhead turtle (*Caretta caretta*) strandings and one Kemp's ridley (*Lepidochelys kempii*) turtle stranding were examined at post mortem using standardised protocols. No basking sharks were examined

at post-mortem during 2008. The most common causes of mortality of the 69 stranded harbour porpoises examined at post-mortem in 2008 were starvation (n=28), pneumonias due to combinations of parasitic, bacterial and/or mycotic infections (n=14), bottlenose dolphin attack (n=12) and by-catch (n=8). Cases of fatal attack from bottlenose dolphins occurred in west Wales (n=5), north-east Scotland (n=4) and Cornwall (n=3) where porpoises have sympatric distributions with resident or semi-resident bottlenose dolphin groups.

Stranding alive (in otherwise healthy animals) was the most common cause of death in 29 of the 41 (71%) UK-stranded short-beaked common dolphins examined in 2008, including the mass stranding event (MSE) in Cornwall in June 2008. In contrast, only two UK-stranded common dolphin carcasses were diagnosed as by-catch in 2008, a marked reduction compared to the previous 18 year period where by-catch was the most common cause of death in the large number of common dolphins that predominantly stranded in south-west England (Cornwall and Devon) between January and April. The reason for the reduction in numbers of stranded harbour porpoises and common dolphins that were diagnosed as by-catch in 2007 and 2008 (mainly in south-west England) is not known.

There were two unusual stranding events in the UK during 2008. The first involved 12 Cuvier's beaked whales (*Ziphius cavirostris*) (mainly in western Scotland), 11 long-finned pilot whales (*Globicephala melas*) (ten in Scotland, one in west Wales), three Sowerby's beaked whales (*Mesoplodon bidens*) (mainly in Western Scotland) and one unidentified beaked whale (in Wales) that stranded between 21 January and 10 April 2008. Most carcasses were found dead and in a degree of decomposition that was largely unsuitable for detailed post-mortem examination. The degree of decomposition appeared to deteriorate further as strandings progressed over time, consistent with death occurring at a similar point in time. This mortality event was investigated as part of larger cluster of strandings that occurred between 13 January and 14 April 2008 and included another 13 long-finned pilot whales and three unidentified beaked whales that stranded in Ireland (Dolman *et al* 2008). The cause(s) of the unusual mortality event was not established, predominantly due to the degree of carcass decomposition (Dolman *et al* 2008).

The second unusual mortality event was the MSE of common dolphins first discovered in the Fal estuary, Falmouth Bay, Cornwall on the morning of 9 June 2008. At least 26 dolphins stranded alive and died and more were refloated back to open water by rescue groups and bystanders. A full investigation of the MSE was funded by UK Government (Defra) through a variation to the existing contract. Detailed post-mortem examinations were conducted along with a comprehensive range of additional diagnostic tests for bacteria (including *Brucella* sp.), viruses (including morbilliviruses) and histopathological examinations in all 26 animals, together with the quantification of algal and chemical toxin levels in tissue samples from the adults only (n=7), making this one of the most intensively investigated cetacean MSEs ever undertaken. On post-mortem examination, all 26 dolphins were found to have empty stomachs and to be in good nutritive condition and all were suspected to have stranded alive. A number of potential causes of this MSE can be either excluded or considered highly unlikely. These include distemper (morbillivirus), brucellosis, other infectious diseases, gas embolism, fat embolism, boat strike, by-catch, attack from killer whales or bottlenose dolphins, feeding unusually close to shore, ingestion of harmful chemical or algal toxins, abnormal weather/climatic conditions and high-intensity acoustic inputs from seismic airgun arrays, recreational craft and natural sources (e.g. earthquakes). An international naval exercise was conducted in the South Coast Exercise Area prior to the MSE but information provided freely by the *UK Ministry of Defence*, under strict legally binding *Freedom of Information* legislation*,* indicates a period of approximately 60 hours between the cessation of mid-frequency antisubmarine sonar deployment and the discovery of the MSE. The naval exercise is therefore considered unlikely to have directly triggered the MSE. Ultimately, a definitive cause for the MSE could not be determined. The findings were most consistent with an adverse group behavioral response to an unknown trigger, or an intrinsic "error of navigation", or a confluence of additional unknown factors within an otherwise healthy social group of dolphins. Greater insight into the causes of any future MSEs may require either a direct observation of the onset, or the emergence of an unusual level of coincidence of MSEs or violent reactions with one or more causal factors. A report on this MSE will become

available later in 2009.

Data and tissue samples generated from the systematic examination of UK-stranded cetacean carcasses since 1990 continues to supports a broad range of multidisciplinary scientific research activity and has resulted in over 150 publications within the peer-reviewed scientific literature in that period.

References:

Dolman, S.J., Reid, R.J., Barley, J.P., Deaville, R., Jepson, P.D., O'Connell, M., Berrow, S., Penrose, R.S., Pinn, E., Stevick, P.T., Calderan, S., Robinson, K.P., Doyle, T.K., Brownell, R.L. and Simmonds, M.P. (2008) A preliminary note on the unprecedented strandings of 45 deep-diving odontocetes along the UK and Irish coast between January and April 2008. (submitted to the 2008 Scientific Committee of the *International Whaling Commission*)

b. Research on abundance, population structure etc.

BELGIUM

Sightings

Next to sightings made during dedicated surveys for marine mammals or birds, the public has ample opportunity to report sightings; eventually all these are collected in MUMM's database, which can be consulted (partly) online.

Other sites where sightings are reported are:

dolphin@mumm.ac.be : the dedicated email address for reporting sightings to MUMM.

http://www.waarnemingen.be : (sightings with species, number of animals, geographical location, …)

http://www.zeezoogdieren.org : (sightings and strandings, Belgium, The Netherlands, and interesting news on marine mammals from around the world)

In 2008 the Flanders Marine Institute (VLIZ) acquired a (towed) hydrophone system for tracking porpoises and other cetaceans. This system is used during ship based surveys of seabirds. MUMM aquired 4 C-PoDs (passive acoustic monitoring).

Harbour porpoises:

Numerous sightings of harbour porpoises were reported in 2008.

White-beaked dolphins:

9 sightings of white-beaked dolphins were reported, of which 8 between February and June (the 9th in December). Average group size reported was 3 animals.

Bottlenose dolphins:

Numerous observations were reported of a single animal, apparently having been present irregularly between January 2008 and the beginning of august 2008 (with confirmed sighting until 7 August). This probably concerned the animal that was present at the same location during 2007 (see national report 2007).

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, aimed at a preliminary evaluation of the environmental impact of beamtrawling against bottom set gill net fisheries in Belgian marine waters, was finished in 2008. It will be followed up by a more extensive project which includes also activities in the field in 2009-2010.

Contact persons: Jochen Depestele: Jochen.Depestele@ilvo.vlaanderen.be and Jan Haelters: j.haelters@mumm.ac.be).

MARIN

The Federal department of Science Policy funded a veterinary pathologist at the MUMM department of the Royal Belgian Institute of Natural Sciences (2006–2008). This veterinary pathologist dealt 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 co-operation with France and the Netherlands. This collection now constitutes the Belgian Marine Mammal Biobank (BMMB) 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. Contact persons: Thierry Jauniaux: t.jauniaux@ulg.ac.be and Johan De winter j.dewinter@mumm.ac.be.

Harbour porpoises in the southern North Sea

IFAW funded the project “Harbour porpoises in the southern North Sea: trends, threats and research & management proposals”, executed by MUMM and the Royal NIOZ (The Netherlands). The report deals with the decline and increase of porpoises in the 20th and 21st century, focus on the related conservation problems, and propose realistic management measures. Results will be printed in spring 2009, and will be distributed. Contact persons: Jan Haelters (j.haelters@mumm.ac.be) and Kees Camphuysen (camphuys@nioz.nl).

Publications, communications

Depestele, J., Courtens, W., Degraer, S., Derous, S., Haelters, J., Hostens, K., Moulaert, I., Polet, H., Rabaut, M., Stienen, E. & Vincx, M., 2008. Evaluatie van de milieu-impact van WArrelnet- en boomKOrvisserij op het Belgisch deel van de Noordzee (WAKO). Eindrapport. ILVO Visserij: Oostende, Belgium, 185 p.

Jauniaux T. Reducing the effects of oil spills on Marine Mammals, in ; RIOS PROJECT–Reducing the Impact of Oil Spills BACKGROUND DOCUMENT : Research and Development Needs for Reducing Impacts from Oil Spills on Wildlife. EU Programme “Global Change and Ecosystems”, 2008 Nordeconsult Sweden AB, Lund, Sweden.

Schnitzler J., Siebert U., Jepson P., Beineke A., Jauniaux T., Bouquegneau J.-M., Das K., Harbour porpoise thyroids: Histological investigations and potential interactions with environmental factors, Journal of Wildlife Disease, 2008, 44, 888-901.

Jauniaux, T., Berguerie, H., Camphuysen, K., Daoust, P-Y., Drouguet, O., Ghisbain, T., Garcia-Hartmann, M., Grondin, A., Haelters, J., Jacques, T., Kiszka, J., Leopold, M., Pezeril, S., Schnitzler, J. & Coignoul, F., 2008. Causes of death of harbor porpoises (*Phocoena phocoena*) stranded on the on the continental coastline of the southern North Sea (Belgium, France, and Dutch coasts) between 1990 and 2007. ICES Annual Science Conference, Halifax, Canada, CM 2008/D:09.

Jauniaux, T., Berguerie, H., Camphuysen, K., Daoust, P-Y., Drouguet, O., Ghisbain, T., Garcia-Hartmann, M., Grondin, A., Haelters, J., Jacques, T., Kiszka, J., Leopold, M., Pezeril, S., Schnitzler, J. & Coignoul, F., 2008. Mortality of harbour porpoises in the North Sea: evaluation tool for the population. Stratégies de suivi de l'état des populations de mammifères marins, La Rochelle, 21-23 novembre 2008, 10ème Séminaire du Réseau National.

Jauniaux T., Rehabilitation of oiled marine mammals: an assessment. Reducing the Impact of Oil Spill Workshop, Albufeira, Portugal, 2008.

Jauniaux T., Causes of death of marine mammals in Europe : the North Sea case. Veterinary College of Prince Eduouard Island (Canada), 2008, invited talk.

Jauniaux T., Causes of death of harbor porpoises on the on the continental coastline of the southern North Sea. 7th international Symposium “Propects for the 3rd Millenium Agriculture” Section: Veterinary medicine, Cluj-Napoca, Roumania, 2008.

Jauniaux, T. , Haelters, J., Coignoul, F. & Jacques, T., 2008. Sonar or not sonar? Necropsy workshop: protocols and interpretation of necropsy data. 22nd Annual Conference of the European Cetacean Society, Egmond aan Zee, Nederland.

Jauniaux, T., Haelters, J. & Jacques, T.G., 2008. Espèces marines strictement protégées (mammifères): prise en charge de l'accroissement des échouages et mise au point de la banque de tissus. Rapport scientifique pour la période 2007-2008. Sec 15 Ch.Suppl. BELSPO 2008, 19p.

Morell M., Degollada E., Alonso J., Jauniaux T., Leopold M., Camphuysen K., André M., 2008. Decalcifying Protocol of Odontocete Ear Samples with RDO®, Acoustics 2008.

DENMARK

In 2008 five harbour porpoises were tracked with satellite tags in the Kattegat, Danish belts and the Baltic Sea (Jonas Teilmann, NERI).

FINLAND

Finland has taken part in a shared LIFE + 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), photo-identification, home range, population structure...

Photo identification of bottlenose dolphins of the Bay of Mont Saint Michel and Cotentin (GECC, GMN, 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), using a standardized protocol.

Genetic study on harbour porpoise (collaboration between the university of Brest and Oceanopolis Brest).

Cetacean distributions and relative abundances were surveyed over the shelf of the Bay of Biscay (May) and English Channel (January) by CRMM/ULR in order to determine relative abundances, preferential habitats and relationships with distribution of small pelagic fish as determined by simultaneous acoustic survey carried out by Ifremer/ Instituto Español de Oceanografía (IEO) research vessel Thalassa. This survey followed a standardized protocol in use since 2003 in Bay of Biscay area (PELGAS survey) and since 2007 in the English Channel (IBTS survey). In 2007 and 2008, collaboration between CRMM/ULR and the Centro Oceanográfico de Vigo (IEO) allowed data on cetacean distribution to be collected by using standardized protocol and same research vessel during April and September pelagic fish survey in the south of the Bay of Biscay (PELACUS survey).

Aerial surveys carried out by Oceanopolis Brest using line transect protocol to estimate the abundance and the seasonality of small cetaceans in Iroise sea (west Brittany).

GERMANY

In 2008, a total of 12 days of aerial surveys were conducted by the Research and Technology Centre (Büsum). In the south-western Baltic Sea, surveys were conducted in February and June 2008. In the North Sea, surveys were conducted in the 12sm zone of Lower-Saxony in April and May 2008, in the area of Sylt Outer Reef in July/August 2008 and in the area of the offshore test field "alpha ventus" in August and September 2008. Findings

from previous survey years such as very high densities around Sylt Outer Reef and increasing densities in the southern part of the German Bight were confirmed. In the Baltic Sea, high densities were detected in the northern part of Kiel Bight and around the island of Fehmarn. [U. SIEBERT]

For a possible military sonar test area in the Bay of Biscay, a detailed study concerning the abundance and habitat use of marine mammals including data of a prediction model and other biotic parameters (e.g. food resources) was carried out. New data for the German marine mammal data base (containing sightings, strandings, worldwide maps of occurrence and characteristics of 126 species) were integrated. In total, about 5000 systematic sightings, 3000 random sightings and 3500 stranding records from the German Baltic and North Sea areas were implemented, collected by national scientific institutes. Furthermore, sighting records from free available data bases were also added. Data about the occurrence and characteristics of 40 squid species, the most important food source for beaked whales, were generated. Information about existing and applied marine protected areas in national and international waters were collected, including 32 countries and mainly focussed on European waters. Within the data base, data of the relative environmental suitability (RES) model that includes seasonal predictions of habitat suitability, densities and uncertainties of marine mammal species, was extended with 10 toothed whale species: common dolphin (*Delphinus delphis*), striped dolphin (*Stenella coeruleoalba*), Atlantic white-sided dolphin (*Lagenorhynchus acutus*), white-beaked dolphin (*Lagenorhynchus albirostris*), long-finned pilot whale (*Globicephala melas*), Rissos dolphin (*Grampus griseus*), killer whale (*Orcinus orca*), bottlenose dolphin (*Tursiops truncatus*), harbour porpoise (*Phocoena phocoena*) and sperm whale (*Physeter macrocephalus*). A new rapid response audiometry system for measuring the hearing ability of marine mammals, using the AEP method (Auditory Evoked Potential), was calibrated and tested on harbour porpoises in captivity. The system is used on captive and life-stranded animals to investigate potential influences of noise exposure on the hearing abilities. [S. LUDWIG]

Four research projects by the environmental consultancy 'BioConsult SH' aimed to investigate the impacts of offshore wind farms, pile-driving, and sand extraction on harbour porpoises. In 2005 and 2006, the impact of operating wind turbines was studied in two Danish wind parks with the use of static acoustic monitoring (T-PODs). The effect of pile-driving was studied in the German offshore test area "alpha ventus" and at the Danish wind farm "Horns Rev II" again using static acoustic monitoring. Pile-driving clearly had an impact on porpoise acoustic activity. It appeared that harbour porpoises completely left the area next to the construction site for a medium time of 16.6 hours after pile-driving. The impact of sand extraction on harbour porpoises was assessed with aerial surveys and static acoustic monitoring. Passive acoustic monitoring devices revealed a short term avoidance of the vicinity of the dredging ship by porpoises, possibly due to acoustic disturbance, which lasted about four hours. [A. DIEDERICHS]

LITHUANIA

The LIFE project "Marine Protected Areas in the Eastern Baltic Sea" (LIFE05 NAT/LV/000100) is implemented in Estonia, Latvia and Lithuania in 2005-2009 (www.balticseaportal.net). One of the goal of this project – to inventory the marine mammals.

For detecting Harbour porpoise and measuring its activity passive submerged porpoise detectors (T-PODs) was used. The project inventory covered the whole length of the Eastern Baltic Sea coast from Lithuania to the Gulf of Finland. Arrays of T-PODs was deployed in pre-selected places (6 T-PODs in each Baltic country). In 2007 and 2008 different pre-selected areas was used, so different project areas was covered. These detectors were physically placed in the sea and every three months the data from T-PODs were downloaded and batteries exchanged.

The T-PODs for harbour porpoise detection have been purchased and programmed, later on deployed to first survey site for survey. So far, within the year 2007/2008, no harbour porpoises were detected near deployment locations.

NETHERLANDS

Aerial surveys were conducted within a research project funded by LNV (Ministry of Agriculture, Nature and Food Quality) and RWS (Ministry of Transport, Public Works and Water Management) 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 and were conducted in May 2008 and November 2008. Analyses of habitat use and abundance estimates are ongoing and will be expected to be published in 2009 and 2010.

A towed hydrophone array has been used during a number of studies in the North Sea. The data is still being analysed but the method is promising to collect 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

Apart from the aforementioned case of a dead animal, no other data such that could complement data on the structure of the population in the Polish Baltic Zone (EEZ) was obtained. Data and materials obtained in the previous years were submitted for genetic analysis which have been carried out within the framework of a German project co-ordinated by FTZ Buesum according to the decisions of the Experts of the Jastarnia Group. The said data are currently developed and will be published soon.

SWEDEN

Investigating the presence of harbour porpoises in the vicinity of gill nets

The aim of the study was to investigate if gill nets might attract harbour porpoises. The presence of harbour porpoises close to gill nets were investigated by using Porpoise click loggers (PCL). PCL:s were placed close to gill nets in a control area where no fishing was carried out. The results show that porpoises were equally present in both areas, there were no difference in the presence in the two areas.

UNITED KINGDOM

The Scottish Government and Scottish Natural Heritage are funding a project examining the distribution, abundance and population structure of bottlenose dolphins in Scottish coastal waters. The project is a collaboration between the University of Aberdeen, Sea Mammal Research Unit (SMRU) and Scottish Association for Marine Science (SAMS) and is due for completion in September 2009.

Welsh Marine Mammal Atlas: CCW has contracted Seawatch Foundation to collate and analyse all available cetacean distribution and abundance data, provided by various NGO's, developers and CCW. This will result in a high resolution dataset for Wales based on a GIS platform and will underpin CCW's advice on oil, gas and renewable energy exploration. Additionally, in Wales a number of reports have been produced on Bottlenose dolphin monitoring and identification (see references below).

During 2008, a preliminary assessment of how Joint Cetacean Protocol data might be used to detect changes in abundance or range of UK and Ireland cetacean species was undertaken. The monitoring objectives that arise from Article 11 of the EC Habitats Directive were reviewed, and consideration was given to what measures might feasibly be monitored. Targets such as having high power to detect a 1% annual decline in abundance or range over a 6 year reporting period are not remotely feasible, and it is suggested that a 15-30% annual decline may be detectable over that period. Analysis of JCP data is difficult because the data are sparse, are collected over a range of spatial and temporal scales and often lack direct information about detectability. Potential analysis methods are reviewed, and methods for data integration and conduct an exploratory analysis of JCP datasets suggested. This assessment is provided as part of the documentation for the 2009 AC (Thomas, 2009).

References

Pesante, G., Evans, P.G.H., and Baines, M.E. 2008a. Cardigan Bay & Pen Llyn a'r Sarnau Bottlenose dolphin monitoring, 2005-2007. CCW Marine Monitoring Report No 61.

Pesante, G., and Evans, P.G.H. (2008). Sea Watch Foundation Welsh Bottlenose Dolphin Photo-Identification Catalogue 2007. CCW Marine Monitoring Report No: 66. xiii + 204pp.

Pesante, G., Evans, P.G.H., Powell, D. and McMath, M. 2008b. Connectivity of bottlenose dolphins in Wales: North Wales photo-monitoring 2007-08. CCW Marine Monitoring Report No 62.

Thomas, L., 2009. Potential Use of Joint Cetacean Protocol Data for Determining Changes in Species' Range and Abundance: Exploratory Analysis of Southern Irish Sea Data. Report to Joint Nature Conservation Committee; National Parks and Wildlife Service; and Countryside Council for Wales.

c. Research on the effects of pollutants on cetacean health

BELGIUM
Pierce G., Santos M., Murphy S., Learmonth J., Zuur A., Rogan E., Bustamante P., Caurant F., Lahye, V., Ridoux V., Zegers B., Mets A., Addink M., Smeenk C., Jauniaux T., Law R., Dabin W., Lopez A., Alonso Faré J., Gonzalez A., Guerra A., Garcia-Hartmann M., Reid R., Moffat C., Lockyer C. and Boon J., 2008. Bioaccumulation of persistent organic pollutants in female common dolphins (*Delphinus delphis*) and harbour porpoises (*Phocoena phocoena*) from western European seas: Geographical trends, causal factors and effects on reproduction and mortality, Environmental Pollution 153: 401-415. Weijs, L., 2008. Bioaccumulatiemodel voor microcontaminanten bij de gewone zeehond (*Phoca vitulina*) en bruinvis (*Phocoena phocoena*). Master thesis, University of Antwerp.
DENMARK
None
FINLAND
None
FRANCE
Transfer and bioaccumulation of heavy metals (mainly mercury and cadmium) in cetaceans (LIENs/ULR)
GERMANY
None
LITHUANIA
None
NETHERLANDS
None
POLAND
None

SWEDEN

The SEPA is funding research of he effects of environmental contaminants on the health status of harbour porpoises during 2009-11. The investigations are to be carried out by the Swedish Museum of Natural History.

UNITED KINGDOM

PCB contamination has been linked to reduced pregnancy rates in harbour porpoises (Pierce et al., 2008). 17mg/kg lipid has been identified as the critical level at which the concentration of PCBs begins to affect harbour porpoise health (Jepson et al., 2008). This level has recently been proposed as one of the criteria used to assess the health status of harbour porpoises under monitoring plans being developed for the species by OSPAR.

Levels of hexabromocyclododecane (HBCD) have been found in harbour porpoises has decreased since 2003, possibly linked with the closure of a manufacturing plant at that time (Law et al., 2008a). Attention has also focused on perfluoroctane sulphonate (PFOS), a synthetic chemical with a wide range of uses including provision of resistance to water and oil, use as a flame retardant and as an active ingredient in pesticides and cleaning products. This has been found in significant concentrations in harbour porpoises stranded or bycaught in UK waters (Law et al., 2008b). This data is contributing to the OSPAR assessment of efficacy of regulatory controls and voluntary limitations on PFOS use. Currently the European Commission are considering measures to restrict the production, marketing and use of PFOS.

In order to improve our understanding of the scale and impacts of human derived noise occurring in the marine environment, the UK intends to complete a call for research proposals in early 2009. This call will be to identify and take forward research on assessing the current status of marine noise occurring in the marine environment, including shipping, and assessing what the impacts is on marine life.

References

Jepson, P.D., Deaville, R., Law, R.J., Allchin, C.R., Baker, J.R, Patterson, I.A.P., Reid, R.J., Northridge, S., Learmonth, J.A., Davison, N., Penrose, R., Perkins, M.W. & Bennett, M.E., 2008. PCB levels are associated with thymic involution and infectious disease mortality in UK-stranded harbour porpoises (1989-2006). 22nd Conference of the European Cetacean Society, Egmond aan Zee, the Netherlands. p.70.

Law, R.J., Bersuder, P., Barry, J., Wilford, B.H., Allchin, C.R. & Jepson, P.D., 2008a. A significant downturn in levels of hexabromocyclodecane in the blubber of harbour porpoises (*Phocoena phocoena*) stranded or bycaught in the UK: An update to 2006. Environmental Science and Technology, 42, 9104-9108.

Law, R.J., Bersuder, P., Mead, L.K. & Jepson, P.D., 2008b. PFOS and PFOA in the livers of harbour porpoises (*Phocoena phocoena*) stranded or bycaught around the UK. Marine Pollution Bulletin, 56, 770-797.

Pierce, G.J., Santos, M.B., Murphy, S., Learmonth, J.A., Zuur, A.F., Rogan, E., Bustamante, P., Caurant, F., Lahaye, V., Ridox, V., Zegers, B.N., Mets, A., Addink, M., Smeenk, C., Jauniaux, T., Law, R.J., Dabin, W., Lopez, A., Alonso Farre, J.M., Gonzalez, A.F., Guerra, A., Garcia-Hartmann, M., Reid, R.J., Moffat, C.F., Luckyer, C. & Boon, J.P., 2008. Bioaccumulation of persistent organic pollutants in female common dolphins (*Delphius delphis*) and harbour porpoises (*Phocoena phocoena*) from western European seas: Geographical trends, causal factors and effects on reproduction and mortality. Environmental Pollution, 153, 401-415.

5. Public awareness and education

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

BELGIUM

Information on stranded animals and on sightings, is given on the website of MUMM (in Dutch, English and French):

http://www.mumm.ac.be/EN/Management/Nature/search_strandings.php

The NGO Natuurpunt organised a whale-watching trip to the Bay of Biskay from 16 to 21 August 2008 on the MV Princess Danae ('Ultimatepelagics'). People on board could participate in lectures on cetaceans and conservation initiatives. This trip was covered in the media (a.o. in the weekly magazine "Knack"; article by Dirk Draulans, and in the popular scientific journal "EOS", article by Tim Vanderjeugd)

During 2008 several observation daytrips (on a ship with a capacity of 30-40 people), called 'Ostend Pelagics' were organised, the first initiative in Belgium to present cetaceans in their natural environment to the wider public. More information on www.ostend-pelagics.be. The initiative was covered by national radio and television (a.o. Dutch television: VARA). Observations made during the Ostend Pelagics were reported to MUMM.

At the festival "Oostende voor Anker" MUMM presented (a.o.) information on cetaceans, windfarms and marine mammal conservation issues; on display were a life-size maquette of a white-sided dolphin and a skull of a pilot whale. Approximately 250.000 people participated in the festival, which ran from 22 to 25 May 2008.

On the 28th of August 2008 a life-size (fake but immensely realistic) stranded sperm whale was present in Antwerp, on the banks of the river Scheldt (Kunstenaarscollectief "Boomer"). Thousands of people made it to the spot, and it received a lot of media attention. The intervention network dealing with stranded cetaceans at the coast participated, and took the opportunity to inform the public on their interventions in case of real whale strandings, and on ASCOBANS (leaflets were distributed). More information and images of this event are available at MUMM' website, news sections:

http://www.mumm.ac.be/NL/News/index.php?page=4&total=128.

Information panels on marine protected areas (Natura 2000 sites) will be installed in a number of coastal communities in front of the SAC *Trapegeeer Stroombank*.

DENMARK

Fjord and Bælt is housing 4 harbour porpoises for public display and research. The animals are presented for over 60,000 guest per year. Within the presentations of the animals and the exhibit activities at the centre, information about harbour porpoise conservation is given. During 2009 there has been a lot of political and media interest for the centre and its research activities, culminating with the visit of the Fishery Minister in September to discuss issues around harbour porpoise bycatch.

Through an agreement with the Danish Ministry of Environment (Skov og Naturstyrelsen) Fjord and Bælt arranged a 1-day workshop around the harbour porpoise bycatch problems, in November, 2008. More than 30 people participated, including environmental NGOs, government officials, and many of the most well esteemed harbour porpoise scientists in Denmark and their students.

In all such activities at Fjord and Bælt, the ASCOBANS agreement is very often and actively discussed.

FINLAND

Finland has continued the harbour porpoise sighting campaign and received information of two sightings of totally 6 animals in year 2008.

FRANCE

Public conferences (Oceanopolis-Brest and CRMM/ULR)

National stranding network: training for volunteers and national meeting (CRMM/ULR)

Observer training in the frame of fishing observation scheme, council regulation 812/04 (CRMM/ULR)

Symposium on monitoring strategies for marine mammal populations La Rochelle, 2008 November 21st and 23th (CRMM/ULR). The symposium was hosted by Université de La Rochelle and co-hosted by Agence des Aires Marines Protégées and Ministère de l'Ecologie, l'Energie, le Développement Durable, et l'Aménagement du Territoire. It was sponsored by Région Poitou-Charentes, Centre National de la Recherche Scientifique, Ministère de la Culture et de la Communication, Ville de La Rochelle, Conseil Général de la Charente Maritime. It was supported by ASCOBANS and ACCOBAMS.

Movie on cetaceans and ferries survey produced by Brittany Ferries and Oceanopolis broadcasted onboard the ferries+ conference on board

Information concerning the "Year of the Dolphin" on the Oceanopolis website.

New exhibition on cetaceans: National Museum Paris, partnership Oceanopolis. An itinerant version will circulate in Europe.

GERMANY

An informational leaflet about the harbour porpoise has reached the state of conceptual design and will probably be published in 2009. [R. Czeck]

The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) / O.Schall published two articles entitled "Protection of Small Cetaceans in the Northeast Atlantic: Extension of the ASCOBANS Agreement in Force" (BMU Umwelt 4/2008: 198; in German) and "Progress and Deficiencies in the Conservation of Small Cetaceans" (BMU Umwelt 6/2008: 320.322; in German) summarizing the results of AC-15.

The Federal Republic of Germany (BMU) has agreed to support the work of ASCOBANS in 2008 with a voluntary contribution of €25,600. Furthermore, it funded the part-time position of S. Bräger to work as chair of the Advisory Committee and additionally financed travel costs of Cetacean experts. [O. Schall]

Following the annual tradition since 2002, the GSM has again approached 450 sailing clubs marinas and campgrounds as well as several yachting magazines to raise awareness for its project "Sailors on the lookout for harbour porpoises". The media feedback is still very good, and the dissemination of the request for sightings is widespread (http://www.habitatmare.de/de/schweinswalsichtungen1m.php). [P. Deimer]

An informational leaflet about the harbour porpoise has reached the state of conceptual design and will probably be published in 2009. [R. Czeck]

LITHUANIA

The 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.

Lithuanian Sea Museum for the 6th time celebrated International Harbour Porpoise Day in 2008. This year was the first one when Lithuanian Sea Museum specialists thought of broader perspective: they decided to knit some ecological factors with Harbour Porpoise problems, and call this view as eco-perspective towards whole environment of Harbour Porpoise. The event was split into 2 parts: scientific and relaxation. Scientific part was dedicated to students and lectures of universities, colleges, schools or just "ordinary" people who are not indifferent in Harbour Porpoise problems. Relaxation part was organized as a night event for visitors' attraction. Also for the popularizing both events, this year Lithuanian Sea Museum decided to appeal to society's emotions using didactic learning method of parallel: they created relation of the meanings for 2 animals (Harbour Porpoise, *Phocena*

Phocena, and Guinea Pig, *Cavia porcellus*). Both animals in the Lithuanian language have almost the same meaning: Harbour Porpoise as “Jūros kiaulė”, and Guinea Pig as “Jūros kiaulytė”. Therefore each visitor holding a picture of Guinea Pig on the Day of International Harbour Porpoise day was allowed to visit sea museum for free. Such idea was amusingly accepted and was widely spread by the means of media. In the press releases Lithuanian Sea Museum specialists explained how sounding the same; animals might differ in reality. Not only emotional contact for people having such Guinea Pigs at home worked, but also like “hidden idea”, and they were interested to get to know something about another animal, sounding the same. The themes about International Harbour Porpoise day were widely discusses and commented in the biggest informational web sites and newspapers.

Events:

1. *Open seminar-discussion dedicated to International Harbour Porpoise day in the Lithuanian Sea Museum*. At early morning a very special exhibition was opened “Birds of Kopgalis”. This exhibition is very particular for Kopgalis region, where the Baltic Sea and Curonian Lagoon meets. In the seminar Dr. Nerijus Blažauskas (Coastal Research and Planning Institute) presented his paper on the problems of Lithuanian Coast: past, present situation and perspectives. He paid a lot of attention towards harbour expanding and industrial region in the coast; Doc. dr. Darius Daunys (Coastal Research and Planning Institute) presented collaborative work made with Prof.hab.dr. Sergej Olenin (Coastal Research and Planning Institute) on the condition and values that have to be saved of the underwater world of the Baltic Sea; Egidijus Bacevičius (Lithuanian State Centre for Pisciculture and Fishery research) presented historical background and nowadays situation on registered facts of toothed and barbate whales that have been observed in the Baltic Sea; Arūnas Grušas (Lithuanian Sea Museum) presented a report on the occurring problems of the biggest sea mammals in the Baltic Sea. The greatest attention was drawn towards the possibilities of seeking collaboration with Ministry of Environment and local fisherman; Laura Janulaitienė (Ministry of Environment of the Republic of Lithuania) presented an issue on the theme Harbour Porpoise conservation in the ecology perspective; Saulius Karalius (Lithuanian Sea Museum) draw his comments on the filmed material from Fjord&Baelt centre (Denmark) about birth of a calf of Harbour Porpoise and training; Monika Konkel (Hel Marine Station, University of Gdansk, Poland) presented work in this center and the special programs they create for conservations of Harbour Porpoises and Jurgita Eglinskienė (Lithuanian Sea Museum) presented ecological AquaRing project that has been proceeding in the Lithuanian Sea Museum.
2. *Night with Harbour Porpoise in the Dolphinarium*. Night with Porpoises started at late night in the Dolphinarium with underwater dolphin show (educational program under the water). Visitors may question the trainers and get the answers or ask to show anything of the dolphins. After such marvellous experiences, visitors may join further program in the Hall. Visitors may ask questions of trainers, see films and pictures of Harbour Porpoise, listened to attractive educational program on the difference between Black Sea Bottlenose Dolphins and Harbour Porpoise. Also visitors may relax listening to splendid concert that was prepared by children collection “Clean Seashore”.

A life-size model of harbour porpoise have been exhibited at the aquarium hall of the Lithuanian Sea Museum

NETHERLANDS

An article on Underwater noise will be published in the Magazine “Kust & Zee Gids 2009

POLAND

Educational and informative actions covering environmental protection issues pertaining to small whales were subordinated to requirements of the protection of the Baltic population of harbour porpoises. A new IUCN Red List of Threatened Species in which the said population

was classified under CR, confirms the said requirement is well grounded.

The main actions were carried out by the Marine Station of Gdansk University, Institute of Oceanography in Hel. Over the whole year an exhibition “The Baltic sea – House of Harbour Porpoises” was displayed there. The exhibition was arranged in co-operation with the Foundation for the Development of the University of Gdansk and local NGO – “The Friends of Hel”

Funds for actions undertaken in 2008 originated from the budget of the Marine Station of the Gdansk University, Institute of oceanography in Hel and the National Fund for Environmental Protection and Water Management. They were assigned in relation to the project of the Active Protection of Harbour Porpoise against By-Catching, implemented in the Puck Bay.

The educational and informative efforts included, but were not limited to the following actions and events

- A 70cm x 100 cm poster about the need to protect Baltic harbour porpoises was printed
- A 16page brochure was developed in order to provide public with the explanation of the biology and ecology of the Baltic population
- Fishermen were addressed with a 6page leaflet titled “Fishermen and Harbour Popoises” developed in order to explain opportunities for the mitigation of a conflict between environmental protection requirements and fishing practices, and a “Pinger” leaflet intended to provide information about the application of acoustic devices in fishing practice in order to reduce the mortality of harbor porpoises, resulting from by-catches
- Sailors and marines as well as fishermen were addressed with label prompting people to report observations of harbour porpoises taken over voyages, cruises etc.

In addition to the foregoing, a tinned fish food was manufactured under the label of “The Delicacy of Harbour porpoise”. The tin was packed in a case bearing notices about the status of the species and the promotion of the eco-mark, showing that tinned fish caught in a manner which is friendly to harbour porpoises.

On a number of occasions provided by public events, information stands promoting the protection of Baltic harbour porpoises were arranged. They included:

- An outdoor stand was arranged at the monument of the animal in Gdynia during the festival of the International day of the Baltic Harbour Porpoise.
- An outdoor stand arranged at the Baltic Festival of Science, which promoted the research methods and protection means used by Polish researchers in regard to harbour porpoises
- An outdoor stand at the “Gifts for the Sea” Festival of Science, which promoted the research methods and protection means used by Polish researchers in regard to harbour porpoises and promote the image of species amongst children and young people
- A stand at the Poleko Ecological Fair, Poznan, Poland. The project of the active protection of harbour porpoises in the Puck Bay, performed by the Marine Station of the Gdansk University, Institute of Oceanography and the general idea of the protection of the species were promoted at that stand

Polish information materials concerning the protection of harbour porpoises were also distributed over the International Day of the Baltic Harbour Porpoise, held at the Lithuanian Sea Museum in Klaipeda, Lituania. A researcher from the Hel Marine Station had a lecture on the protection of the species and protection measures used in Poland. The lecture was specifically addressed to young audience.

Actions for the increase of public awareness were complemented and supported by publications in local and national press, radio broadcasts and tv programmes as well as information displayed on the Internet site www.morswin.pl

As in the previous years, a similar opportunity to present the requirement to protect small and large whales in the Baltic Sea was created by the occurrence of a humpback whale near the middle shoreline in summer which event arose a great interest in mass media. A number of interviews were given to journalism from polish mass media.

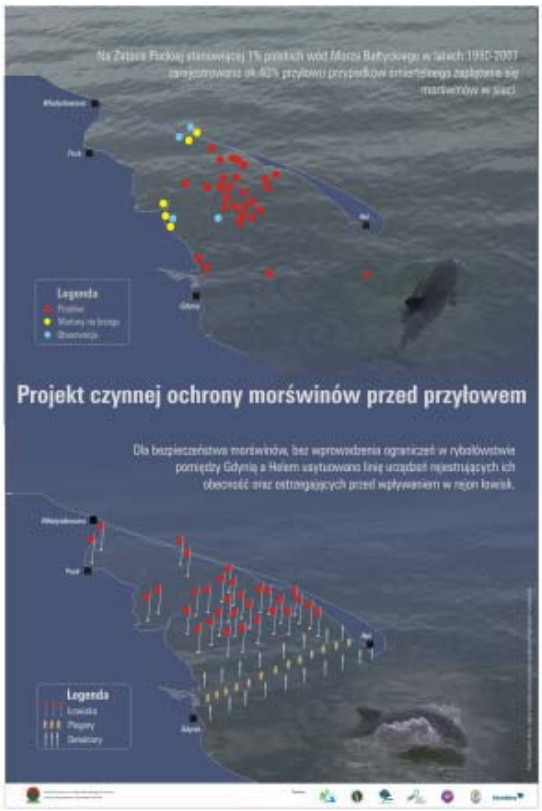
Meetings with fishermen were also held to talk about issues related to harbour porpoise as well as to explain the rationale Regulation 812/2004/UE and – in particular- its provisions concerning the ban on the use of drifting nets and the scope of the – so called – Observer's Programme.

In its effort to promote the image of the harbour porpoise and the awareness of the protection of harbour porpoise being necessary, the shop of the Marine Station and the Foundation for the Development of Gdansk University has extended its trade offer by new patterns of goods, gadgets and souvenirs.

Exhibition: The Baltic Sea – the House of the Harbour Porpoise

Selected display cases at the exhibition presented in the Marine Station of the Gdańsk University Institute of Oceanography, Hel (47 thousand visitors in 2008).

Selected examples of display boards showing threats to the harbour porpoise and protection measures taken in order to protect the species




Gdzie natrafiano na morświny?
Rozmieszczenie polskich raportów
o złowionych, zaobserwowanych i znalezionych na brzegu morświnach w latach 1990 - 2007
Obserwacja
Przyłów
Wyrzucony na brzeg


Zauważyłeś morświna?
Zawiadom Stację Morską UG w Helu
tel. 0 601 88 99 40
Tel. 058/ 675-08-36, fax. 058/675-04-20,
e-mail: hel@univ.gda.pl
www.morswin.pl

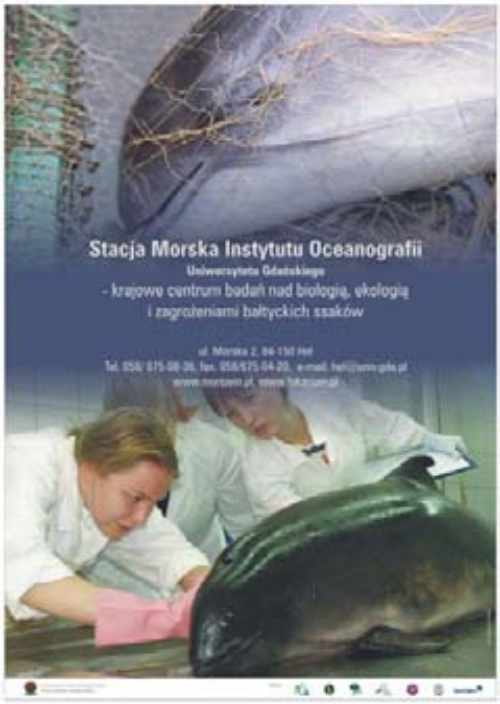

Czynna ochrona morświnów przed przyłowem
Projekt realizowany przez: Stację Morską Instytutu Oceanografii Uniwersytetu Gdańskiego


Pinger - sojusznik rybaka, ochroniarz morświna
- podwodne akustyczne urządzenie odstraszające morświny od sieci
Pinger typu Fumodo FMDP-2000
Sposoby mocowania
pingera typu "AQUAmark 100"


Ośrodek ratowania i rehabilitacji morświnów
w holenderskim delfinarium w Harderwijk
Akcja SOS Dolphin


Ośrodek badań i hodowli moświnów
Fjord&Baelt w duńskim Kerteminde


Morświny - morskie ssaki, to najmniejsze walenie na świecie.
W Bałtyku dorastają zwykle do ok.170 cm. Żyją kilkanaście lat.
Występują głównie w strefie przybrzeżnej morza,
gdzie polują na drobne ryby będące ich pokarmem:
szproty, śledzie, babki, tobiasze i dobijaki.
W lecie, zwykle co dwa lata samica rodzi jedno młode,
które karmi mlekiem przez około 6 miesięcy.
Żyjąc w Bałtyku morświny są zagrożone wyginięciem.
Pozostało ich zaledwie kilkaset sztuk.
W wszystkich krajach morświny są objęte ochroną prawną.


Stacja Morska Instytutu Oceanografii
Uniwersytetu Gdańskiego
- krajowe centrum badań nad biologią, ekologią
i zagrożeniami bałtyckich ssaków

Poster and brochures

A poster (70 cm x 10 cm) and the covers of brochures: *Fishermen and Harbour Porpoises, The Baltic Harbour Porpoise, Pinger – the Guard of Harbour Porpoises and the Friend of Fishermen* [www.morswin.pl/index_base.php?Screen_Option=1&Page_ID=97]

Fish boxes

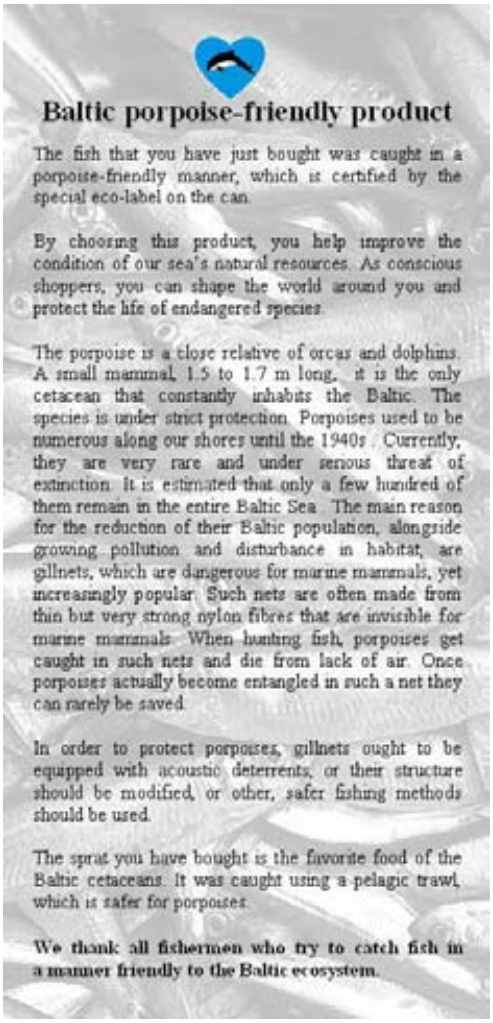
Boxes are being delivered to Hel

Label engraved on the lateral walls of the boxes

Tinned fish

A board promoting the new product

Templates



Baltic porpoise-friendly product

The fish that you have just bought was caught in a porpoise-friendly manner, which is certified by the special eco-label on the can.

By choosing this product, you help improve the condition of our sea's natural resources. As conscious shoppers, you can shape the world around you and protect the life of endangered species.

The porpoise is a close relative of orcas and dolphins. A small mammal, 1.5 to 1.7 m long, it is the only cetacean that constantly inhabits the Baltic. The species is under strict protection. Porpoises used to be numerous along our shores until the 1940s. Currently, they are very rare and under serious threat of extinction. It is estimated that only a few hundred of them remain in the entire Baltic Sea. The main reason for the reduction of their Baltic population, alongside growing pollution and disturbance in habitat, are gillnets, which are dangerous for marine mammals, yet increasingly popular. Such nets are often made from thin but very strong nylon fibres that are invisible for marine mammals. When hunting fish, porpoises get caught in such nets and die from lack of air. Once porpoises actually become entangled in such a net they can rarely be saved.

In order to protect porpoises, gillnets ought to be equipped with acoustic deterrents, or their structure should be modified, or other, safer fishing methods should be used.

The sprat you have bought is the favorite food of the Baltic cetaceans. It was caught using a pelagic trawl, which is safer for porpoises.

We thank all fishermen who try to catch fish in a manner friendly to the Baltic ecosystem.

English version

Produkt przyjazny bałtyckim ssakom

Ryby, które znajdują się w kupionej przez Państwa puszce, zostały złowione metodami bezpiecznymi dla morświnów. Świadczy o tym zamieszczony na opakowaniu specjalny eko-znak.

Wybierając taki właśnie produkt wpływacie Państwo na poprawę stanu zasobów przyrodniczych naszego morza. Robiąc zatem zakupy, możecie Państwo świadomie kształtować świat wokół siebie i troszcz życia ginących gatunków.

Morświny to blizcy krewni orek i delfinów. Te niewielkie 1,5-1,7 metrowe ssaki są jedynymi waleniami stale zasiedlającymi Bałtyk. Podlegają ścisłej ochronie. U naszych brzegów były liczne do lat 40. XX wieku. Obecnie występują sporadycznie i są silnie zagrożone wyginięciem. Przypuszcza się, że w całym Bałtyku pozostało ich kilkaset. Podstawową przyczyną zanikania ich bałtyckiej populacji stały się oprócz wzrostu zanieczyszczeń i zakłóceń, coraz liczniej stosowane niebezpieczne dla życia morskich ssaków sieci przelowe. Wiele z nich jest dziś wykonywana z cienkich, ale bardzo silnych nylonowych włókien. Zawieszone w toni wodnej stają się dla morskich ssaków niespodziewanymi pułapkami. Morświny w pogoni za rybami wpadają w nie i giną z braku powietrza. Przypadki uratowania przez rybaków zaplątanego w sieć tego małego bałtyckiego walenia są niezwykle rzadkie.

Ochrona życia morświnów wymaga wyposażania sieci skrzelowych w akustyczne odstraszacze, zmian technologii ich konstrukcji lub połowu ryb takimi metodami, które są dla tego gatunku bardziej bezpieczne.

Szproty, które Państwo właśnie kupiliście – są przysmakiem bałtyckich waleni. Złowiono je bezpieczniejszym dla życia morświnów sposobem – włokiem pelagicznym.

Dziękujemy rybakom, którzy starają się łowić w sposób przyjazny dla ekosystemu Bałtyku.

Polish version

Notice attached to the fish tine case

Events

International Day of the Baltic Harbour Porpoise (ASCOBANS)

The Baltic Festival of Science

The information stand of the Hel Marine Station of the Gdańsk University (Gdynia, 01 Jun 2008)

The “Gifts of the Sea” Festival of Marine Products

The educational stand of the Hel Marine Station of the Gdańsk University
(Gdynia, 26 Jul 2008)

POLEKO Fairs

The educational stand of the Hel Marine Station of the Gdańsk University, venue at the ecological fairs -POLEKO, (Poznań, 27-30 0ct 2008)

New internet site

www.morswin.pl – Polish Internet site about the harbour porpoise

New label

A label to be used by yachtsmen, sailors, seamen and fishermen

Gadgets

A few samples of gadgets and souvenirs labeled with the image of the harbour porpoise

Press coverage

A few samples of press coverage on problems concerning the Baltic harbour porpoise

SWEDEN

In 2008 the Action program for harbour porpoise was revised by SEPA in cooperation with the National Board of Fisheries.. In the present plan (2008-1013) , limits to anthropogenic mortality of harbour porpoises are proposed to be calculated in agreement with national and international conservation objectives and regional working groups with the objective to reduce the number of bycatch of harbour porpoises to sustainable levels will be established. Further actions proposed in the plan are for example systematic collections of “ghost nets”, development of fish traps as alternatives to gillnets, development of a camera system for data collection on bycatches and a survey of bycatches in recreational fisheries. The effects of environmental contaminants on the health status of harbour porpoises and the levels of anthropogenic underwater noise will also be investigated. The long term objective of the action plan is that in year 2018, the environmental conditions shall allow the stocks of harbour porpoise in Swedish waters to recover to at least 80 % of their carrying capacity.

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 has 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

A new website has been launched to promote the work of the UK Cetacean Strandings Investigation Programme (CSIP) http://www.ukstrandings.org

A link to the ASCOBANS homepage has been placed on the whale and dolphin pages of the Defra website.

The Scottish Marine Wildlife Watching Code, launched in 2006, continues to promote responsible and sustainable wildlife watching by providing guidance on minimising disturbance to marine wildlife. It is relevant to both commercial tour operators and recreational users of the marine environment.

6. Other relevant news

BELGIUM

In the framework of the International Whaling Commission, The Belgian Federal Ministry of Environment has produced a folder on ship strikes with cetaceans which includes information on the centralised ship strikes database hosted by the IWC Secretariat, as well as advice to help avoid collisions with whales. The folder will be available in June 2009 in six languages: English, Arabic, Chinese, French, Russian and Spanish. The database can be accessed and updated at www.iwcoffice.org/sci_com/shipstrikes.htm".

On December 8-12, 2008: a necropsy session of 81 harbour porpoises stranded on the Dutch coast was organized at the Utrecht Veterinary College; the Department of Pathology of the University of Liege, Belgium collaborated with the department of Pathology (Veterinary College) of Utrecht and IMARES/NIOZ, the Netherlands.

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