Ninth Compilation of Annual National Reports

Bonn, 2005

Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas

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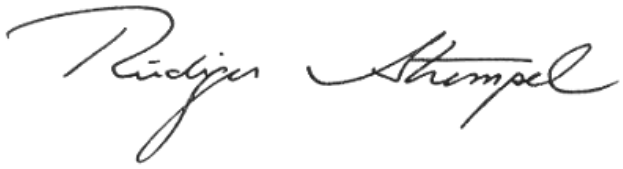
Preface

Most of the information included in this 9th Compilation of Annual National Reports relates to the year 2004[1], the tenth year since the Agreement's entry into force and the final year of its fourth triennium. For the first time we are able to present reports from all countries that were Parties to the Agreement during the year in question. Moreover, we are very pleased that this compilation includes a report from our new Party, Lithuania, which acceded to the Agreement in September 2005. Lithuania has submitted data for the years 2001 – 2005, so for the sake of clarity their information has not been compiled under the various headings, but is included as it was received (see page 36).

This compilation also contains the reports of two Baltic Non-Party Range States, Estonia and Latvia, which was provided under the harmonized reporting scheme agreed on by ASCOBANS and HELCOM [2].

This compilation bears witness to the continued efforts of ASCOBANS Parties to implement the Agreement on the eve of its fifth triennium, a triennium in which ASCOBANS will face new and additional challenges in an enlarged Agreement area, as agreed by the 4th Meeting of the Parties (Esbjerg, Denmark, August 2004)[3]. Moreover, the 4th Meeting of the Parties also took a decision pertaining to the Parties' National Reports themselves. Starting with the new triennium, the Triennial Reports hitherto required of Parties have been abolished, leaving only the Annual National Reports pursuant to Article 2.5 of the Agreement, thereby substantially increasing the importance of the Annual Compilations. The Secretariat looks forward to the continued support of the ASCOBANS Parties and Range States in producing these compilations.



Rüdiger Strempel
Executive Secretary

Bonn, December 2005

[1] In the case of Poland the report covers the years 2003 and 2004.
[2] Cf. Recommendation 17/5, taken at the 5th Meeting of HELCOM HABITAT and the relevant decisions of ASCOBANS bodies
[3] MOP 4 Res. 4

A. GENERAL INFORMATION

A. Summary of Party Details

Party	Period Covered	Report Compiler	Coordinating Authority
Belgium	1 January – 31 December 2004	Jan Haelters MUMM	Dr Thierry Jacques, MUMM Ministère de la santé publique et de l'Environnement, Gulledulle 110 1200 Bruxelles
Denmark	2004	Maj F. Munk and Genevieve Desportes, in cooperation with the Ministry of Environment – Forest and Nature Agency, Esbjerg Fisheries and Maritime Museum, Fjord&Bælt, Danish Institute for Fisheries Research, and National Environmental Research Institute.	Maj F. Munk Ministry of Environment The Danish Forest and Nature Agency, Division for Wildlife Management Haraldsgade 53 2100 Copenhagen Ø
Finland	1 January – 31 December 2004	Penina Blankett Ministry of the Environment	Penina Blankett Ministry of the Environment P.O. Box 380 00131 Helsinki
Federal Republic of Germany	1 January – 31 December 2004	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety	Dr Tilman Pommeranz Federal Ministry for the Environment, Nature Conservation and Nuclear Safety Postfach 120629 53048 Bonn
Poland	1 January – 31 December 2004	Iwona Kuklik, Krzysztof Skora Hel Marine Station ul. Morska 2 84-150 Hel	Mr Andrzej Langowski Ministry of Environmental Protection, Natural Resources and Forestry, Department for Nature Conservation Ul Wawelska 52/54 00-922 Warsaw
Lithuania	2001 – 2005	Mindaugas Vaišvila Data and Marine Environment Policy Dept., Centre of Marine Research	Sigute Alisauskiene Ministry of Environment/Biodiversity Unit A. Jaksto 4/9 2600 Vilnius
Netherlands	1 January 2004 – 31 December 2004	Prof. Dr. P.J.H. Reijnders Alterra P.O. Box 167 1790 AD Den Burg	S.J.D. Verbunt Ministry for Agriculture, Nature and Food Quality, Department of Nature P.O. Box 20401 2500 EK The Hague
Sweden	1 January – 31 December 2004	Christina Rappe	Christina Rappe Swedish Environmental Protection Agency Blekholmsterrassen 36 10648 Stockholm
United Kingdom of Great Britain and Northern Ireland	1 January – 31 December 2004	Rachel Harris, Department for Environment, Food and Rural Affairs	Ms Christine Rumble Dept. for Environment, Food & Rural Affairs (Defra) Species Conservation Branch 2 The Square Bristol BS1 6EB

2. Institutions and Organisations mentioned in national reports

Country	*Name*	*Pages*
Belgium	Management Unit of the North Sea Mathematical Models/Royal Belgium Institute for Natural Sciences (MUMM)	9,18,23,25,33
	Flemish Marine Institute	33
	Institute of Nature Conservation	25
	Royal Belgian Institute for Natural Sciences (RBINS), Brussels	33
Denmark	Danish Fisheries Research Institute	7
	Danish Joint Task Group on Marine Mammals	13
	Fisheries and Maritime Museum, Esbjerg	23
	Fiskeriundersøgelser, Charlottenlund	9
	Fjord&Bælt, Kerteminde	7, 9,33
	National Environmental Research Institute	14
	Nordic Council of Ministers	7
	Zoological Museum, Copenhagen	23
Germany	Research and Technology Centre, Büsum	8,14,16,23,26,27
	German Oceanographic Museum, Stralsund	14,23,26,27
	GKSS Research Centre, Geesthacht	23,30
	German Oceanographic Data Centre	27
	Federal Armed Forces Underwater Acoustic and Marine Geo-physics Research Institute	27
	Federal Research Centre for Fisheries	34
	Federal Maritime and Hydrographic Agency	14
	Institute for Sea Fisheries	34
	Leibniz Institute for Marine Research at the University of Kiel	14
	Museum Alexander Koenig, Bonn	34
	Natureum Unterelbe, Cuxhaven	34
	Veterinary Agency of Mecklenburg-Vorpommern (Rostock)	23
	Veterinary Institute for Fish and Fishery Products, Cuxhaven	23
	Multimar-Wattforum Tönning	33
	National Park Office Schleswig-Holstein	14
Lithuania	Lithuanian Sea Museum, Klaipeda	37
Netherlands	National Museum of Natural History	24
Norway	Marine Research Institute	7
Poland	Friends of Hel	34
	Centre of Excellence for Baltic Development, Education and Research (BALTDER)	24,34
	Hel Marine Station, University of Gdansk	12,24,27,34,35
	Foundation for the Development of University of Gdańsk	34
	The Ministry of Agriculture, Department of Fishery	8
	Medical University of Gdańsk	27
	Ministry of the Environment	18
	Nadmorski Landscape Park	22
	Słowiński National Park	22
Sweden	Linköping University	9
	Institution of population genetics at the University of Stock-holm	28
	Kolmården Djurpark	7, 9
	Swedish Environmental Protection Agency (SEPA)	36
	Swedish Museum of Natural History, Stockholm	25

UK	Centre for Environment, Fisheries and Aquaculture Science (CEFAS)	33
	British Divers Marine Life Rescue (BDMLR)	36
	Ceredigion County Council	17
	Cornwall Sea Fisheries Committee	11
	Countryside Council for Wales (CCW)	17,21,26,29,30
	DEAL Data Registry for UK Offshore Oil and Gas (UKDEAL)	19
	Department for the Environment, Food and Rural Affairs (DE-FRA)	17,22,24,25
	Department of Trade and Industry (DTI)	19
	Environment Department of the States of Jersey	29
	"Friends of Cardigan Bay"	28
	Institute of Zoology (IoZ)	17,24,32
	Joint Nature Conservation Committee (JNCC)	19
	Marine Awareness North Wales	28,35
	Natural History Museum, London (NHM)	28
	Scottish Agricultural College (SAC)	21,22,24,32
	Scottish Natural Heritage	22, 24,32
	Sea Mammal Research Unit (SMRU)	17
	Sea Watch Foundation	28, 35
	University of Aberdeen	28
	Welsh Assembly Government	25
	Whale and Dolphin Conservation Society (WDCS)	28
	Wales Cetacean Group (WCG)	29
International Organisation	International Whaling Commission (IWC)	23,32,25

B. NEW MEASURES /ACTION TOWARDS MEETING THE RESOLUTIONS OF THE MEETING OF THE PARTIES

1. Direct Interactions of small cetaceans with fisheries

a. Investigations of methods to reduce bycatch

Belgium

No new information

Denmark

NAPER project – 'New Alternatives to Porpoise Entanglement Reduction':
Fjord&Bælt (DK), Kolmården Djurpark (SE), Danish Fisheries Research Institute (DK) – funded by Nordic council of Ministers (NAF - Nordic Working Group for Fisheries), Kolmården Fundraising Foundation and participating agencies.

The project, which was testing a single prototype of an interactive pinger in the wild was completed in 2004, after two field seasons in the summer of 2002 and 2003 (Poulsen, 2004[4], Poulsen *et al*., submitted[5]). The interactive pinger is activated by the sonar of the porpoises. It is thus an interesting alternative to the beacon mode pinger since the deterrent/displacement sounds are only transmitted when they are necessary, i.e. when a porpoise is swimming toward a net. The experiments showed that the interactive pinger was effective at displacing the porpoises, but did not exclude them from a wider area. Changes in swimming behaviour compared to baseline were indeed significant for the dive where the displacement sound was emitted, but not for any of the subsequent dives. Since the purpose of a pinger is to keep the animals at a safe distance from nets but not to scare them off, the interactive pinger seemed to work as intended. Also, the sound monitoring showed that the interactive pinger emitted less than 3% of the amount of deterrent sounds a beacon mode pinger would emit.

NIPPER project – 'Nordic Interactive Pinger for Porpoise Entanglement Reduction':
Fjord&Bælt (DK), Kolmården Djurpark (SE), Danish Fisheries Research Institute (DK), Marine Research Institute (NO) – funded by Nordic council of Ministers (MiFi - Environment and Fisheries), Kolmården Fundraising Foundation and participating agencies.

The objective of the NIPPER project is to test the interactive pinger in a set-up simulating a bottom set gillnet fishery, i.e., to expand from one interactive unit to an array of units, allowing for a more realistic evaluation of the concept. Accessory goals of the project are collecting data on the sonar source level of wild porpoises and on their acoustic activity in the wild, since knowing these is a prerequisite to optimizing the design of the interactive pinger and its porpoise detection (POD) function.

The first set of field trials was conducted in August 2004. The ongoing analysis shows that despite the lack of response to the displacement sounds exhibited by some of the individuals, the interactive pinger had an overall significant displacement effect on the porpoises. The median of the closest approach distance was 75m when the deterrent system was activated compared to the 36m under baseline condition. Another set of trials will be carried out in May-June 2005.

[4] Poulsen, L. R. (2004): The efficiency of an interactive pinger (activated by biosonar) in displacing wild harbour porpoises, Phocoena phocoena. [M.Sc. thesis] University of Aarhus. 43pp + appendices.
[5] Poulsen, L. R., Desportes, G., Amundin, M., Larsen, F. and Hansen, J.R. (submitted): Testing a prototype of a biosonar activated pinger.

Finland

No new information

Federal Republic of 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. Brief information on the project had been given in the previous annual national report (period covered: 2003, ASCOBANS document of 2004 AC11/Doc. 30(S)). An extensive report on the results of the project is expected in 2005.

Netherlands

The Dutch Authorities (Ministry of Agriculture, Nature & Foodquality) are in the process of carrying out an inventory on which measures (e.g. acoustic deterrent devices, on board observers) in the several Dutch Fisheries shall be applied in accordance with the EU Council Regulation 812/2004.

The Netherlands takes part in the EU programme NECESSITY. This EU-funded programme (6^{th} PCRD) focuses on the interaction between pelagic trawls and small cetacean populations.

The Dutch Authorities fund a project involving experiments to investigate the impact of commercially available acoustic deterrent devices on several North Sea fish species. The project is expected to be finished in early 2006.

Poland

A pilot research project on monitoring of seasonal occurrence and abundance of porpoises with application of acoustic high frequency Porpoise Detectors (PODs) has been carried out in the Puck Bay area, which is identified as a hot spot for porpoises due to the highest level of reported incidental take in fishing nets. This project aims to find a possible relation between seasonality of harbour porpoise occurrence and salmon fishery in this area. In March 2003 the first three PODs were set in Puck Bay, and 10 additional started monitoring in April 2004. According to a very law number of porpoises left in the Baltic this monitoring programme is planned to last several years in order to obtain sufficient data for interpretation.

An additional expected output of the project might be to find the best time and model of the pinger programme in this area, one of the recommended short-term methods of bycatch reduction. The idea is not to use pingers on each fishing net in Puck Bay, but to establish an acoustic barrier at the entrance to the Bay. Such a barrier would be activated during the periods recognized as porpoise positive (occurrence of porpoises has been confirmed), if simultaneous with the most intensive salmon fishery.

The fishery sector did not undertake any investigations on the methods of bycatch reduction. The Ministry of Agriculture, Department of Fishery, expects such an effect due to the reduction of the fishing fleet. According to the data from the Ministry 176 ship owners applied for a scrapping grant for their fishing vessels, which is ca. 40% of Polish fishing fleet. There is a lack of data on how many of these ship owners are licensed for salmon driftnet fishery and were fishing with the nets considered hazardous for porpoises.

Sweden

Tests of cod traps as alternative to bottom set gillnets negative. The experiments will be continued with fykes and artificial attractants.

The voluntary use of pingers by a few gillnet fishermen in Kattegatt have been successful and are continued. The EU regulation for the Baltic will make pingers mandatory in large parts of the Swedish fishing zone.

Equipment for in-situ control of pingers has been developed and will be used in controlling the pinger use.

A continuation of research on interactive pingers, NIPPER (Nordic Interactive Pinger for Porpoise Entanglement Reduction), has been funded by the Nordic Counsil and is carried out as a cooperation between Fjord&Baelt, Kjerteminde, DK, Dr Geneviève Desportes, Kolmården Djurpark/ University (SE):Dr.Mats Amundin, Dan-marks Fiskeriundersøgelser, Charlottenlund, (DK):Finn Larsen, and Havforsknings-instituttet, Oslo, (N): Dr Arne Bjørge.

The objective of the NIPPER project is to test the interactive pinger concept in a set-up simulating a bottom set gillnet fishery, i.e., to expand from one interactive unit (NAPER project) to an array of four units, allowing for a more realistic evaluation of the concept.

The planned field trials were conducted from Fyns Hoved between August 1 and September 6. The main points in the preliminary findings were that the method used for monitoring the porpoise behaviour from a landbased station, the acoustic listening system as well as the logging or POD function added to the interactive pinger unit, performed satisfactorily. However the interactive deterrent system did not seem to conform with the specified requirements in order to have the expected effects on the porpoises. It was therefore decided to stop testing the effect of the interactive deterrent system and to concentrate on testing the effect of enticing sounds and collect POD data.

Further trials are needed to fully evaluate the interactive pinger and POD functions and especially understand why some animals did not react to the deterrent sounds. They are planned to be carried out in May-June 2005.

United Kingdom

The UK Small Cetacean Bycatch Response Strategy set out the Department for the Environment, Food and Rural Affairs thinking on what measures should be taken to reduce bycatch to a level where it does not threaten cetaceans' conservation status. The Strategy begins with a review of existing information concerning the population and abundance of small cetaceans occurring in UK waters. Existing information (including long-standing research on stranded cetacean) enables an assessment to be made of the current level of small cetacean bycatch in UK fishing sectors, including set net fisheries, pelagic and dimersal trawls, and dredging. This information is important in assessing where effort to reduce mortality is best directed.

b. <u>Implementation of methods to reduce bycatch</u>

Belgium

From March to May 2004 a relatively high number of bycaught porpoises washed ashore (9 to 15 out of 23 washed ashore animals). At least part of these animals were bycaught in recreational beach gillnet fisheries. On 21 april 2004 a note concerning relatively high bycatches of porpoises in recreational beach fisheries was sent (by MUMM) to the Flemish administration responsible for fisheries ("Dienst voor de Zeevisserij"), and to the administration responsible for environmental conservation ("AMINAL afdeling Natuur"). A meeting with these two authorities and MUMM was held on 2 June 2004 to discuss if this represented a problem, and conflicted with conservation requirements for the harbour porpoise, and investigate possible remedial actions. The fisheries authorities indicated that they did not intend to take additional measures, while the administration responsible for environmental conservation indicated their willingness to investigate the possible ways to eventually ban the use of these nets on the beach. Interviews with 2 of the professional fishermen (capable of setting up to 7.5km of gill nets each) revealed that one had taken approximately 6 porpoises in 2004, the other fisherman reported having caught none. The third vessel, capable of setting up to 23kms of gill nets, has not reported whether bycatches occurred or not.

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 and 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 to comply with these new regulations and has taken them into account in its revised Action Plan for Reducing Incidental By-catches of Harbour Porpoises (cf. below Implementation of guidelines…).

Finland

Yes, on the basis of the Council regulation (EC) No. 812/2004. Amendments to Finnish fishing legislation are under preparation.

Federal Republic of Germany

Monitoring of the by-catch of the only vessel (17 m) potentially harmful to small cetaceans by fishery with bottom set gill nets for cod and turbot or other demersal fish was continued (see previous annual national report for 2003).

Netherlands

No actions so far.

Poland

The fishery sector has been searching for the financial resources to implement pingers.

In the year 2003-2004 no methods of bycatch reduction were implemented in Polish fishery. The fishing sector considers bycatch in Polish EEZ insignificant for the Baltic population of harbour porpoises. At the same time, drift nets are considered the appropriate and only possible method of fishing for salmon and seatrout in Polish waters, although there is another fishing technique for salmonids, long-lines, traditionally used by Polish fishermen and never noticed as a threat for harbour porpoise.

One of the methods to reduce bycatch in Polish waters, particularly in Puck Bay, might be the establishment of a protected area within the NATURA 2000 system in part of the Bay. However the necessary precondition to achieving that aim would be to take into consideration the harbour porpoise needs in the future management plan worked out for that area.

Sweden

No information provided.

United Kingdom

In the summer of 2004 UK Fisheries Minister Ben Bradshaw put a case to the European Commission under Article 8 of Council Regulation (EC) No 2371/2002 for emergency action to close the offshore bass fishery to all pair trawlers for the forthcoming season whilst permanent measures could be considered. This was as a result of continuing trials of an exclusion grid which had initially allowed dolphins to escape through the grid and out of the net. However, the results of the trial in 2004 were less encouraging and there was no easy or early technical solution to reducing the bycatch in this fishery through the use of mitigation devices.

The European Commission did not accept the UK's case for immediate action on a European wide basis. The UK subsequently banned the use of pelagic pair trawls for bass by UK vessels within 12 miles of the south-west coast of England from 24 December 2004.

In addition to these national measures, local measures have been put in place. Cornwall Sea Fisheries Committee, who are responsible for the management of fisheries within 6 miles of baselines, have adopted a voluntary code in conjunction with the fishing industry in the South West to reduce cetacean bycatch in set nets. Fishermen will haul their nets and warn other colleagues to leave the area if cetaceans are seen in areas where fishing is taking place.

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

Belgium

Species	Estimated number of bycaught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Phocoena phocoena	4^+	IVc	Recreational beach fisheries, probably gill nets
	3^+	IVc	Professional gill net fisheries
	$3\text{-}11^+$	IVc	Unknown gear
	total: $10^+\text{-}18^+$; none were reported by the fishermen immediately after the bycatch; evidence from washed ashore animals, reports by persons on the beach.		
Balaenoptera acutorostrata	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 porpoise	No new estimate for 2004. The most recent estimate is that from 2001-2002 presented by Vinther and Larsen (2004)[6]		
Other species	Few, but the exact number and species involved unknown.		

[6] 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 bycatch reported.

Federal Republic of Germany

Species	Estimated number of bycaught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Phocoena phocoena	1	3 C 22	Set net for cod
Phocoena phocoena	Few	(Stranded in) 37F8 and 38F8	

Netherlands

Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Harbour porpoise	approx. 100	IV-c	Gillnet

Poland

Data on bycatch in the Polish waters are available only as minimal numbers. The bycatch level has not been estimated due to a lack of information on both fishing potential (mainly in artisanal fishery) and population size of harbour porpoises. Fishermen reported all data collected by Hel Marine Station voluntarily. However, not all fishermen report the bycaught animals. Fishermen underestimate the scale of bycatch in Polish waters due to the lack of an obligation in Polish law to report the bycatch of marine mammals.

Bycatch in the Polish EEZ in 2003-2004 was reported in cod set nets and salmon semi-drift nets in coastal fishery.

Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, etc.)
Phocoena phocoena	1	ICES/IIId - Polish west coast	Salmon semi-drift nets (artisanal fishery)
Phocoena phocoena	2	ICES/IIId. Polish central coast	Cod set nets
Phocoena phocoena	1	ICES/IIId . Gulf of Gdańsk	Cod set nets
Phocoena phocoena	4	ICES/IIId . Puck Bay	Salmon semi-drift nets (artisanal fishery)

A recent publication which summarises all collected data on the bycatch of harbour porpoises in Polish EEZ is:

Skóra K.E., Kuklik I. 2003. Bycatch as a potential threat to harbour porpoises (*Phocoena phocoena* L.) in Polish Baltic Waters. NAMMCO Sci. Pub. 5: 303-315

Sweden

No further estimate of by-catch has been made since last year. A system where selected fishermen are paid to keep a special journal on by-catch and damages by marine mammals and birds is now introduced and will improve the quality of by-catch statistics.

Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Phocena phocena	About 20 per year	III a, in the Swedish part of Skagerrak.	Bottom trawls
Phocena phocena	About 80 per year	IIIa, Swedish Kattegat Sea	Gillnets and trammel nets and pelagic trawls

United Kingdom

Estimates of harbour porpoise bycatch in set and gillnet fisheries have not yet been updated for 2003-4; figures of bycatch estimates for 2002 are presented below.

The estimate of common dolphin bycatch in the pelagic pair fishery for bass is extrapolated from the observed bycatch rates for the 2003-2004 season. Bycatch events in this year differed in a number of ways from those observed in this fishery between 2000-2003. Highest bycatch rates in previous years occurred in March, whereas in 2003-2004 the highest rates were found to be between December and February. Bycatch events were found to occur in areas closer to shore during this season and may suggest a change in the common dolphin distribution in the early months of the year compared to previous years. As yet it is unclear if this redistribution of animals was an anomalous event or is an indication of a more permanent change in distribution.

Species	**Estimated number of by-caught animals**	**Area (ICES area or more detailed)**	**Notes (type of fishery, effort, seasonal variations, etc.)**
Harbour Porpoise	439 (95% CL 371-640)	IV	UK set nets 2002
Harbour Porpoise	48 (96% CL 25-68)	VIa	UK set nets 2002
Common Dolphin	439 (95% CL 379-512)	VII ed	UK bass pair trawl 2003-2004

d. Implementation of guidelines, new legislation, etc. to reduce by-catch

Denmark

In 2003, the Danish Joint Task Group on Marine Mammals started a process of revising the Danish Action Plan for Reducing Incidental By-catches of Harbour Porpoises endorsed in 1998. The revised action plan was then modified in the spring of 2004 to take into account the new EU regulations on by-catch mitigation and monitoring adopted in March 2004. The new Danish Action Plan has been endorsed by the 2 relevant Danish ministries in March 2005.

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 high speed ferry routes between Belgium and the United Kingdom are in operation.

On the 28 June 2004 a workshop was held at the Belgian Army Headquarters concerning "The influence of active SONARs on marine mammals; a new concern for the Belgian defence". A short report on the contents and the results of this workshop were submitted as an information document to the Advisory Committee meeting of ASCOBANS, Brest, France, 12 to 15 April 2005.

Denmark

The National Environmental Research Institute has investigated the effects on harbour porpoises from wind farm constructions and operations at Nysted Offshore Wind farm and Horns Reef Offshore Wind Farm since 1999[7][8]. The monitoring program is based on stationary acoustic recordings (T-PODs) at both farms and regular ship surveys at Horns Reef. The monitoring program finish by the end of 2005. The final report on the projects will be available in 2006. Reports on the effect on harbour porpoises of the construction and operation phases are available at the following web pages:

http://uk.nystedhavmoellepark.dk/frames.asp?Page_ID=81&Page_Ref=44&Templates_ID=1
http://www.hornsrev.dk/Engelsk/default_ie.htm

Finland

No new information.

Federal Republic of Germany

Offshore wind farms

The research project MINOS (Marine Warm-blooded Animals in the North and Baltic Seas: Foundations for Assessment of Offshore Wind Farms) was continued. As briefly decribed in the previous annual national report for 2003 the project was focussed on spatial and temporal variation in distribution and abundance of marine mammals in the German Bight and in the German waters of the Baltic and on effects of sound emissions on marine mammals. The final report on the first project phase beginning in 2002 was presented in autumn 2004.

Beginning in June 2004 the project will go on until April 2007 with a similar structure and under the name of MINOSplus. The German Oceanographic Museum (Stralsund), the Research and Technology Centre (Büsum), the Leibniz Institute for Marine Research at the University of Kiel and the National Park Office Schleswig-Holstein are involved.

Within the framework of the current approval procedure for offshore wind farms by the Federal Maritime and Hydrographic Agency (Bundesamt für Seeschifffahrt und Hydrographie: BSH) applicants are requested to supply an environmental impact assessment for project ar-

[7] Tougaard, J., Carstensen, J., Henriksen, O.D., Teilmann, J. & Hansen, J.R. 2004: Harbour porpoises on Horns Reef - effects of the Horns Reef Wind Farm. Annual Status Report 2003. Report request. Commissioned by Elsam Engineering A/S. National Environmental Research Institute. 67 pp.
Available at: http://www.hornsrev.dk/Miljoeforhold/miljoerapporter/Porpoises_2003_revised.pdf

[8] Henriksen, O.D., Carstensen, J., Tougaard, J. & Teilmann, J. 2004: Effects of the Nysted Offshore Wind Farm construction on harbour porpoises. Annual status report for the acoustic T-POD monitoring programme during 2003. Report request. Commissioned by ENERGI E2 A/S. National Environmental Research Institute. 31 pp.
http://www.nystedhavmoellepark.dk/upload/pdf/PODnysted_2004.pdf

eas. Intensive investigations are conducted by each project group according to standards for environmental impact assessments, in this case impacts of offshore wind turbines on the marine environment. Mammal investigations comprise studies of abundance, distribution and habitat use, as well as noise emission and immission studies.

For assessing the abundance and distribution of marine mammals in project areas and adjacent waters at least two consecutive, complete seasonal cycles including both aircraft and ship transect surveys are requested (12 times a year combined with bird observations and 6 additional aerial surveys yearly covering only mammals). Results obtained at the beginning of the investigations advised to accentuate more on mammal aerial surveys in order to gain information on possible calving grounds.

Frequency of occurrence, behaviour and time spent by harbour porpoises in the project areas are recorded by click detectors (TPOD) operated continuously throughout the seasonal cycle for at least two consecutive years prior to the start of wind farm construction. However, this practice proved to be quite difficult in the field due to loss of detectors and calibration problems. Some results could be gained by employing detectors while anchoring for bird migration observations.

Survey effort and some first results out of 14 offshore windfarm projects (7 approved, 7 still under consideration) in four regions of the German EEZ of the North Sea on marine mammals are briefly summarised below. The regions considered are: Northern Borkum (4 projects), northern Helgoland (3 projects), western Sylt (4 projects) and Oyster Ground (3 projects).

Table A. Ship survey effort in the project areas during the period of July 2001 - July 2003

Region	n ship surveys	Investigation area (km^2)	Transect on effort (km)	n harbour porpoises (sightings)	n calves (sightings)
Western Sylt	61	3374.5	11528.3	387	4
Northern Helgoland	40	1213.0	5352.3	203	-
Northern Borkum	50	881.0	7172.6	269	-
Oyster Ground	40	3694.0	8793.6	362	-
Total	191	9162.5	32846.5	1221	4

Table B. Aerial survey effort in the project areas during the period of July 2001 - July 2003

Region	n aerial surveys	Investigation area (km^2)	Transect on effort (km)	n harbour porpoises (sightings)	n calves (sightings)
Western Sylt	34	10171	22569	1549	96
Northern Helgoland	32	2719	7664	96	0
Northern Borkum	33	3467	6768	267	4
Oyster Ground	8	3765	3769	204	11
Total	107	20122	40770	2116	111

The combination of results from these intensive, high survey-frequency, project delimited investigations and results of large-scale projects (e.g. SCANS, MINOS) with less frequent but wide area observations may help to better assess the ecological importance of the project areas for marine mammals.

Seismic investigations

One survey with a total length of 2618 km was carried out during 31 May - 19 June 2004 in the southeastern parts of the German and the Dutch North-Sea area.

High speed ferries

Summary information on two high speed ferries on the North Sea coast of Schleswig-Holstein has been given in the previous annual national report for 2003. No change has to be reported at present. One of the ferries runs between Helgoland, Amrum, Sylt and Büsum with a speed of up to 44 nm/h but restricted to 16 nm/h in certain National Park areas. The other ferry may navigate with up to 12 nm/h in certain protection zones, up to 16 nm/h in offshore zones and up to 24 nm/h in particular corridors. Further information on German high speed ferries in 2004 was reported to ASCOBANS by means of the Secretariat's usual questionnaire.

Netherlands

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

Poland

Wind power stations:

No wind farms projects were realized and no permits were issued for such investments in Polish Baltic waters in the years 2003-2004. Potential investors did not carry out investigations on the effects on marine mammals of constructing and operating such hydro-technical investments, leaving this problem for theoretical consideration to the authors of the environmental impact assessment. It is a common conclusion that there are so few marine mammals in Polish waters that the potential harmfulness of the investment is insignificant for those animals.

Seismic activity:

Seismic investigations are carried out in Polish waters aimed in connections with prospecting for oil and natural gas deposits. A basic method of generating the acoustic waves and registering the reflected ones is used.

There is a lack of data confirming any acoustic disturbance to harbour porpoises caused by the seismic activity in Polish waters and further investigations are needed to analyze the potential threat for porpoises.

High-speed ferry routes:

Six hydrofoils operate on the lines of Polish shipping companies in the Baltic. That is the only type of high-speed boats (excluding sport and tourist motor boats) which according to their max. speed over 30 knots might be considered a source of acoustic disturbance for harbour porpoises. No information on the high-speed boats operating in the navy, coastguard and anti-terrorist units is available.

The timetables of Polish hydrofoils in 2004 showed that most of the lines covered a narrow strip of water in the western part of the Gulf of Gdańsk, the entrance to Puck Bay. The most frequent connections were run between the following harbours:

1. Gdynia - Hel – Gdynia	6 round trips a day
2. Sopot . Hel – Sopot	3,5 round trips a day
3. Gdańsk . Hel – Gdańsk	3 round trips a day
4. Gdynia-Sopot, Sopot-Gdynia	1,5 round trip a day
5. Gdynia-Jastarnia, Jastarnia-Gdynia.	2 round trips a day

In total only in the summer season hydrofoils made the trip across the Bay 32 times a day. (June-August).

So far there is no evidence of the occurrence of harbour porpoises in Puck Bay in the summer season since the main indicator of their presence is the bycatch in fishing nets used in the au-

tumn-spring months. However there is not sufficient information to conclude that hydrofoils operating in this region do not cause acoustic disturbance to those animals.

Another area where hydrofoils run regularly in summer season is the Vistula Lagoon. There are two lines, one national and one international, with 6-8 round trips each day. However that area has not been visited by harbour porpoises and so far no further analysis of possible impact on porpoises were done.

Seasonal connections between Polish harbours on the central coast (Kołobrzeg, Ustka, Darłowo) and Danish Bornholm (Nexo) were operated by one hydrofoil in 2003 and 2004. The frequency of the courses and in consequence assessing possible threat for porpoises, were difficult to analyse since numerous technical breakdowns of the vessels caused a high irregularity of the daily number of trips. A plan for 2004 assumed 2-6 trips a day according to the following timetable:

1. Darłowo-Nexo-Darłowo	Mo. - 2 round trips, Fr. 3 round trips
2. Kołobrzeg-Nexo-Kołobrzeg.	Tu., Wed. 3 round trips, Thu. . 2 round trips
3. Ustka-Nexo, Nexo-Ustka	Sa. . 1 round trip, S. . 1 round trip

The line Poland-Bornholm was closed finally on 28 August 2004.

Sweden

Fast Ferries

Name/type of craft	**Route (return)**	
HSS Stena Carisma	Gothenburg-Fredrikshavn	44 000 hk
HSC Gotland	Nynäshamn-Visby	28 000 kW
HSC Delphin	Trelleborg-Rostock	
HSC Villum Clausen	Ystad-Rönne	

United Kingdom

The UK report on levels of seismic survey over the past eight years continued to be developed during the year. Technical problems concerning availability of data were solved. UK assisted in developing a report for ICES to aid in advising the European Commission on the effects of sonar on cetaceans.

The Scottish Executive has recently let a three year contract to the Sea Mammal Research Unit (SMRU), to develop and test a cetacean-friendly seal scarer. This project will investigate more effective and target-specific acoustic scaring techniques that concentrate on keeping seals away from salmon fisheries and fish farms, but do not affect other marine mammals (cetaceans).

On 1 October 2004, the Institute of Zoology (IoZ) began a small (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 research is in collaboration with the Forschungs und Technologiezentrum Westkueste, Buesum (Germany).

Ceredigion County Council, supported by the Countryside Council for Wales (CCW), reported on a 10 year study of cetacean site use and boat traffic along the Marine Heritage Coast and Cardigan Bay cSAC in 2004. 1412 encounters between bottlenose dolphins were recorded, the majority at New Quay, the home port of several dolphin-watching trip-boat operators. The introduction of a code of conduct has had less impact on the users of recreational motor boats than trip-boat operators. Speed boats, in particular, were consistently less likely to stop when close to dolphins and the report highlighted the necessity to further promote adherence of the code of conduct with speed boat operators in order to reduce the risk of propeller or collision injury from encounters with these vessels.

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

Belgium

On 14 April 2004 the building and exploitation of an offshore windfarm ('C-Power') was licenced. The windfarm will be located on the Thorntonbank, approximately 27 km offshore, and will consist of 60 turbines of 3.6MW each. During the construction phase (starting in 2006?), measures will have to be taken for avoiding disturbance of, or harming marine mammals (ramp up procedures, deployment of pingers, …). More information is available on MUMM's website (http://www.mumm.ac.be

Denmark

No new guidelines or legislation implemented.

Finland

Nothing to report

Federal Republic of Germany

The efforts were continued to introduce speed reductions for vessels in North Sea coastal waters of the federal state of Schleswig-Holstein, i.e. within three nautical miles seawards off the region of Dithmarschen and twelve nautical miles off the region of Nordfriesland (see previous annual national report for 2003).

Military sonar tests are carried out by applying the NATO URC diver and marine mammal risk mitigation rules. These include the selection of the trial area based on an environmental scoping study, visual and acoustical surveillance of the area 30 minutes before, during and 30 minutes after the operation and a ramp up procedure for at least 30 minutes starting with 150 dB re 1 Pa or the lowest possible setting. Operations are suspended on detecting marine mammals within the safety range and sightings are reported. If transmissions stop for more than 30 minutes the start up procedure is repeated.

Poland

In connection with Poland`s accession to EU a Polish law was amended in accordance with the European law. The Polish parliament adopted a new act on nature protection on 16 April 2004 (Dz. U. Nr 92, poz. 880) and new decrees of the Ministry of the Environment specifying the lists of protected species and methods of their protection. The decree of the Minister of the Environment from September 28, 2004 on the protected wild species of fauna (Dz. U. Nr 220, poz. 2237) lists the harbour porpoise and other cetaceans in Appendix 1 (Wild species of fauna under strict protection, including the species requiring active protection). The Harbour porpoise, according to its status of threatened species in the Baltic, is listed as needing active protection.

The new act on nature protection provides for the establishment of protected areas within the NATURA 2000 network in Polish Baltic waters. This will become the first important tool in Polish law for the protection of habitats. These new regulations may contribute to more effective implementation of ASCOBANS recommendations.

Sweden

Nothing to report.

United Kingdom

Studies on the noise caused by the installation and operation of windfarms have been published by the Joint Nature Conservation Committee. Relatively high sound levels are generated during the piling phase of installation. Such information will be used to inform both Strategic Environmental Assessments and the Environmental Impact Assessment processes.

A new version of the Joint Nature Conservation Committee guidelines to reduce disturbance to marine mammals from seismic surveys was published in April 2004. Guidelines for explosive use during decommissioning of marine industrial locations continued to be developed during 2004 and will be published in 2005.

The Scottish Executive's Nature Conservation (Scotland) Act 2004 was launched on 29 November 2004. This contains measures to improve the existing species protection offered by the Wildlife and Countryside Act, including the extension of existing protections for cetaceans from intentional disturbance to encompass protection from 'reckless' disturbance in line with that offered by the CROW Act 2000 in England and Wales.

Under the Nature Conservation (Scotland) Act 2004 Scottish Natural Heritage was given the responsibility of producing a Scottish Marine Wildlife Watching Code. They have set up an internal steering group, employed contractors to work on the project and agreed a project plan to deliver the final text of the Code by April 2006. Initial meetings have been held and a review of existing codes of conduct is underway. The Code is intended to cover both commercial and leisure activities and a wide range of marine wildlife, including cetaceans.

UKDEAL is now the definitive source for the navigation data from seismic surveys shot on the United Kingdom Continental Shelf (UKCS). The continued endeavor to fully populate DEAL makes it a valuable tool for current operators, regulators and new entrants to the UK. Through the regulatory efforts of Department of Trade Industry and the strengthening of PON9 and PON14a legislation in 2004, more surveys for 2003/4 have been loaded to DEAL. In 2005, the further development of the regulations will call for complete datasets to be submitted for the 2000 – 2004 period. New tracking procedures adopted by Department of Trade and Industry and DEAL will considerably reinforce policing and submission of the complete datasets within a twelve week period of survey completion.

Department of Trade and Industry is currently funding two projects, which are being carried out by Subacoustech Limited. The details of these are outlined below:

(i) Estimating, measuring and controlling the Environmental effects of man made noise on the marine environment: The aim of this project is to establish a method of rating the toxicity of underwater noise on the marine environment and assessing the effects of such noise on fish / mammal behaviour. This has involved assessing the hearing sensitivities of various species so that the thresholds above which behavioural changes occur can be determined and comparisons made. A review of existing information on historical measurements had established that most of the audiograms available were of poor quality and not suitable for assessing the effects of underwater noise and it has therefore been necessary to carrying out tests on fish (considered to be a good experimental model) using the dBht metric that has been developed in order to assess their reaction to noise and measure their hearing sensitivity. This should define a 'gold-standard' for measuring hearing, which could then be extended to cover a range of marine species including mammals. The project is due to be completed in March 2006 and a final report will be disseminated for `peer-review' purposes as well as being made available on Subacoustech's website (with links from DTI and industry websites).

(ii) A feasibility and demonstration study - Active and Passive detection of marine mammals: This project, due to start around the middle of February, will provide detailed information and a demonstration system, to enable the proper design of active or daylight sonar systems to monitor marine mammals during hazardous offshore activities such as underwater blasting or seismic surveys. The research will involve:

- Estimating the typical Lethal Range for marine mammals for several typical marine operations, including blasting.

- Measuring the key acoustic parameter determining the detectability of marine mammals (the wideband Target Strength) on a seal as a typical species.
- Using this measure to assess the limits of performance of acoustic daylight and active sonar systems and the required system parameters (frequency, source level, directivity etc) to detect marine mammals to, at a minimum, the Lethal Range.
- The assembly of a demonstration system (a Marine Mammal Detection System) and testing it on seals.

The anticipated completion date is July 2005 and a full report will be made available for 'peer-review' purposes / access via relevant websites.

The existing Code of Conduct for Dolphin Watching has been reinforced through the launch of a web-based system to report marine mammal sightings (www.environment.gov.je) and publicity of this through a range of media.

3. Protected areas for small cetaceans

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

Belgium

No protected areas for cetaceans are identified in Belgium.

Denmark

No new measures taken.

The Danish implementation of the EU Habitat Directive includes the designation of several sites, which are considered important for harbour porpoises. A list of Danish designated Habitat Directive sites important for harbour porpoises was included in the National Report 1998.

Finland

Nothing to report

Federal Republic of Germany

The efforts were continued to introduce fishery restrictions for the Whale Protection Area off the islands of Sylt and Amrum into European regulations by means of modifications of the Coastal Fisheries Order of the the federal state of Schleswig-Holstein (see previous annual national report for 2003). This concerns, for example, a decrease of the maximum height of bottom set gill nets to 1.30 m. The implementation into EU fishery legislation is still pending.

Furthermore the efforts towards speed limits for vessels (see above) in the Whale Protection Area were carried on, i.e. generally for a maximum of 16 nm/h and exceptions of 24 nm/h in two relatively short corridors.

Netherlands

No specific areas for small cetaceans have been designated. In the frame of the Habitat Directive, a proposal is in preparation to identify areas in the Dutch sector of the North Sea as potential marine protected areas. They will ultimately provide for some protection of small cetaceans.

Poland

Data on bycatch collected in 2003-2004 based on fishermen's voluntary reports confirmed that Puck Bay is an area where harbour porpoises are particularly threatened by fishing nets.

Nadmorski Landscape Park as the only instrument of protection in the area, as well as existing fishery regulations do not protect marine mammals from bycatch.

During the reported period 2003-2004 no marine protected area for small cetaceans was established. The only new marine protected area was established in 2004 as an enlargement of Słowiński National Park by 2 miles of coastal waters, but no regulations for harbour porpoise protection were implemented. An internal part of the Puck Bay is also proposed to be included in the system of NATURA 2000.

The projected monitoring of the occurrence of harbour porpoises using hydro acoustic detectors in Puck Bay is to support the future management plan for NATURA 2000 Puck Bay by delivering data on the number and seasonal distribution of harbour porpoises in this region.

It is assumed that protected areas of NATURA 2000 stemming from the Bird Directive No 79/409/EWG, might support the reduction of harbour porpoise bycatch. In Polish Baltic waters SPAs (Special Protection Areas) cover most of the areas where both the occurrence and the bycatch of porpoises have been noticed. A necessary condition for achieving this aim is to implement adequate regulations in fishery concerning the methods and seasons of certain fisheries to mitigate the bycatch of wintering diving birds. The harbour porpoise might benefit from the implementation of such measures.

Sweden

No area has been identified as a protective area for harbour porpoise in the Baltic. In the Skagerrak three Natura 2000 sites has been identified to harbour porpoises. Management plans have not yet been produced.

The sites are:

- Vrångöskärgården (SE0520001)
- Koster(SE0520133)
- Väderöarna (SE0520143)

United Kingdom

Following two analyses undertaken of data on harbour porpoise distribution in 2003, the Joint Conservation Committee agreed that an area of higher concentration off South West Wales might be suitable for proposal as an SAC under the Habitats Directive. The Countryside Council for Wales is responsible for formal proposal of boundaries etc. No other suitable areas were found in these analyses. Analyses of the offshore (as opposed to coastal) distribution of bottlenose dolphin indicated that the species was a non-significant presence in a proposed SAC on the Wyville Thomson Ridge.

The Scottish Sustainable Marine Environment Initiative (SSMEI), which was launched in October 2002 to look at the value of Scotland's marine environment and to examine how it could be managed more sustainably, is now coming to the end of its second phase.

Phase II of the initiative has provided the foundations for four pilot management schemes that explore the benefits of a sustainable management and ecosystem based approach to Scotland's marine environment. These pilot schemes will be implemented as part of Phase III of the initiative and will seek to deliver an improved integrated management for maritime areas to ensure the sustainable management of local marine resources; focus on marine leisure and tourism and interactions with the fishing industry and local communities; and work with regulators and stakeholders to develop and trial a new marine planning system.

Scottish Natural Heritage (SNH) has signed a Memorandum of Agreement with Aberdeen University for monitoring the bottlenose dolphins within the Moray Firth SAC. The Agreement will run between 2004 and 2011. The results will be used by SNH to report on the condition of the bottlenose dolphins as a feature of the SAC.

Jersey's offshore reefs designated as Ramsar sites. Passed by States of Jersey in November 2004. Passed by the UK Government on 2 February 2005.

Jersey's Government has employed a project officer for 8 months to conduct a stock take of activities in the coastal zone and produce relevant topic papers for consultation. The results of this process will inform the development of policy and actions for the coastal zone and form the basis of a spatial plan for Jersey's marine and coastal environment. Measures to identify, implement and manage protected areas are likely area of policy development within the project. This will be reported in further detail in the 2005 report.

Offshore Marine Conservation (Natural Habitats, &C.) Regulations

The UK Government is currently taking steps to implement both the Wild Birds and the Habitats Directives beyond its territorial waters where it exercises sovereign rights. This will provide additional protection in the UK offshore marine area for cetaceans listed under the Habitats Directive. It is hoped these Regulations will be laid before parliament during 2005.

Review of Marine Nature Conservation (RMNC)

In July 2004 the Review of Marine Nature Conservation Working Group reported to Government. Led by Defra and supported by a Working Group drawing on a broad range of stakeholder interests, the Working Group makes recommendations on possible measures to improve the protection afforded to important marine features and ecosystems. The report has recommended identifying areas important for marine biodiversity and geodiversity in the UK waters, including those requiring priority conservation actions, and also identifying and establishing an ecologically coherent and representative network of marine protected areas, with appropriate measures applied to ensure their conservation needs are met.

Government will consider how these recommendations sit alongside recommendations emerging from other reviews, and will report in 2005. We will want to secure a strategic approach to stewardship of the marine environment which delivers multiple benefits. Finalising and applying an overarching UK policy framework of strategic goals, objectives, targets and indicators, within which policy development, guidance and strategic planning can be decided by bodies with regulatory responsibility in the UK marine environment, will help improve nature conservation whilst ensuring that mechanisms are available to draw together all aspects of the Governments sustainable development strategy.

OSPAR Convention – The Conservation for the Protection of the Marine Environment of the Northeast Atlantic.

OSPAR is concerned with the effect of human activities on the North East Atlantic. To monitor the state of the environment, OSPAR has established a set of draft Ecological Quality Objectives.

Initial OSPAR list of threatened and/or declining species and habitats.

Criteria have been used by OSPAR's Biodiversity Committee to draw up an initial list of 29 threatened and/or declining species & 14 habitats. Harbour porpoise is listed as threatened, also included on the list are the Bowhead whale, Blue whale and Northern right whale. Work is ongoing to identify the management measures that may be required to protect the species and habitats on the Initial OSPAR List.

It was agreed at the fifth North Sea Conference in 2002 that an Ecological Quality Element relating to bycatch of harbour porpoises in the North Sea would be given an Objective: "Annual bycatch levels should be reduced to levels below 1.7% of the best population estimate".

In order to determine the status of this EcoQO, relevant Contracting Parties should establish (and maintain) monitoring schemes for harbour porpoise bycatch. UK is willing to collate the results of this monitoring for OSPAR. All relevant Contracting Parties are asked to report to

UK as lead country on the management and other measures they are undertaking to ensure that this EcoQO is met.

4. Further research on small cetaceans

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

Belgium

In 2003 and 2004 the Belgian Science Policy funded the project "Viability of the Northeast Atlantic harbour porpoise populations". MUMM was part of the users committee, and as part of its regular obligations, took charge of stranded mammals at the Belgian coast, and made them available to the scientific community for research purposes.

In 2004 it was decided to dedicate part of the oceanographic vessel BELGICA shiptime in 2005 to SCANSII (30 May to 9 June 2005)

Studies on pathology and microbiology and parasitology of cetaceans and pinnipeds were continued.

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 collected opportunistically.

The observations of stranded cetaceans recorded in 2004 are not yet available.

Finland

No, but see point 5

Federal Republic of Germany

The stranding network for cetaceans for the German coasts of the North and Baltic Seas (see previous annual national report for 2003) 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 latter cooperated newly with the Veterinary Agency of Mecklenburg-Vorpommern (Rostock).

In 2004 so far 149 stranded and 1 by-caught harbour porpoises were studied in Schleswig-Holstein (116 from the North Sea, 24 from the Baltic, 9 of unknown origin). In Niedersachsen (North Sea) 33 stranded harbour porpoises were found. 22 stranded and 1 by-caught harbour porpoises were examined in Mecklenburg-Vorpommern (Baltic). No unusual illnesses or particular epidemics were detected. Final data are annually provided to IWC (in this year 2005 at about mid May).

Projects of the Research and Technology Centre (Büsum) and the GKSS Research Centre (Geesthacht) to investigate the genetic structure of parasites from the respiratory tract of harbour porpoises (see previous annual national report for 2003) were continued.

Netherlands

The hitherto operational cetacean stranding network scheme in the Netherlands has been operated by the National Museum of Natural History. Contact person is Dr. C. Smeenk.

Autopsies are carried out on a number of stranded animals. Stomach content and other samples were collected

A project has been started to investigate the impact of windfarms, close to the Dutch North Sea coast, on cetacean distribution and abundance. The so-called t_0 study has been completed. This study involves the deployment of T-PODs and simultaneous ship-surveys in both the study area as well as reference areas.

Poland

Post mortem analysis of small cetaceans was done in Hel Marine Station, where international procedures of sampling, analysis and maintenance of tissue and data banks are implemented. In the years 2003-2004, 7 bycaught animals were dissected and sampled. 3 specimens found stranded were not dissected due to the stage of decomposition of the carcasses.

To propagate international standard procedures, a workshop on methods of post mortem analysis of small cetaceans was organized in Hel Marine Station in 2003 within the European Centre of Excellence BALTDER, workpackage 7. (Endangered species of Baltic marine mammals: threats, investigations and conservation measures) 30 students, scientists and administrators from different institutions in Poland participated in this two-day meeting combined with lectures and practical presentations by European specialists.

Sweden

Post mortem investigations are carried out on all small cetaceans by-caught or found stranded in the Baltic. The animals have to 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, a piece of tissues from the dorsal fin is sampled. For further detail se prior information sent to ASCOBANS.

During 2005 samples from about 30 harbour porpoises from the Baltic Sea and possibly the Swedish west coast will be analysed for contents of DDT and PCB.

United Kingdom

During 2004, under the Defra-funded UK Cetacean Strandings Programme, a total of 782 cetacean strandings comprising 15 species were reported to the Natural History Museum (NHM) from England, Wales, Scotland, Northern Ireland, the Isle of Man and the Bailiwick of Jersey. 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 Institute of Zoology (IOZ) and the Scottish Agricultural College (SAC) are continuing to investigate diseases and causes of death in UK stranded cetaceans. Since 1990, over 2800 marine mammal carcasses have been examined in the UK. Pathological and 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 2004 226 necropsies of stranded cetaceans (of 12 species) were conducted in the UK, and a further 9 necropsies of by-caught harbour porpoises retrieved from fishing vessels (mainly as part of observer-based research conducted by the Sea Mammal Research Unit). Harbour porpoises (n=156) and common dolphins (n=46) were the most commonly stranded species to be examined. By-catch was identified as the cause of death of 32/46 (70%) common dolphins, 37/156 (24%) harbour porpoises, and 1/3 (33%) Risso's dolphins. The harbour porpoise by-

catches continue to exhibit injuries consistent with entanglement in monofilament gillnet-type gear, whereas the common dolphin by-catches typically had different external lesions more consistent with smaller-mesh trawl-type gear. As in previous years, the harbour porpoise and common dolphins diagnosed as by-catches predominantly originated form the southwest of England (mainly Cornwall and Devon) during the winter (December-March). The annual number of all common dolphin and harbour porpoise strandings (including those examined and diagnosed as by-catch) reported in South West England during the winter (mainly December-April) has been consistently increasing between 1999 and 2004.

In addition, 38/156 harbour porpoises were diagnosed as fatally attacked by bottlenose dolphins in Scotland (mainly within the Moray Firth-Firth of Forth area) and in west Wales. A single pilot whale that live stranded and was euthanased had evidence of attack by bottlenose dolphin(s). The number of harbour porpoises killed by bottlenose dolphins in west Wales has increased annually since 1999. Another 28 harbour porpoises died due to heavy parasitic infections and/or pneumonias caused by combinations of parasitic, bacterial and mycotic infections and 7 porpoises had fatal generalized bacterial infections. Starvation caused the death of 19 harbour porpoises, 1 common dolphin and 1 white beaked dolphin and physical trauma (often of unidentified origin) caused the death of a further 4 harbour porpoises , 2 common dolphins and 1 fin whale. One harbour porpoise and one Sowerby's beaked whale died of systemic gas embolism, and two common dolphins that died of by-catch also had gas embolic lesions.

Finally, 6 common dolphins, 3 striped dolphins, 2 Atlantic white-sided dolphins, 2 harbour porpoises,, 1 Risso's dolphin, 1 pilot whale, 1 sperm whale and 1 Sowerby's beaked whale 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-coordinator in conjunction with Countryside Council for Wales.

In addition to the strandings co-coordinators funded by Defra, the Welsh Assembly Government and Countryside Council for Wales continue funding the Welsh strandings coordinator. The cetacean most commonly found stranded on the Welsh coast is the

Harbour porpoise and the most common cause of death for this species have changed from bycatch to attack from bottlenose dolphins over the duration of the project.

b. Research on abundance, population structure etc.

Belgium

The number of stranded porpoises increased (again) in 2004: 41 animals were counted (including washed ashore bycaught animals). This is the highest number ever recorded for Belgium. Two white-beaked dolphins washed ashore, and 1 sperm whale. This sperm whale had already washed ashore at Thornham (Norfolk, UK) on 28 January. One minke whale was found dead at sea (Institute of Nature Conservation), the most probable cause of death was bycatch in fishing gear.

Observations of harbour porpoises were again numerous, especially between February and April, and in November and December. From March to April, and from October to December, observations of groups of white-beaked dolphins were reported. A remarkable observation was made of a large group of around 30 bottlenose dolphins on 4 September 2004. Later in 2004 two more sightings of smaller groups were made (Institute of Nature Conservation). A single pilot whale was sighted (Institute of Nature Conservation). A live sperm whale was sighted very close inshore at Blankenberge and Zeebrugge on 5 May 2004 (MUMM). The animal appeared to be in a very bad physical condition.

Some publications:

Haelters, J., Kerckhof, F. & Jauniaux, T., 2004. Bijvangst van bruinvissen *Phocoena phocoena* vastgesteld bij recreatieve (strand)visserij. Nota van de BMM, 13p.

Haelters, J. & Kerckhof, F., 2004. Hoge bijvangst van bruinvissen bij strandvisserij in het voorjaar van 2004. De Grote Rede 11:6-7.

Communications:

Haelters, J., Kiszka, J., Tavernier, J. & Jauniaux, T., 2004. The harbour porpoise (*Phocoena phocoena*) in the southern North Sea: a comeback in northern French and Belgian waters? Poster presentation. 18th Annual Conference of the European Cetacean Society, Kolmarden, Sweden, March-April 2004.

Kiszka, J., Haelters, J. & Jauniaux, T., 2004. The harbour porpoise (*Phocoena phocoena*) in the southern North Sea: a come-back in northern French and Belgian waters? Document presented at the 11th Meeting of the Advisory Committee to ASCOBANS, 27-29 April 2004, Poland

Denmark

No new information

Finland

Yes, we are gathering historical harbour porpoise data from museum collections etc.

Federal Republic of Germany

Collecting the data of harbour porpoise sightings along the coastline of Niedersachsen (see previous annual national report for 2003) is ongoing and improving. These data and additional published studies which became available enhance the knowlegde about seasonal distribution of harbour porpoises. At first sight there seems to be a match of pattern between the occurence along the coastline of the Netherlands (most of the sightings between January and March) and the coastline of Niedersachsen - in Niedersachsen about 2/3 of the harbour porpoises have been observed between February and April. But before it can be considered as fact, this has to be subject to a scientific review of the data, which is planned for 2005. It might be remarkable that in 2004 one sighting of a living harbour porpoise was reported from the river Ems, near Papenburg. Before, only a few carcasses have been reported for the rivers Ems, Weser and Elbe.

Aerial surveys were conducted in the German North Sea by the Research and Technology Centre (Büsum) throughout the year 2004 similar to 2002 and 2003 (see previous annual national report for 2003). Along the coast of Schleswig-Holstein a density gradient from the northern to the southern part was discovered: Highest densities were observed around the Amrum Außenriff, which includes the area off the island of Sylt close to the Danish border. Lowest densities were found offshore the East Frisian islands. In the Baltic Sea study area all sightings in 2004 were limited to the area west of the island of Rügen. A west-east density gradient was detected in the summer months.

Within the scope of MINOS and MINOSplus (see above) the Research and Technology Centre (Büsum) continued research in the Whale Protection Area off the islands of Sylt and Amrum (see previous annual national report for 2003) by means of visual surveys from boats and porpoise detectors (POD). Information is available via internet (http://www.minos-info.de).

In 2004 the German Oceanographic Museum (Stralsund) deployed up to 22 harbour porpoise detector (POD) measuring stations in the German Baltic Sea from West of Fehmarn up to the Pomeranian bay. Aim was to study the habitat use of the area by porpoises. This method re-

vealed geographical differences and seasonal changes in harbour porpoise registrations with a prominent decrease of registrations from West to East, and lower registrations in wintertime compared to summertime around Fehmarn and the Kadet channel, indicating geographical differences and seasonal changes in the relative porpoise density.

For possible military sonar test areas, as the Skagerrak, Sogne-Fjord and Celtic Sea, special studies concerning the abundance, distribution and migration of cetaceans were or will be carried out by the Federal Armed Forces Underwater Acoustic and Marine Geophysics Research Institute (Forschungsanstalt der Bundeswehr für Wasserschall und Geophysik: FWG). Another investigation deals with the possibility to detect cetaceans with military sonar systems used in a passive mode. Therefore a database containing signals and parameters of various cetacean vocalizations is prepared.

Data on opportunistic sightings of harbour porpoises by mariners and small craft operators especially in the Kattegat, Belt Sea and Baltic (see ASCOBANS documents of 2003 AC10/Doc. 8(P) and of 2004 AC11/Doc. 7(P)) are reported to the German Oceanographic Data Centre (Deutsches Ozeanographisches Datenzentrum: DOD) at the BSH and visualised in maps. The observations for 2003 and 2004 are accessible via internet (http://www.bsh.de/en/Marine%20data/Observations/DOD%20Data%20Centre/BalticSea/Harbour%20Porpoises/2003/index.jsp).

Contributions are made to the development of a recovery plan for harbour porpoise in the North Sea.

Netherlands

The Netherlands participated actively in the preparation of SCANS II.

Poland

Poland, together with other countries, participated in finalizing the preparatory work in the SCANS II project. The main survey is planned for 2005. Due to the very low number of porpoises in the Baltic Sea the best recommended survey method is a long-term hydroacoustic monitoring programme based on platforms of opportunity such as regular shipping routes and stationary hydro technical installations placed within surveyed areas.

Data on the opportunistic sightings of harbour porpoises in Polish Baltic waters were collected and investigations on the biology and ecology of the species (reproduction, parasitology, intoxication, age and diet) were carried out in Hel Marine Station, University of Gdańsk.

Analysis of fishery impact on harbour porpoises according to the type of nets and seasonal strategy of fishery were continued.

At the Medical University of Gdańsk research on intoxication of internal organs of harbour porpoises from Polish Baltic waters was carried on.

Hel Marine Station began a cooperation with Forschungs- und Technologiezentrum Westküste Büsum, University of Kiel, Germany and Deutsches Meeresmuseum in Stralsund, Germany within a project. Investigations on harbour porpoises from the Baltic as a basis for the implementation of the recovery plan for the Baltic population (Jastarnia Plan) were carried out. The project aims at the investigation of presence, habitat use, population structure and age structure as well as reproduction and health status of the Baltic porpoise with the help of acoustical, genetical and pathological methods.

Sweden

An examination of other scientists works concerning population structure of harbour porpoises in Swedish and adjacent waters was carried out by the Institution of population genetics at the University of Stockholm and a report was published in 2004.

United Kingdom

Countryside Council for Wales are funding, or grant-aiding a number of projects examining population abundance and structure including trials on monitoring methods:

1. Extended survey of Risso's dolphins, harbour porpoises and other cetaceans in Cardigan Bay, 2002-2005 (Whale and Dolphin Conservation Society). Both land-based and boat-based survey techniques were used including acoustic porpoise detectors (or PODs) and photographic identification. In 2004 three cetacean species were sighted and useful photographs of Risso's and bottlenose dolphins were captured for analysis that may shed light on life histories of individuals and how animals relate to others in different parts of the UK.
2. Cetacean boat-based surveys in west Wales, 2004 (Friends of Cardigan Bay). Boat-based surveys were undertaken off two Sarns and offshore Cardigan Bay. Sarn Cynfelin was identified as a possible hotspot fro cetacean activity, mainly foraging.
3. North Anglesey surveys of harbour porpoise, 2002-2005 (Marine Awareness North Wales). Data were collected and analysed using line transect sampling. Analysis of the data gathered throughout the study period 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.
4. Harbour porpoise occurrence in Carmarthen Bay, 2002-2004 (Gower Peninsula to Swansea Bay Local Biodiversity Action Plan (LBAP) Partnership). This acoustic survey has enabled comparison between results gained from static TPODs and towed hydrophone arrays. Preliminary results show that there is a year-round porpoise presence on this stretch of the south coast.
5. Common dolphin surveys in the Celtic Deep and St Georges Channel have been initiated in 2004 in order to estimate absolute abundance. Both line transect sampling and photo-identification techniques are being used.
6. Throughout 2003-2004, marine mammals in the Cardigan Bay cSAC were counted using distance sampling and photo-identification techniques. Preliminary estimates indicate that there were 0.49 porpoises/km^2 in the inshore waters of the cSAC. Based on the number of dolphins photo-identified, the minimum population size is 119. An estimate based on the number of well-marked animals identified, and their percentage in the population, suggest a number of 138 bottlenose dolphins in the Cardigan Bay cSAC.
7. Social structure and ranging patterns of bottlenose dolphins in Cardigan Bay were investigated using photo-identification data. Most dolphins in the study were weakly associated but there were some high association values and some animals appeared highly gregarious. Certain individuals seemed to be centres of networks and dolphins did have preferred or avoided associations. Clusters of dolphins that were often together may have geographical separations, following a complex pattern. There seemed to be long-term site fidelity, indicating that, for monitoring purposes, photo-identification needs a good geographical spread.
8. Spatial modeling of bottlenose dolphin and harbour porpoise abundance in Cardigan Bay, using generalised additive models. Spatially explicit models based on generalised additive models (GAMs) applied to transect data offer a number of advantages, including the ability to investigate the significance of environmental variables as predictors of animal abundance.

The Countryside Council for Wales commissioned the Sea Watch Foundation in collaboration with Dr Graham Pierce, University of Aberdeen to analyse harbour porpoise sightings from the Joint Cetacean Database. Spatio-temporal analyses were conducted upon combined databases from North-west Europe, comprising 100,000 hours of effort data and 17,200 porpoise sightings collected between 1980 and 2001. Emphasis was placed upon whether the following

criteria could be fulfilled: 1) the continuous or regular presence of the species (subject to seasonal variation); 2) high population density in relation to neighbouring areas; and 3) high ratio of young to adults during certain periods of the year. A number of areas were highlighted as having greater than average numbers of porpoises regularly present during an important period (April-September) in the annual cycle of the species, including west Wales.

Work continued on the development of agreed protocols for the monitoring of cetaceans (bottlenose and common dolphins/harbour porpoise) in Wales by the Countryside Council for Wales. This included the formation of the Wales Cetacean Group (WCG). The group (formerly the Cardigan Bay Dolphin Workshop) was set up in November 2003 to bring together those studying cetaceans in Welsh waters. Its function was to exchange information, share resources, develop methods and co-ordinate surveys. Within the WCG, Welsh waters are interpreted fairly widely to include areas contiguous with Wales and UK Territorial Seas. A cetacean sightings newsletter is being produced that will include updated species distribution maps and summaries of ongoing work.

Countryside Council for Wales commissioned a short review of invasive research on cetaceans. The strengths and limitations of each approach were reviewed and it was stressed that adoption of any such technique should first be very carefully assessed to evaluate its need in the context of conservation biology, balanced against the potential dangers to the target animal and local societal concerns. (Invasive research is defined here as research involving the application of techniques that result in physical contact with the animal, thereby potentially causing disturbance or damage. Such techniques are being increasingly applied around the world including elsewhere in Europe. Their use on cetaceans primarily involve a) skin and/or blubber sampling either by biopsy or scrubbing of the surface, and b) the attachment of telemetric devices, time-depth recorders or other sensors. These methods are variously used for DNA studies, fatty acid and stable isotope analyses for assessing diet and/or contaminant levels, or for tracking the movements, behaviour and physiology of individual animals).

In 2004 the Environment Department of the States of Jersey launched a web-based method to report marine mammal sightings and to display historic data (www.environment.gov.je). This has been promoted through the local media, the local boat-owing club and associations and through the Jersey Cruising Guide 2005 (4,000 copies of this publication have been distributed).

In early 2004 the Environment Department of the States of Jersey purchased a Porpoise Opening Device and a volunteer is currently developing a deployment programme and monitoring protocols, which are being agreed with the necessary stakeholders.

c. Research on the effects of pollutants on cetacean health

Belgium

1. Viability of the Northeast Atlantic harbour porpoise and seal population (Pollution and biomarker study, contract EV/XX/806). Coordination: Jean-Marie Bouquegneau (contact: krishna.das@ulg.ac.be)

This study aimed to investigate:

- The ecological status of the harbour porpoise in the Northeast Atlantic including the North Sea, in particular the population structure and health status.
- The environmental impact on the population, the individual and the cellular and subcellular levels, using biomarkers in both field studies and laboratory assays.

Three approaches were considered to reach the objectives:

a) Population level: age structure and population dynamics (sex, length…).
b) Individual level: healthy and diseased individuals.

c) Cellular and subcellular levels: biomarkers of pollutant exposure reflecting both the genotypical and phenotypical effects.

2. Viability of the Northeast Atlantic harbour porpoise and seal population (Genetic and Ecological studies, Contract number: EV/12/46). Coordination: Jean-Marie Bouquegneau (contact: krishna.das@ulg.ac.be)

This project aimed to assess the viability of the harbour porpoise and harbour seal populations in the North Sea (focusing mainly on its southern Bay) through:

- The characterisation of their genetic structure and diversity.
- A better understanding of their feeding ecology through the determination of stable carbon and nitrogen signatures.
- The assessment of their susceptibility of being trapped accidentally in fishing nets.

3. Evaluation of the immunotoxicity of mercury, zinc and methyl sulfonyl polychlorinated biphenyls on cytokine secretion by marine mammals. Coordination: Krishna Das (contact: krishna.das@ulg.ac.be)

The aim of the research is to evaluate the immunotoxicological risk linked to an exposure of the harbour porpoise and the harbour seal to methyl-mercury (methyl-Hg), zinc (Zn) and to polychloro biphenyls (PCBs). The study is financed partly by the FNRS (Fonds National pour la Recherche Scientifique) and a European funding (Marie-Curie Reintegration grant). The whole project is carried out in close collaboration between the Liège University (Dr K. Das), the FTZ (Dr U. Siebert, FTZ, Westkueste, Kiel University, Germany) and the GKSS Forschungzentrum (Dr. S. Fonfara, Germany) in Germany.

Some publications:

Brenez, C., Jauniaux, T. & De Pauw, E., 2004. A strategy to identify specific biomarkers related to the effects of a PCDD/F mixture on the immune system of marine mammals. Talanta, 63, 1225-1230.

Chu, S., Covaci, A., Voorspoels, S., Van de Vijver, K., Blust, R., Haraguchi, K., Das, K., Bouquegneau, J.M. & Scheppens, P., 2003. Levels and enantiomeric signatures of methyl sulfone PCB and DDE metabolites in livers of harbour porpoises (*Phocoena phocoena*) from the Southern North Sea. Environmental Science and Technology. 37 :4573-4578.

Das, K., Holsbeek, L., Browning, J., Siebert, U., Birkun, A. & Bouquegneau, JM., 2004. Trace metal and stable isotope measurements in small cetacean species from the Ukrainian coasts of the Black Sea. Environmental Pollution 131 (2): 197-204

Das, K., Siebert, U., Fontaine, M., Jauniaux, T., Holsbeek, L. & Bouquegneau, J.M., 2004. Ecological and pathological factors related to trace metal concentrations in harbour porpoises *Phocoena phocoena* from the North Sea and adjacent areas. MEPS 281:283-295

Van de Vijver, K.I., Hoff, P.T., Das, K., Van Dongen, W., Esmans, E.L., Siebert, U., Bouquegneau, J.M., Blust, R. & De Coen, W.M., 2004. Baseline study of perfluorochemicals in harbour porpoises (*Phocoena phocoena*) from Northern Europe. Marine Pollution Bulletin 48: 986-1008.

Communications:

Brenez, C., Gerkens, P., Jauniaux, T., De Pauw-Gillet, M-C. & De Pauw, E., 2004. Identification of specific biomarkers related to the effects of pollutants on the immune system of marine mammals. 18th Annual Conference of the European Cetacean Society, Kolmarden, Sweden, 28-31 March 2004.

Das, K., Fonfara, S., Beineke, A., Jauniaux, T. & Siebert, U. (2004). Cytokine messenger RNA expression in the blood of harbour porpoises (*phocoena phocoena*). 11th Benelux Congress of Zoology, Louvain-La-Neuve Belgium 5-7th May 2004 (poster presentation).

Das, K. & Siebert, U., 2004. Impact of contaminants on thyroid and immune system of harbour porpoise (*Phocoena phocoena*) from the Northeast Atlantic. Eurocean 2004. Galway Ireland 11-13 May 2004 (poster presentation).

Das, K. & Siebert, U. 2004. Trace metal and endocrine disrupter impact on marine mammals. Eurocean 2004. Galway Ireland 11-13 May 2004 (invited oral presentation).

García Hartmann, M., Scharpegge, J., Jauniaux, T. & Addink, M., 2004. Diagnostics in respiratory tract disease in small cetaceans: a review and personal evaluation. 32nd Annual Symposium of the European Association for Aquatic Mammals, Valencia, Spain, 14-17 March 2004.

Hue, C., Van Canneyt, O., Jauniaux, T., Thiébaud, M., Verger, J.M., Grayon, M. & Garin-Bastuji, B., 2004. First evidence of Brucella infection on a bottlenose dolphin stranded on the French Atlantic coast. 18th Annual Conference of the European Cetacean Society, Kolmarden, Sweden, 28-31 March 2004.

Jauniaux, T., 2004. Les paramyxovirus des mammifères marins. Séminaire annuel de la Société Française Anatomie Pathologique Vétérinaire, Paris, 3 December 2004.

Jauniaux, T. & Coignoul, F., 2004. Les épidémies à morbillivirus chez les mammifères marins: état de la question. 8e Conférence internationale sur les cétacés (Réserve Internationale Maritime en Méditerranée Occidentale) et le 6e séminaire annuel du Réseau National d'échouage français, Nice, 13 & 14 November 2004.

Jauniaux, T., Mignon, B. & Coignoul, T., 2004. Fungal broncho-pneumonia in harbour porpoises stranded on the Belgian and French coastline in 2003. 3rd Annual Conference of the Dutch Society for Wildlife Health, Utrecht, The Netherlands, 26 June 2004.

Jauniaux, T., Mignon, B. & Coignoul, F., 2004. Severe fungal pneumonia in harbour porpoises stranded on belgian and french coastline in 2003. 18th Annual Conference of the European Cetacean Society, Kolmarden, Sweden, March-April 2004.

Van de Vijver, K.I., Hoff, P.T., Das, K., Van Dongen, W., Esmans, E.L., Siebert, U., Bouquegneau, J.M., Blust, R. & De Coen, W.M., 2004. New threat for coastal waters of Northern Europe: Perfluorochemicals in harbour porpoises. 18th conference of the European Cetacean Society. Conference Guide and abstracts, Kolmarden, Sweden 28-31 March 2004 (poster presentation).

Denmark

No new information

Finland

None

Federal Republic of Germany

The study on the impact of contaminants on the thyroid and immune system of harbour porpoise from different regions of the Northeast Atlantic within the scope of the Marie Curie Scholarship (EU) was continued (see previous annual national report for 2003).

Netherlands

The co-ordination of the IWC POLLUTION2000+ project has been continued, with focus on the harbour porpoise post mortem calibration part.

Poland

No direct investigations on the effects of pollutants on harbour porpoise health are carried out in Poland. Indirect information is delivered by the analysis of the level of pollutants in different organs of this species from Polish Baltic waters.

Results on pollutants in the tissues of harbour porpoises were published in:

• Ciesielski T., Wasik A., Kuklik I., Skóra K., Namieśnik J., Szefer P. 2004. Organotin compounds in the liver tissue of marine mammals from the Polish coast of the Baltic Sea. Environmental Science and Technology. American Chemical Society. Accepted. Vol.38 no.5: 1415-1420

Another paper showing indirect impact of pollutants on the immunological system of harbour porpoise from Polish Baltic waters, reflected in a higher number of parasites, was published:

• Kijewska A., Jankowski Z., Kuklik I., Rokicki J. 2003 Pathological changes in the auditory organs of the harbour porpoise (*Phocoena phocoena*) associated with *Stenurus minor* (Kuhn, 1829) Acta Prasitologica 41(1):60-63

Sweden

Nothing to report for 2004

During 2005, though, The Swedish Museum of Natural History in Stockholm plans to carry out analyses on samples from about 30 harbour porpoises from the Baltic Sea and possibly the Swedish west coast, for contents of PCB and DDT. No new information

United Kingdom

In 2004, tissue samples collected by the Institute of Zoology and SAC Inverness from 90 UK-stranded harbour porpoises were analysed at the CEFAS Burnham Laboratory, Essex for a range of contaminants including 5 organochlorine pesticides, 25 individual chlorobiphenyl congeners (Σ25CBs), 12 trace elements, 3 butyltins and 11 brominated diphenyl ether congeners (polybrominated flame retardants). A long-term dataset developed jointly by IoZ, SAC Inverness and CEFAS since 1989 now contains pathology and toxicology data for over 560 UK-stranded harbour porpoises. Spatial analyses of contaminant levels in UK-stranded porpoises showed that levels of all organochlorine pesticides, Σ25CBs, Cr and Ni were significantly lower in Scottish porpoises compared to those stranded in the rest of the UK.

Temporal trends in contaminant levels in UK-stranded porpoises suggested that levels of Σ25CBs, some organochlorine pesticides (i.e. DDTs, dieldrin, alpha and gamma hexachlorocyclohexane) and some heavy metals (Cr, Ni, Pb) have gradually declined since 1989-1990, but levels of Σ25CBs in many individuals still occur at levels predicted to be immunotoxic based on experimental mammalian studies. A recent (case-control) study involving 257 UK-stranded harbour porpoises demonstrated statistically significant associations between elevated Σ25CBs levels and infectious disease mortality (using physical trauma cases as controls), suggesting that PCB exposure is influencing individual and possibly population-level mortality effects.

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.

Information concerning the relatively high level of bycatches of harbour porpoises in spring 2004 was published on MUMM's website and in an article in the magazine of the Flemish Marine Institute (VLIZ).

For reporting sightings an email account can be used (dolphin@mumm.ac.be), and a webforum dedicated to marine mammals (http://www.zeezoogdieren.be) provides useful information.

On 27 March 2004 an international symposium was held on cetaceans. It was organised by the SeaLife Club and WWF. Presentations were made (a.o.) on cetaceans in the Mediterranean, the Bay of Biscay, and on bycatch of common dolphins in the Channel area and the North Sea. A porpoise showing clear net marks that washed ashore on the Belgian coast that very morning, was on display (see Whale and Dolphin Magazine, May/June 2004, p.32).

From 16 April to 26 june, a temporary exhibit on the North Sea environment was organised at Ostend (Organisation by Ostend and the RBINS). The exhibit was organised in an interactive way, and paid attention to human threats to the environment, amongst others to threats to small cetaceans.

On 19 April, the Belgian Minister responsible for scientific affairs paid a visit to the oceanographic vessel BELGICA. She was also informed about the growing number of bycatches of harbour porpoises in Belgian waters (a bycaught porpoise was on display). The press was present, and the problem of bycatch received some attention.

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.gounderwater.com) also contains information on harbour porpoise conservation and has a direct link to the ASCOBANS web page.

Finland

We continued the harbour porpoise sighting- campaign and received information of two observations one which consisted of 4-6 animals swimming together and one single animal. We could conclude that there have probably been 5 - 6 harbour porpoises in the Finnish waters during the summer 2004. We will also launch a new poster; containing information about harbour porpoise sightings and how to identify harbour porpoise from seals.

Federal Republic of Germany

The public relation activities existent in Schleswig-Holstein were carried on (see previous annual national report for 2003), such as dissemination of brochures on harbour porpoise, whales and seals. Again the new wing for exhibitions on whales of the „Multimar-Wattforum-Tönning" on the North Sea Coast was strongly frequented in 2004.

Public awareness was furthermore promoted by the Federal Research Centre for Fisheries, Institute for Sea Fisheries (Bundesforschungsanstalt für Fischerei: BFAFi; Institut für Seefischerei: ISH) by means of lectures given at various locations (e.g. Museum Alexander Koenig, Bonn, or Natureum Unterelbe, near Cuxhaven).

Netherlands

A Dutch translation of the ASCOBANS folder is in the process of translation in co-operation with Dr. J. Haelters, our colleague from the Belgium partner in ASCOBANS.

Poland

Information and education on the status of the Baltic harbour porpoise population was the main activity implemented to increase public acceptance of measures aimed at more effective protection of the species. Hel Marine Station, University of Gdańsk, and Foundation for the Development of University of Gdańsk took a leading role in this.

On 28 January 2004 the National Bank of Poland issued new coins in the series called Animals of the World, showing the harbour porpoise. 800,000 2zł coins and 56,000 20zł silver coins (for collectors) were minted. The coins were distributed by the National Bank and numismatic companies. A brochure (in Polish, English and German) on the status of and threats to harbour porpoise in the Baltic was distributed in addition to the coins. This campaign was aimed at increasing public awareness about the situation of the Baltic porpoise.

The Polish version of the ASCOBANS exhibition "Harbour porpoise in distress! Save our native cetaceans" and the exhibition "Marine Mammals of the Baltic Sea" displayed at Hel Marine Station, University of Gdańsk, were seen by 412,000 people in 2003 and 365,000 in 2004. Brochures, leaflets, postcards and stickers with the harbour porpoise and other small cetaceans, including material supplied by ASCOBANS Secretariat, were also distributed there. ASCOBANS information material was translated into Polish, with the support of the Secretariat.

A new brochure on harbour porpoises in the Baltic and Polish waters was published in two versions: Polish and English.

The new EU regulation No 812/2004 banning driftnets in the Baltic Sea was widely commented in the media. This offered an opportunity to present the main elements of the Jastarnia Plan to the public. The issue was reported on Polish television, radio and in the press.

Special campaigns organised by the NGO "Friends of Hel" provided considerable support for the protection of Baltic harbour porpoise in Poland. Articles on the situation of the harbour porpoise have been published regularly in its magazine "Helska Bliza".

Members of the association are involved in different, mainly educational, activities such as producing printed material, VHS and DVD movies, and organising lectures and exhibitions.

Hel Marine Station has continued to publish information about events connected with harbour porpoises on its website dedicated to progress in implementing the Jastarnia Plan in Poland. An example of a new way to communicate information to the public are "radio chats" dedicated to the small cetacean problem. These can be found on the website of Polish Radio.

A notable activity of Hel Marine Station was organizing the special exhibitions entitled "A World of Harbour Porpoises" during the first and the second Baltic Festival of Science and to mark the International Day of the Baltic Harbour Porpoise in 2003 and 2004. Several groups of students and schoolchildren visited the exhibitions and listened to the presentations on the state of research on the biology and ecology of that species, including the acoustic monitoring of its presence in Polish waters.

An educational workshop and course of lectures on endangered species of Baltic marine mammals was organized at Hel Marine Station as part of Work Package No 7 of the Centre of Excellence for Baltic Development, Education and Research (BALTDER) in October 2003.

The problems of protection and restoration of the harbour porpoise population in the Baltic Sea was also one of the topics at the Baltic University's Student Summer Course "Restoration ecology, healing aquatic environments", organized in Hel Marine Station in August 2004.

Problems of the status of small cetaceans are also dealt with in an educational program for schoolchildren called "The Blue School" that is held at Hel Marine Station. 7,000 students attended the Blue School lessons in the period 2003-2004.

At the end of 2004 Hel Marine Station began to make efforts to obtain reports on sightings of harbour porpoises from the crews of navy ships. A special brochure and a poster were prepared and distributed to relevant ships.

The 24-hour rescue telephone has been operating at Hel Marine Station to receive information on stranded, by-caught and observed cetaceans. The telephone number and the address has been included in all information material to facilitate the delivery of reports.

Sweden

A brochure to inform fishermen, the coast guard, municipalities and people living off and by the sea, what to do if they find a stranded or by-caught small cetacean is available at present.

SEPA has also produced another brochure for the general public with the objective of rising public awareness and receiving reports on sighted harbour porpoises. The brochure has been widely distributed and the information is also available on the SEPA website.

A reporting system of porpoise sightings has been produced by the Swedish Museum of Natural History in cooperation with SEPA. A report with the results from the first year was produced during 2004.

United Kingdom

Centre for Marine Awareness for North Wales, 2002-2005 (Marine Awareness North Wales) - support for an information centre and education officer in Bangor, North Wales. This includes an education outreach scheme involving visits to schools, press releases and events implementing community involvement in marine biodiversity action plans.

Marine Environmental Education for Cardigan Bay and Environs, 2002-2005 (Sea Watch Foundation) - support for an education officer, managing volunteers and providing educative and interpretive material. The educational resource will be in line with the National Curriculum in Wales.

Cetacean surveys in Wales – training and use of volunteer observers, 2002-2005 (Sea Watch Foundation). Work includes the promotion of a national sightings scheme, the training of volunteer participants in this network and the provision of sightings data on cetaceans encountered during training. In 2004, 80 people, including local volunteers, attended the courses.

At the end of 2004, funding was agreed to develop a marine and coastal interpretation centre in Gorey, on the east of the Island. It is due to open mid May 2005. This will include information about cetaceans, a viewing platform and interpretation and education material. More information about this will be provided in the 2005 report.

A local branch of the British Divers Marine Life Rescue (BDMLR) was set up in 2004 and they carried out a mass strandings exercise on Green Island Beach as a training exercise to help promote awareness and understanding on how to handle this type of occurrence.

6. Other relevant news

Belgium

In 2004 Belgium became a member of the International Whaling Commission (IWC).

Lithuanian National Report

1. A. General information

Name of Party: Lithuania	Period covered: 2001-2005
Name of report compiler: Mindaugas Vaišvila	Date of report: 4 10 2005

B. New measures/action towards meeting the resolutions of the 2nd Meeting of Parties

1. Direct interaction of small cetaceans with fisheries

Investigations of methods to reduce by-catch: No investigations on methods to reduce by-catches of harbor porpoises have been conducted so far			
Implementation of methods to reduce by-catch: No methods implemented			
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.)
Harbor porpoise	Two individuals	Lithuanian coastal zone	One found entangled in set nets in April 2001. A second was by -caught in a pelagic trawl in winter 2003

2. Reduction of disturbance to small cetaceans

Information on levels of disturbance (e.g. seismic surveys, new high-speed ferry routes, studies about acoustic impacts on cetaceans, etc.): No measures on disturbance reduction have been implemented
Implementation of guidelines, new legislation, etc. to reduce disturbance: No concrete measures or legislation have been implemented or adopted so far

3. Protected areas for small cetaceans

Measures taken to identify, implement and manage protected areas: There are no protected areas established

4. Further research on small cetaceans

Implementation of schemes to use and gain information from stranded cetaceans: There are no such schemes implemented
Research on abundance, population structure etc.: No research on abundance and population structure have been conducted so far except of gathering an information on by-caught or stranded harbor porpoises or other cetaceans
Research on the effects of pollutants on cetacean health: No such research have been carried out

5. Public awareness and education

Measures taken in the fields of public awareness and education to implement or promote the Agreement: Lectures for schoolchildren and students on protection of marine ecosystems including cetaceans as well as local harbor porpoises are permanently organized in the Lithuanian Sea Museum display. ASCOBANS posters have been exhibited at the booking office and aquarium hall of the Lithuanian Sea Museum. ASCOBANS posters and leaflets have been circulated throughout secondary schools of Klaipeda. Publication in daily press of Klaipeda on the International Harbor Porpoise Day. Harbor porpoise postcards have been distributed among LSM visitors on IHPD. A schedule of events has been implemented on IHPD May 15 2005 in the Lithuanian Sea Museum.

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

Estonia*

1. Direct Interactions of small cetaceans with fisheries

a. Investigations of methods to reduce bycatch

No investigations carried out.

b. Implementation of methods to reduce bycatch

No methods implemented.

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

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.)

No new information.

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

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

Trilatelar (EST/LAT/LIT) LIFE-Nature project "Marine Protected Areas in the Eastern Baltic Sea" (Baltic MPAs)" was launched in August 2005. Identification of areas important for harbour porpoises in the Eastern Baltic Sea is part of this project.

4. Further research on small cetaceans

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

A small-scale public awareness campaign has been going on since January 2005. Part of this campaign is the collection of data on any records of present and historical abundance of harbour porpoises, including information on strandings.

b. Research on abundance, population structure etc.

An acoustic survey with porpoise detectors started in September 2004.

c. Research on the effects of pollutants on cetacean health

Not planned in the near future.

5. Public awareness and education

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

See 4a above.

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* Period covered September 2004 – September 2005

Latvia

1. Direct Interactions of small cetaceans with fisheries

a. Investigations of methods to reduce bycatch

No investigations carried out.

b. Implementation of methods to reduce bycatch

No methods implemented.

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

Most possibly no bycatch has occurred.

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.)

No information available.

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

None.

3. Protected areas for small cetaceans

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

None.

4. Further research on small cetaceans

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

None.

b. Research on abundance, population structure etc.

None.

c. Research on the effects of pollutants on cetacean health

None.

5. Public awareness and education

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

Celebration of International Day of the Baltic Harbour Porpoise in the Latvian Museum of Natural History. Competition for children about knowledge on the Baltic Harbour Porpoise organised by the magazine “Spica”.

ANNEX 1

Table 1: Cetacean strandings in United Kingdom & Bailiwick of Jersey during 2004

	ENGLAND, WALES, ISLE OF MAN & BAILIWICK OF JERSEY	**SCOTLAND**	**NORTHERN IRELAND**	***TOTAL***
FAMILY BALAENOP-TERIDAE				
Balaenoptera acutorostrata	1	12	1	14
Balaenoptera physalus	5	2	-	7
Balaenoptera sp.	1	-	-	1
Megaptera novaeangliae	-	1	1	2
FAMILY DELPHINIDAE				
Delphinus delphis	149	3	-	152
D. delphis/ S. coeruleoalba	-	4	-	4
Globicephala melas	2	4	-	6
Grampus griseus	2	8	-	10
Lagenorhynchus acutus	-	5	-	5
Lagenorhynchus albirostris	2	6	-	8
Lagenorhynchus sp.indet.	2	-	-	2
Stenella coeruleoalba	4	2	-	6
Tursiops truncatus	5	3	1	9
Unidentified dolphins	43	15	-	58
FAMILY PHOCOENIDAE				
Phocoena phocoena	374	83	6	463
FAMILY PHYSETERIDAE				
Physeter catodon	2	1	-	3
FAMILY ZIPHIIDAE				
Hyperoodon ampullatus	2	-	-	2
Mesoplodon bidens	2	1	1	4
Ziphius cavirostris	-	2	-	2
Unidentified toothed whales	6	7	-	13
Unidentified cetaceans	7	4	-	11
TOTALS	**609**	**163**	**10**	**782**

ANNEX 2

Jersey Marine Mammal Strandings for 2003

Ref.	Species	Date	Location	Remarks
102	Common Dolphin (D.delphis)	03/02/2003	St Quens Bay Near La Pulente	Badly decomposed – disposal by public services
103	Common Dolphin (D.delphis)	03/02/2003	St Quens Bay Near Le Etacq	Badly decomposed – disposal by public services
104	Common Dolphin (D.delphis)	05/02/2003	St Quens Bay Near Le Braye slip-way	Badly decomposed – disposal by public services
105	Common Dolphin (D.delphis)	09/08/2003	West of Green Island	Picked up by Ross Goodnicke. V young male – 100cm. Fairly fresh. All fins intact. Gouge under next. Photos taken, ref 105 std NHM form 136 filled in and forwarded to NHM
106	Common Dolphin (D.delphis)	26/12/2003	Pomtac 3003 east of slip	Animals' Shelter received a call on Boxing day at 11:15am and contacted H Forshaw. A Male dolphin – 2m 30cm – in very good condition. HF suspects drowning (possibly nets) though no post mortem. Photographs taken