Fourteenth Compilation of Annual National Reports to ASCOBANS 2009

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

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NEW MEASURES / ACTIONS TOWARDS MEETING THE OBJECTIVES OF THE CONSERVATION AND MANAGEMENT PLAN AND THE RESOLUTIONS OF THE MEETING OF PARTIES

A. HABITAT CONSERVATION AND MANAGEMENT

1 DIRECT INTERACTION WITH FISHERIES

1.1 Investigations of methods to reduce bycatch
BELGIUM
Investigations of methods to reduce bycatch A project 'WAKO II' started in 2009 and will continue in 2010. The project aims at an integrated assessment of direct ecosystem effects of trammel net and beam trawl fisheries for the Belgian part of the North Sea (BPNS). A total of 4 workpackages are therefore drawn up, namely (1) quantification of the major direct, short-term effects of trammel net and beam trawl fisheries at the BPNS, (2) the development and application of a methodology for a sensitivity assessment of key species of each of the ecosystem components (endo-, epifauna, fish, sea birds and marine mammals), (3) the production of spatio-temporal distribution maps of these key species and (4) the integration of sensitivity maps of the key species and fishing effort. The study includes the participation of independent observers on board static gear fishing vessels, and a voluntary logbook-keeping by static gear fishermen. The project is funded by the Belgian Science Policy (http://www.belspo.be/ssd). Contact person: Jochen Depestele: Jochen.Depestele@ilvo.vlaanderen.be; website: www.ilvo.vlaanderen.be/wako.
DENMARK
Research project for developing alerting pingers (Lotte K Larsen and M Wahlberg, DTUAQUA and Fjord& Bælt, funded by the Danish Ministry of Food and Agriculture and the EU Strategic Fishery Foundation, EFF), final project report ready in October, 2010. Studies on porpoise behaviour around fishing gear (M Wahlberg, Fjord& Bælt), funded by the Danish Ministry of Food and Agriculture and the EU Strategic Fishery Foundation, EFF), final project report ready in October, 2010. Research project on video monitoring of by-catch from smaller fishing vessels (Lotte K Larsen, DTU-AQUA): Kindt-Larsen, L & Dalskov, J., 2010. Pilot study of marine mammal by-catch by use of an Electronic Monitoring System. EFF-report, Ministry of Food, Agriculture and Fisheries. Dalskov, J. & Kindt-Larsen, L., 2009. Final Report of Fully Documented Fishery. DTU Aqua report no. 204-2009. Charlottenlund. National Institute of Aquatic Resources, Technical University of Denmark
FINLAND
In the absence of reported bycatches, no studies are carried out.
FRANCE
Pilot study in Iroise sea (EC 812/2004): species and level of by-catch + implementation of 3

acoustic deterrents (Aquamark, VO2, DDD); Iroise Marine Protected Area / Ifremer / Oceanopolis / Local fisherman representative are the participants involved in this study. The final report is available through internet; the biological results are poorly significant due to the low bycatch in that part of area VII. The real costs of equipments have been evaluated after one year of experiments.

The fishing Industry worked to prepare an observer programs (Filmancet) dedicated to set nets in the Channel, the aim is to determine the level of by-catch in this area and to test acoustic deterrents (decision of the National Committee of the Fisheries (CNPMEM: French industry) and the National Head of the Fisheries (French administration)). The Ministry of fisheries will also dedicate some additional observations on vessels in 2009 included in the project Obsmer. All those observation programs planned by the Fishing Industry, the ministry of Fisheries and Ifremer have started in 2009 in the area VII in order to determine seasons, fishing grounds and fisheries having the highest bycatch rate. A standardization of a protocol for all the observation programs has been done by the IFREMER and the CRMM/ULR in 2009 the tasks will be similar in all the observations at sea (whatever is the regulation asking for observers). This means that cetacean bycatch is recorded now for all gears and fisheries when observers are on board. An intermediate report is available, it shows a low bycatch rate at least in the western channel.

Following the EU NECESSITY project to reduce cetacean by-catch in pelagic trawl fisheries, experiments of the acoustic deterrent CETASAVER on commercial vessels were carried on in 2007, 2008 and 2009 by Ifremer and the fishing industry. The methodology consists in having combined tows to compare control tows and test tows in several trips in the sea bass fisheries. A report has been published on internet by Morizur et al. (2008)

GERMANY

None

LITHUANIA

No investigations on methods to reduce by-catches of harbor porpoises have been conducted so far.

NETHERLANDS

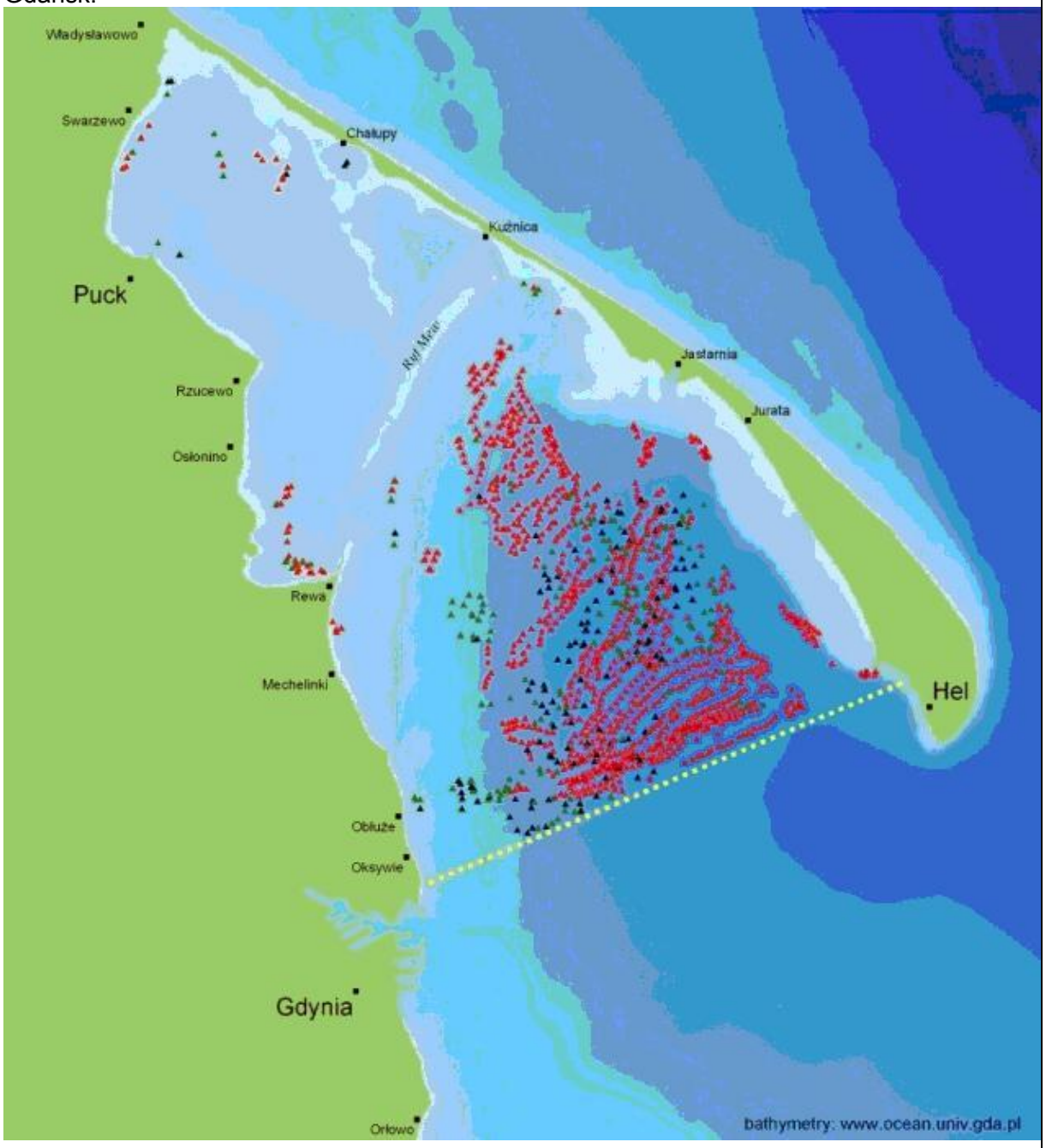
Coastal & Marine Union (EUCC) started in 2009 a pilot study to investigate the workability and efficiency of a new pinger, the Dolphin Saver, aiming to mitigate bycatch of Harbour Porpoises (*Phocoena phocoena*) in the winter set net fishery on mainly cod, turbot and brill. The study is a close collaboration between the Dutch Fisheries Organisation (Vissersbond); Expert group on set net fishery (Kenniskring Staand want), 10 Dutch winter season set net fishermen and the Coastal & Marine Union. The study is supported by the Dutch Ministry of Agriculture, Nature and Food Quality and aims to be continued in 2010 and 2011. Project coordinator for EUCC is Marine Science & Communication.

For 2010 a trial is planned with Closed Circuit television on board of one or two set gillnet vessels. This system is primarily used for the collection of effort and catch data, but is probably very suitable for the bycatch observation as well. First results are expected to be available for presentation at the ASCOBANS meeting in 2011.

POLAND

Among the research on methods of reducing bycatch in Poland last year was the project “Active Protection of Harbour Porpoises against Bycatch”. 2009 was another year in the preparatory period before the introduction of a linear barrier of acoustic scares at the entrance to the Puck Bay to stop the porpoises from entering an area where there is a high density of bottom gillnets and anchored surface gillnet (GNS). The project is carried out by

the Hel Marine Station of the IOUG, financed by the National Fund for Environmental Protection and Water Management and the University of Gdańsk.



Explanation: Red points – surface gears, black points – bottom-set gears, green points – unrecognized gears. Side - method of anchoring the pingers on the seafloor.

SWEDEN

Cod pots

A potential alternative fishing gear to the cod gillnet fisheries in the Baltic is the two-chambered pot. The Swedish Board of Fisheries has investigated the catch of the Norwegian cod pots when used in a commercial fishery. The cod pots catch efficiency over the fishing season 2009 has been investigated and compared to the gillnet fisheries in the same area.

However, there are many aspects regarding the use of pots which needs to be taken under consideration. The pot needs to be selective both with regard to non commercial fish species, small fish and marine mammals and birds. There is also a need to improve catch efficiency of the pots. This can be done by modifying the pots entrance, adding a visual stimuli or just using more long lasting bait. Studies have been carried out to investigate if visual stimuli can increase the catch. The Swedish Board of Fisheries have also studied the effect of escape windows for the undersized cod.
UNITED KINGDOM
The two main species affected by fishing in UK waters are the harbour porpoise and the short-beaked common dolphin. Since Regulation 812/2004 came into force, for four years running (2005-2008 inclusive) there have been no observations of cetacean bycatch in any of the fleet segments listed for compulsory monitoring. Additional monitoring of pelagic trawl and static net fisheries was also undertaken for the purposes of Article 12 under the Habitats Directive and 'Scientific Studies' under Regulation 812/2004. For 2008, the bycatch estimates of harbour porpoise in gillnet and tanglenet fisheries in the Irish and Celtic Sea areas was 498-1409 and for common dolphins 279-1019 (SMRU, 2009). The bycatch levels recorded are below 1.7% of the best population estimate and unlikely to represent a major conservation threat to either species. However, there are bycatches in many other European fisheries affecting the same biological populations. It is not yet possible to determine the cumulative significance of the various bycatch estimates. The UK is committed to enforcing all aspects of Council Regulation 812/2004 and the provisions of the Incidental Catches of Cetaceans in Fisheries (England) Order 2005 in order to minimise cetacean by-catch. All Reports to European Commission on activities conducted by the UK under Regulation 812/2004, and under Article 12(4) of the Habitats Directive, provide details of the monitoring work undertaken and estimates of bycatch. All Reports can be found at: http://www.defra.gov.uk/foodfarm/fisheries/protect/cetaceans.htm.

1.2 Implementation of methods to reduce bycatch
BELGIUM
None
DENMARK
None
FINLAND
None
FRANCE
Modification of practices in pelagic trawling (headline at 5 m depth)
GERMANY
Together, three NGOs (GSM, GRD and NABU) prepared a paper on "by-catch of harbour porpoises (*Phocoena phocoena*) in the Baltic coastal waters of Angeln and Schwansen (Schleswig-Holstein, Germany)" (Koschinski & Pfander 2009, AC16/Doc.60) as well as a literature study on "strategies to prevent by-catch of harbour porpoises and seabirds in the German Baltic Sea", mainly focusing on alternative fishing methods (funded by 'BINGO!

Lotto'). [Koschinski]

In addition to the GSM's public awareness project "Sailors on the Look-out for Harbour Porpoises", members of the public are increasingly reporting strandings (inc. bycatch). The data are automatically forwarded to the authorities and to the stranding network. If possible, the location of a stranding is – with some delay due to logistics – also registered and published in the sightings map of BfN/GSM. [Deimer]

LITHUANIA

Yes, on the basis of the Council Regulation (EC) No. 812/2004.

NETHERLANDS

None

POLAND

Article 2 and Annex I to the Regulation 812/2004 obliges Poland to use in the ICES 24 area acoustic deterrent devices (pingers) on fishing vessels of the length 12 m or more. Poland undertook efforts to purchase pingers so as to distribute them among fishermen. It was assessed that order to fulfil Poland's commitments concerning the above Regulation 500 pingers should be purchased. Therefore, an open tender was announced, and 500 pingers AQUATEC AQUAAmark 100 (produced by a British company – AQUATEC) were purchased. In January 2009 all pingers were distributed among fishermen by the Marine Fisheries Inspectorates in Gdynia, Słupsk and Szczecin. Over half of the pingers are possessed by ship owners of ships in the region where the use of deterrent devices is obligatory (Świnoujście - 6%, Dziwnów - 30%, Mrzeżyno - 15%, Kołobrzeg – ca. 4%). The reminder are held by ship owners who fish in the same area but whose home ports are located on the central and east coast. These are Darłowo (4%), Ustka (ok. 28%) i Władysławowo (ok10%).

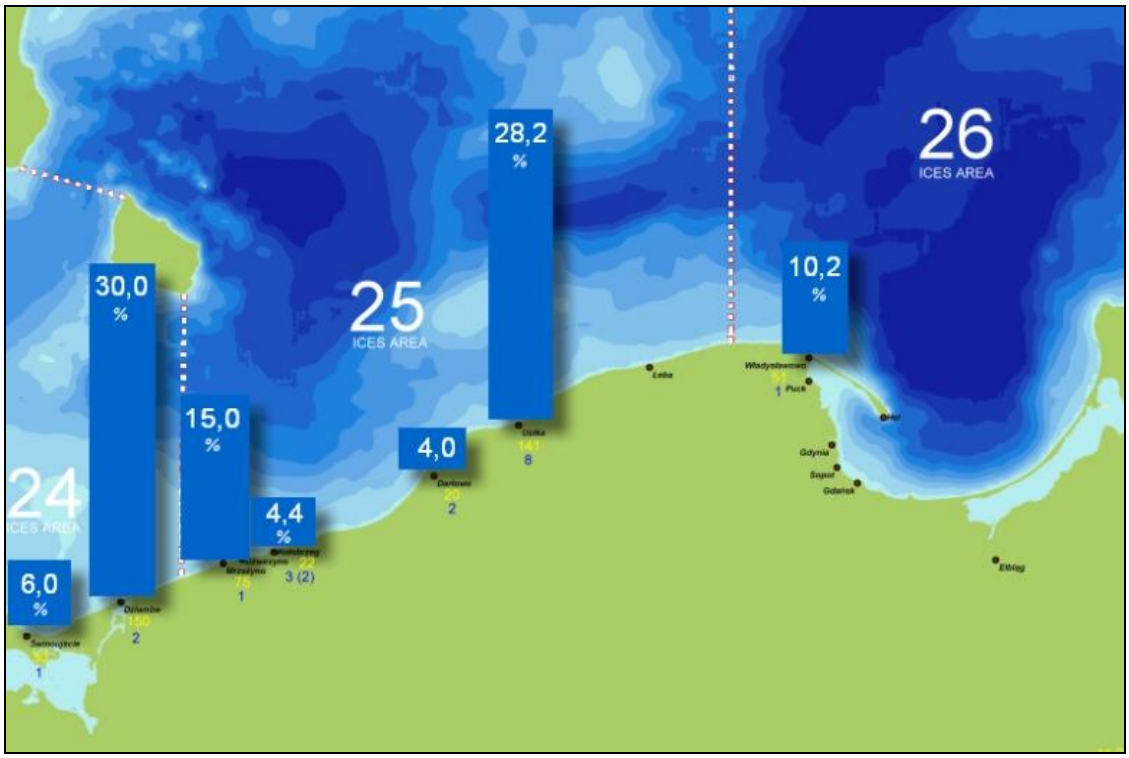


Fig.2. The location and percentage of pingers held by Polish ship-owners who fish using set gear (as of 2009).

Other activities which may assist the reduction of porpoise bycatch have not been carried out.

SWEDEN

Push-up traps

The pike perch fisheries in the Baltic sea have suffered from seal damages for a long time. In 2008 pike perch/white fish traps were being introduced as an alternative to gill nets with the purpose of reducing seal damage. A certain percent of the cost of the trap will be funded by the government when fishermen are investing in the fishing gear. The traps used are so called push-up traps. They have been a success in Sweden in the salmon and white fish fisheries. In the salmon fisheries the traps mostly replace older traps but in the white fish and pike perch fisheries the traps replace nets and therefore reduce net effort.

Pingers

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

UNITED KINGDOM

The Marine Management Organisation (MMO) is England's enforcement body for fisheries matters. The MMO has continued to conduct training courses for the Fisheries Protection Squadron who undertake boarding at sea. This has raised awareness of cetacean and bird by-catch issues. The UKs Monitoring, Control and Surveillance System (MCSS) is now in place for boarding officers to record the number of cetaceans that have been captured as part of a fishing operation (as witnessed during a boarding) or any information given by the Master of the vessel regarding bycatch of cetacean and wild birds.

The use of acoustic deterrent devices as specified under Council Regulation 812/2004 has been problematic for the UK but we are committed to resolving these problems. UK fishing vessels have identified pinger deployment and safety issues during fishing operations and therefore the UK Government is striving to identify pingers that are safe for fisher to use and effective at deterring cetaceans through focused research on the issue.

The UK's research into acoustic deterrent devices is being carried out on behalf of Defra by the Sea Mammal Research Unit (SMRU). SMRU, in collaboration with SeaFish and the Fishing Industry are currently testing two versions of a more powerful, durable acoustic deterrent known as a Dolphin Dissuasive Device (DDD), looking at the effects these devices may have on the population distribution of harbour porpoises (as one of the key species of bycatch concern). Initial results on the efficacy of these pingers are promising, with a significant reduction in porpoise bycatch associated with use of DDDs on gillnets and also very low bycatch rates of dolphins in trawls when DDDs have been used.

Defra is providing SMRU with additional funding for these trials to expand the scope of this work. We hope that this expansion will provide the project with the necessary data to be confident about the efficacy and practicality of use of the pingers.

We hope that in the next year we will be able to make an informed decision on the safety and effectiveness of these new devices, and so make a final decision on whether to implement and enforce the use of these DDD pingers across the whole of the UK fleet segment that is mandated to use them under Regulation 812.

1.3 Other relevant information, including bycatch information from opportunistic sources.

BELGIUM

In the framework of the WAKO II project (see above), a small number of bycatch cases of porpoises was reported by fishermen.

DENMARK

none

FINLAND

Permanent contacts between Ministries and stakeholders, especially fisheries organizations, to facilitate among others thing, awareness of harbour porpoise

FRANCE

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

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

The table below brings the2008 bycatch estimates available for pelagic trawl fisheries and set nets observed under the Reg 812/2004 (national report delivered in 2008;

Species	Estimated number of by-caught animals	Area (ICES area or more detailed)	Notes (type of fishery, effort, seasonal variations, etc.)
Phocoena phocoena	350	VIIIa,b	Set net (all size vessels) (all the year)
Stenella coeruleolba	50	VIIIa,b	Set net (all size vessels) (all the year)
Stenella coeruleoalba	0	VII&VIII	pelagic trawling (summer)
Delphinus delphis	100	VIIIa,b	Set net (all size vessels) (all the year)
Delphinus delphis	300	VII&VIII	pelagic trawling (winter mainlyr)
Tursiops truncatus	0	VII&VIII	pelagic trawling (summer)
Globicephala melas	(90)	VII&VIII	pelagic trawling (summer)

( ) indicates an estimate raised from only one incident with a high extrapolation factor.

An increase of common dolphin bycatch has been observed in august 2009 in some sampled trips of the tuna pelagic trawling. Difficulties to find tuna may have increase some risk of bycatch.

GERMANY

None

LITHUANIA
None
NETHERLANDS
Report EU regulation 812/2004: Couperus, A.S. 2009. Annual Report of the Netherlands to the European Commission on the implementation of Council Regulation 812/2004 on cetacean bycatch. *IJmuiden: IMARES, (CVO report 09.006)*
POLAND
The Hel Marine Station of the University of Gdańsk carries up-to –date information on cases of bycatch and the discovery of dead porpoises on the coast of the Polish EEZ on its website: www.morswin.pl In the framework of “Long-term Programme for Collecting Fisheries Data” conducted by the Sea Fisheries Institute in Gdynia, neither incidental bycatch was recorded nor harbour porpoises were observed in 2009 (similarly to previous years). The programme does not include methodologically standardized observations by tourists, sailors or anglers. Sea Fisheries Institute (MIR) in Gdynia is conducting the “Monitoring Incidental Catch of Cetaceans” Scheme at the commission of the Ministry of Agriculture and Rural Development. It does not publish reports of its activities online. They are, however, transmitted to the Ministry and to the ICES Study Group for Bycatch of Protection Species The last material published by a sitting of this specialist forum was the report on 2008. On 9 March 2009, in order to fulfill the commitments of EC regulation 812/2004 the Ministry of Agriculture and Rural Development announced an open tender for preparing and conducting the Monitoring of Incidental Catch of Cetaceans Scheme as well as for preparing a report on achievements of this programme for 2009. The Sea Fisheries Institute was once again chosen to fulfil the above tasks. The report’s conclusion indicate that using the described In EC Regulation 812/2004 methodology it is difficult to obtain representative data. The report states that the data is no more representative using information from the National Programme of Fisheries Data Collection, since only about 100 days of fishing annually meet the appropriate criteria, and these are mostly data from cutters using pelagic trawls. The report emphasises that since the beginning of the Monitoring Incidental Catch of Cetaceans Scheme (in 2006), regardless of the time, location, and type of fishing equipment used, no incidental catch of any porpoise has been confirmed, and drawing conclusions from information coming from a variety of assemblies and discussion fora (European Commission, ICES,HELCOM), in the Sea Fisheries Institute believes that continuing the Monitoring Incidental Catch of Cetaceans Scheme makes sense chiefly with respect to cutters fishing with set gear, as it is they who are considered to be causing the greatest morality among mammals and birds in the Baltic Sea. Furthermore, referring to results of the 150 days of monitoring performer on fishing using set gear within the Scheme from 2008 and 2009, it states that at depths over 20 m there have been no records of bycatch of any mammals or birds. Report from Monitoring Incidental Catch of Cetaceans Scheme in 2009 I available on Minstry’s of Agriculture and Rural Development website: Due to lack of full information on quantity of incidental catch of harbour porpoises before launching the Monitoring Incidental Catch of Cetaceans Scheme, that programme was realized in the years 2006-2008 as a pilot programme.

Sea Fisheries Institute (MIR) in Gdynia is conducting the "Monitoring Incidental Catch of Cetaceans" Scheme at the commission of the Ministry of Agriculture and Rural Development. It does not publish reports of its activities online. They are, however, transmitted to the Ministry and to the ICES Study Group for Bycatch of Protection Species

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SWEDEN
None
UNITED KINGDOM
None

In addition, please attach or provide link to your country's Report under EC Regulation 812/2004.

BELGIUM
None
DENMARK
http://www.aqua.dtu.dk/English/Publications/publication_database

FINLAND
None
FRANCE
http://www.ifremer.fr/docelec/notice/2008/notice4506.htm
GERMANY
None
LITHUANIA
None
NETHERLANDS
None
POLAND
http://www.minrol.gov.pl/index.php?/eng/content/view/full/1469 http://www.minrol.gov.pl/index.php?/eng/content/view/full/1469
SWEDEN
None
UNITED KINGDOM
http://www.defra.gov.uk/foodfarm/fisheries/protect/cetaceans.htm

2 REDUCTION OF DISTURBANCE

2.1 Anthropogenic Noise

BELGIUM
In the framework of the construction and operation of offshore windfarms in Belgian waters, impact studies were performed, amongst others to try to assess the impact on marine mammals. Preliminary studies, describing predominantly the methodology on noise monitoring and marine mammal monitoring, including setting the baseline, were published in: Degraer, S. & Brabant, R., 2009. Offshore windfarms in the Belgian part of the North Sea: State of the art after two years of environmental monitoring. Royal Belgian Institute of Natural Sciences, Department MUMM, 287p., 8 annexes. Chapter 3: Haelters, J., Norro, A. & Jacques, T.G., 2009. Underwater noise emission during the Phase I construction of the C-Power windfarm and baseline for the Belwind wind farm. Chapter 10: p. 237-266: Haelters, J., 2009. Monitoring of marine mammals in the framework of the construction and exploitation of offshore windfarms in Belgian marine waters. In June 2009 the Minister responsible for energy has granted a fourth domain permit for the installation of windmills in Belgian waters. The group RENTEL had introduced a request for a domain permit for a park of 288 megawatt. In October 2009 the Minister responsible for energy has granted a fifth domain permit for the

installation of windmills in Belgian waters. The group NORTHER had introduced a request for a domain permit for a park of 300 to 450 megawatt. The environmental permit procedure, subject to the decision of the Minister responsible for the North Sea, will start in 2010.

In February 2010 the Minister responsible for energy has changed the domain permit for the installation of windmills in Belgian waters for the group C-Power. Their new permit foresees a park of 216-318 megawatt and piling of monopiles instead of gravity based foundations.

DENMARK

BaltSeaPlan. An international project funded by the EU Interreg programme conducted in 2009-2011. One part of a work package, lead by NERI, includes studies of the effect of shipping and fast ferries on behaviour and distribution of harbour porpoises, studied by means of passive acoustic data loggers (T-PODs). Data collection will finish in 2009, results are pending analysis in 2010-2011.

Sprogø Offshore Wind Farm. A monitoring project based on passive acoustic monitors (T-PODs) was conducted during construction of a small wind farm (7 turbines) in the Great Belt. Comparison with baseline data collected in 2008 indicated limited impact of construction activities. Monitoring during operation will continue in 2010. A new publication on disturbances of porpoises:

Tougaard, J, OD Henriksen, LA Miller. Underwater noise from three types of offshore wind turbines: Estimation of impact zones for porpoises and seals. Journal of the Acoustical Society of America 125(6):3766-3773, 2009. Information on levels of disturbance (e.g. seismic surveys, new high-speed ferry routes, studies about acoustic impacts on cetaceans, etc.)

A revised set of guidelines for conduction of seismic surveys in Greenlandic waters was published in 2009 by the National Environmental Research Institute, NERI.

NERI participated in producing the background report (published by the International Councli of the Exploration of the Seas, ICES) on effects on energy (e.g. noise) on marine mammals in European waters in relation to the Marine Strategy Directive.

FINLAND

None

FRANCE

A study (bibliography, part of a post-doc work) is currently under way for refining the (sonar/seismics) risk threshold definition, in terms of parameters (species, frequencies, signals). Models for predicting the radiated level of sonar and seismic systems are being improved.

The pinger (CETASAVER) directional pinger is experimented on trawls is now commercialized.

A new acoustic deterrent device prototype using wideband signals at moderate levels with random frequency content and devoted to seismic surveys has been developed by Ifremer and installed for tests on an oceanographic vessel. Limited trials have been conducted, with significant results on common dolphins.

IFREMER now applies on his seismic surveys mitigation measures, based on the classical international recommendations (preliminary studies for risk evaluation, MMOs onboard, amplitude ramp-up for airgun arrays); the modelling for risk evaluation has been improved. The development and installation of an experimental PAM system on oceanographic vessels has been achieved (based on a three-hydrophone array, a dedicated receiving chain, and post-processing by freeware *PamGuard*), and put to use on two cruises; the practical

applicability of PAM in complement of the current mitigation measures is being studied.

GERMANY

Following the instructions for the German Navy on the protection of marine mammals and maritime habitats that were enacted in September 2007, marine mammal sightings are collected continuously by the German fleet and recorded in a data base to improve knowledge about the distribution and habitat use of abundant species. This information is taking into account for the planning of the use of sonar systems during trials.

To reduce the risk for marine mammals during explosions (disposal of ammunition in the Baltic Sea), the effect of an air bubble curtain for the attenuation of shock waves was examined. [Velte, Federal Ministry of Defence]

Together, three NGOs (GSM, GRD and NABU) cooperated with the Schleswig-Holstein Ministry of the Interior regarding detonations of WW II mines in Kiel Bight. Originally, their public awareness campaign initiated a bubble curtain study by the Ministry of the Interior using detonations of 350 kg mines. Noise measurements have been undertaken by the Navy's Technical Center for Ships and Naval Weapons (WTD 71/FWG). [Koschinski]

Spatial and temporal responses of harbour porpoises to pile-driving were investigated during the construction of two large wind farms in the North Sea using passive acoustic monitoring (T-PODs). One wind farm consisting of 91 mono-piles is located in the Danish North Sea, approximately 30km west of Esbjerg in water depths of 15m. Construction took place from May to October 2008. The other wind farm is located in the German North Sea, 90km north of the island Borkum in water depths of 30m. This wind farm consists of six tripod and six jacket founded turbines. Construction lasted from April to August 2009. In both areas a clear negative effect of the pile-driving procedure on the presence of harbour porpoises could be proven with a clear gradient along distance to the pile-driving location. At the Danish site, porpoise activity and possibly density was reduced near the construction site over the entire five months period that pile driving occurred. [Diederichs, Brandt et al., BioConsult SH]

In order to avoid any physical damage in porpoises and seals the use of seal scarers during offshore windfarm construction is mandatory in German waters. However, little information exists as to how far deterring effects of seal scarers on harbour porpoises reach and existing knowledge is ambiguous. Spatial and temporal effect of a seal scarer (Lofitech) on the acoustic activity of harbour porpoises were investigated. [Brandt, Diederichs et al., BioConsult SH]

Offshore wind farms: A research project funded by the Federal Agency for Shipping and Hydrography (BSH) has been continued to investigate effects of the construction in the first German Offshore test-field for windfarms "Alpha Ventus" close to Borkum Reef, Germany. Visual surveys by airplane and ship, as well as acoustic surveys with towed hydrophone and stationary acoustic monitoring using C-PODS are carried out.

Pile driving: A research project aiming at the development and testing of an efficient, cheap and easy-to-use air bubble curtain has been started. The system shall reduce the noise emissions from impact pile driving during the installation of monopiles in offshore areas. Funding is provided by the EU and the state of Schleswig-Holstein.

TTS in harbour porpoises: A research project has been started to verify the TTS level for impulsive noise (airgun signals) measured in a harbour porpoise (Lucke et al., 2009). Measurements will be conducted on a captive as well as on free-ranging animals. [Siebert, Forschungs- und Technologiezentrum Westkueste]

LITHUANIA

No studies on anthropogenic noise have been taken.

NETHERLANDS

In an acoustic study by Au et al. (2009) the acoustic backscatter from Atlantic cod (*Gadus morhua*), gray mullet (*Chelon labrosus*), pollack, (*Pollachius pollachius*), and sea bass (*Dicentrarchus labrax*) was measured using simulated biosonar signals of the Atlantic bottlenose dolphin and harbor porpoise. The overall results suggest that there are sufficient acoustic cues available to discriminate between the four species of fish based on the echoes received, independent of aspect angle.

In another study by Kastelein et al. (2009) a psychoacoustic behavioral technique was used to determine the critical ratios (CRs) of two harbor porpoises for tonal signals with frequencies between 0.315 and 150 kHz, in random Gaussian white noise. Generally harbor porpoises can detect tonal signals in Gaussian white noise slightly better than most odontocetes tested so far. By combining the mean CRs found in the present study with the spectrum level of the background noise levels at sea, the basic audiogram, and the directivity index, the detection threshold levels of harbor porpoises for tonal signals in various sea states can be calculated.

A number of studies on underwater sound was conducted by TNO in 2008 and 2009. This included investigations of anthropogenic (e.g. associated with piling activities of wind farms) and natural sound sources (de Jong & Ainslie 2008; de Jong et al. 2009; Dreschler et al. 2009; Ainslie 2008; de Jong & Ainslie 2008). TNO also organized a symposium on underwater sound and biology on March 17th 2009 in Den Haag together with NWO (Netherlands Organisation for Scientific Research) financed by a number of Dutch ministries (V&W, LNV, Defensie).

The 3S group currently involving four main partners (FFI, TNO, SMRU and WHOI) conducted in May-June 2009 a research trial in Norwegian waters to investigate behavioral reactions of killer whales, pilot whales and sperm whales to Low Frequency Active Sonar (LFAS) and Mid Frequency Active Sonar (MFAS) signals, in order to establish safety limits for sonar operations (Kvadsheim et al. 2009).

References:

Au, W.W.L., Branstetter, B.K., Benoit-Bird, K.J., and Kastelein, R.A. (2009). “Acoustic basis for fish prey discrimination by echolocating dolphins and porpoises,” J. Acoust. Soc. Am. 126, 460-467.

Ainslie, M.A., C A F de Jong, H S Dol, G Blacquière, C Marasini, Assessment of natural and anthropogenic sound sources and acoustic propagation in the North Sea, TNO report TNO-DV 2009 A085, February 2009.

de Jong, C.A.F & M A Ainslie, Underwater radiated noise due to the piling activities for the Q7 Offshore Wind Park, ECUA 2008.

de Jong, C.A.F. & M A Ainslie, Underwater sound due to the piling activities for the Q7 Off-shore wind park, TNO report MON-RPT-033-DTS-2007-03388, March 2008.

de Jong, C.A.F., G Blacquière, M A Ainslie, Measuring Underwater Sound: towards measurement standards and noise descriptors, TNO report TNO-DV 2009 C613, December 2009.

Dreschler, J., M A Ainslie, W H M Groen, Measurements of underwater background noise Maasvlakte 2, TNO report TNO-DV 2009 Cnnn, draft in preparation, December 2008.

Kastelein, R. A., Wensveen, P. J., Hoek, L., Au, W. W. L., Terhune, J. M., de Jong, C. A. F. (2009). “Critical ratios in harbor porpoises (*Phocoena phocoena*) for tonal signals between 0.315 and 150 kHz in random Gaussian white noise”, J. Acoust. Soc. Am. 126, 1588-1597.

Kvadsheim, P., Lam, F-P, Miller, P., Alves, A.C., Antunes, R., Bocconcelli, A. van Ijsselmuide, S., Kleivane, L., Olivierse, M. and Visser, F. 2009. Cetaceans and naval sonar – the 3S-2009 cruise report. Available at: http://rapporter.ffi.no/rapporter/2009/01140.pdf

POLAND

There has been no research on the occurrence of underwater noise in the Polish zone of the Baltic Sea. Furthermore, no research attempt have been made on the effect of acoustic disturbance on the cetaceans.

On the other hand, as a result of an operation on 19 th February 2009 to destroy Second World War German depth charges on the wreck of a sunken ship in the Hel region, after an application from the Ministry of Environment with substantive support from the Hel Marine Station and within the technical options available, the Navy carried out appropriate measures to secure against dangers to any Baltic cetaceans which could potentially be in the area. Of great importance is the fact that this region is among the network of areas protected by the Nature 2000 system and is , among other things, designed to protect the porpoises.

The disposal concerned weapons on a ship of the Kriegs-Fisch-Kutter class, submarine hunter version. It lay on the floor of the gulf of Gdańsk at the depth of 32 m about 1 km south of the port at Hel. Its deck held DM-11 depth charges with an explosive charge of 100 kg each (500 in total). They carried detonators, which made carrying them to the surface and disposing of them elsewhere impossible. The operation was co-ordinated by the Polish Navy's Maritime Operations Centre (COM Mar.Woj). The acoustic explosive power for the cetaceans was calculated at about 30 km.

Fig. 3 The detonation location and the marked safety zone

One preventive measure was the scaring of porpoises from the Puck Bay region just prior to the moment of detonation. The operation was conducted by the ship ORP "Mamry" which sailed a changing course from the centre of the bay using acoustic signals from its underwater station to scare off any potential porpoises in the area.

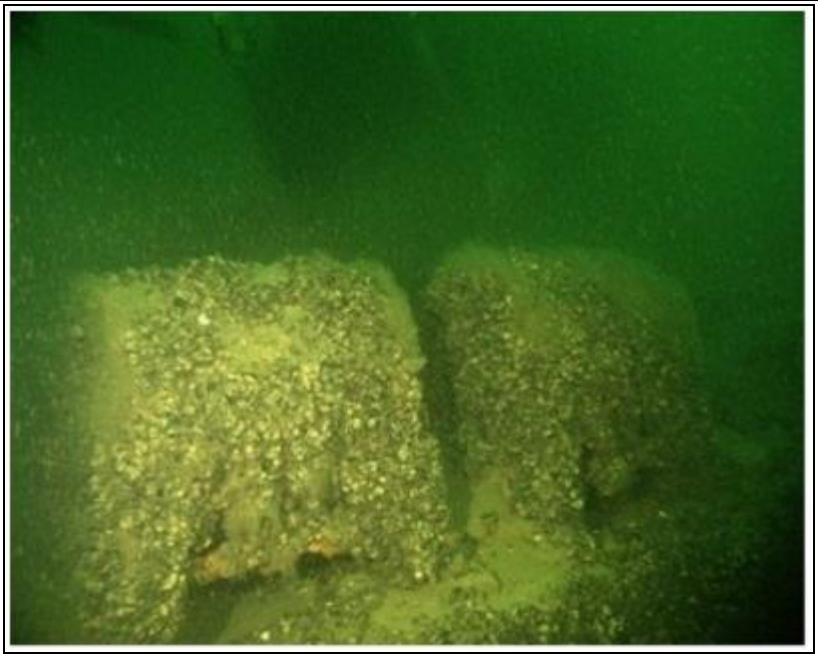


Fig 4. Mines placed on the deck of the sunken warship – the target for destruction

The final phase of the operation began with the confirmation that the region was secure. Scuba diver sappers went under the surface and attached charges to the depth charges which would ensure that they detonated simultaneously. The planned detonation was carried out at 14:30.

Fig. 5 An image of the explosion on the sea's surface (photo: J. Abramowicz)

The scale of the explosion was smaller than originally expected. Specialists hypothesized they some of the TNT which had been underwater for over 60 years could have decomposed and lost its original power. Post-operation reconnaissance showed that natural losses at the explosion's location were not observed.

SWEDEN

In 2008 a monitoring study of noise from leisure boats was carried out. Two sites, known to have intensive leisure boat traffic, were visited for one week each: Sandhamn in the outer Stockholm archipelago and Västervik, a coastal town some 200 km south of Stockholm

A hydrophone test rig was custom made for the project. It turned out to work fine, after some adjustment of the anchoring system. The data acquisition system also worked precisely as intended, and proved to be very reliable.

The first site, at the ship lane leading to Sandhamn, was visited in week 29, 2008. The data acquisition resulted in two different data sets: 1) remote recordings of boats passing in the ship lane, with photographs of each boat to reveal type and approximate speed, and 2) recordings of boats passing through the hydrophone gate, with detailed info on boat mark, engine power, propeller type and average cruising speed. The latter allowed for source level to be calculated. Also the use and type of echo sounder was asked for.

A total of 176 boats were recorded on the Sandhamn site, of which 8 ran through the gate. The vessels run through the gate ranged from medium sized cabin boats to jetskis. All but 2 of the 176 were photographed. One of the boats running through the gate failed to provide info on its specifications and speed. For the remotely recorded boats, the estimated distance to the hydrophone gate ranged from 50 to 300m.

On the second site, visited in week 31, 2008, the gate was deployed in between two ship lanes leading to the Västervik town. Like at Sandhamn, two different data sets were acquired, remote recordings of boats passing by in the two ship routes, and recordings of boats passing through the gate.

A total of 179 boats were recorded on the Västervik site, of which 10 run through the gate. One of the latter was considered too big to pass through the gate; instead it was run parallel to the gate, as close as possible. For the remotely recorded boats the distance to the gate varied from 50m to 300m.

So far the acoustic data has not been analyzed. Although the basic analysis of software has been developed, an automated routine is being developed to facilitate the processing of this large data set. Also the source tracing algorithms are still to be refined and tested in order to make the source level calculations possible. These algorithms include autocorrelation in order to calculate time of arrival differences between the five hydrophones in the gate. This is more complicated to do with continuous noise, compared to e.g. sonar clicks or frequency modulated dolphin whistles. So far the analysis indicates that the frequency spectrum of the noise extends to above 100 kHz. The source levels, as expected, were the highest from the outboard and semi-outboard boats, with fast revolution propellers. Also the jetskis were very noisy. An unexpected finding was that a large proportion of the boats had continuously running echosoundes, many of which transmitted at frequencies audible to marine mammals.

UNITED KINGDOM

Following ASCOBANS request for Parties to introduce mitigation measures with respect to seismic surveys, the UK has presented data on 2D and 3D seismic survey activity in the UK maritime area for periods since 1997 at a number of ASCOBANS Advisory Committees and Meetings of the Parties over the past five years. The most recent update from the Department of Energy and Climate Change (DECC) is in the 'Information on Seismic Survey Activities by the United Kingdom 2008-2009' report. This report is available on request.

DECC recently prepared a report, jointly with the University of Aberdeen and Lighthouse Field Station, to provide the results of acoustic propagation modelling and prediction of underwater noise from seismic survey operations proposed for the Moray Firth region during 2010 and/or 2010. The report summarises operational and site specific data for the region

based on the modelling of underwater noise propagating through the middle of the survey region. Additional modelling has also been undertaken to investigate the underwater noise propagating into shallower coastal waters inhabited by the bottlenose dolphin and porpoise.

Defra and the UK Ministry of Defence (MoD) have set up a Military Underwater Sound Stakeholder forum. This gives the opportunity for industry, non-government organizations and other interested stakeholders to engage directly with government to raise their concerns. Most recently, these discussions have helped lead to the development of a real-time alert procedure for naval training operations. This enables local information on unusual cetacean sightings, e.g. the presence of a species group closer to shore than is usual, to be incorporated into the training schedule and for operations to be relocated if necessary.

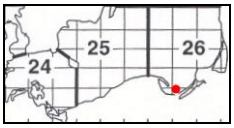
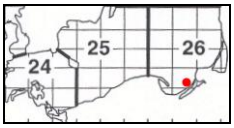
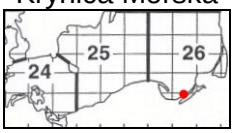
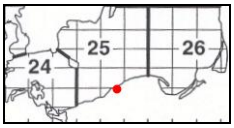
2.2 Ship Strike Incidents

Date	Species	Type of injury	Fatal injury (Yes / No)	Type of vessel (length, tonnage and speed)	Location (coordinates)	More information: (Name / Email)
BELGIUM						
<22 Sep 2009	*Balaenoptera physalus*	Bone fracturesdamage to internal organs, external lesions	Yes	Refrigerated cargo ship *Summer Flower,* 169m, 12659 GT, cruising speed 22.5 kts	Unknown	Jan Haelters
The common fin whale, an adult female of 19.9m, entered the port of Antwerp on the bulb of the cargo vessel Summer Flower, on a journey from Colombia to Antwerp. The state of preservation of the carcass indicated that the animal had died 2-3 days before, so presumably off the coast of Portugal or Spain. The animal had been in a good physical condition before death. Its weight was estimated at 40 t. The incident was reported in detail to the IWC.						
DENMARK						
None						
FINLAND						
None						
FRANCE						
None						
GERMANY						
None						

LITHUANIA						
None						
NETHERLANDS						
None						
POLAND						
None						
SWEDEN						
1 April 2009	Harbour porpoise	Probably killed by a boat propeller	yes	?	Lat N58 56, 124 Long E11 8, 547	Anna.roos@nrm.se
UNITED KINGDOM						
None						

2.3 Major Incidents Affecting Significant Numbers* of Cetaceans

Date	Location	Type of incident	Further Information
BELGIUM			
None			
DENMARK			
None			
FINLAND			
None			
FRANCE			
None			
GERMANY			
None			
LITHUANIA			
None			
NETHERLANDS			
None			

POLAND			
17-20. 02.2009	Gulf of Gdańsk 	Bycatch (GNS)	Harbour porpoise (*Phocoena phocoena*)
25.04. 2009	Gulf of Gdańsk 	Bycatch (GNS)	Harbour porpoise (*Phocoena phocoena*)
21.07. 2009	Gulf of Gdańsk – Krynica Morska 	Stranded	Harbour porpoise (*Phocoena phocoena*)
05.10. 2009	Middle Coast – Ustka 	Stranded	Harbour porpoise (*Phocoena phocoena*)
SWEDEN			
None			
UNITED KINGDOM			
22/07/09	Scotven Bay, North Uist, Scotland	Mass stranding	Five white beaked dolphins (*Lagenorhynchus albirostris*) live stranded and were subsequently refloated by local volunteers. - further details available on request from CSIP
Various (2009)	Various	Mass stranding	Five other live stranding events involving two animals in each event (variety of species) in the UK during 2009. Several outcomes- further details available on request from CSIP

**Two or more animals*

2.4 Pollution and Hazardous Substances

BELGIUM
None

DENMARK
Dietz, R, Outridge P.M., Hobson K.A. 2009. Anthropogenic contribution to mercury levels in presentday Arctic animals – A review. Science of the Total Environment 407 (2009) 6120–6131.
FINLAND
None
FRANCE
Transfer and bioaccumulation of heavy metals (mainly mercury and cadmium) in cetaceans (LIENs/ULR) Work in partnership with the Marine Protected Area of the Iroise Sea, the University of Brest and Océanopolis and pollutants (TBT, lindane, fluorenten, indenopyren and BCB 153 has started)
GERMANY
None
LITHUANIA
None
NETHERLANDS
None
POLAND
The conduct of activities to reduce pollution are the consequence of the Convention on the Protection of the Marine Environment In the Baltic Sea Area (1992) signed by Poland and are regularly reported to the appropriate groups of the Baltic Marine Environment Protection Commission (HELCOM).
SWEDEN
The Museum of Natural History in Stockholm have initiated a 3-year study on several contaminants in harbour porpoises from Swedish waters. The study is funded by the SEPA. The first results will be available within a year.
UNITED KINGDOM
In 2009, analyses of long-term temporal trends in blubber concentrations of chlorobiphenyls (PCBs) (n=440; 1991-2005) and brominated diphenyl ethers (PBDEs) (n=415; 1992-2008) in UK-stranded harbour porpoises were conducted (Law et al. 2010; Law et al. *in review*). A non-parametric statistical method was used and potential confounding factors (area, season, by-caught or stranded, age class, sex, blubber thickness and lipid content) were investigated and found not to confound any of the trends identified. For PCBs, a standard suite of 25 CB congeners was determined throughout the study period and show a decline that is much slower than for organochlorine pesticides (e.g. DDTs). It also shows regional differences across the UK (e.g. lowest levels in Scotland). The reason for the slow decline in PCBs is likely due to both continuing diffuse inputs from e.g. PCB-containing materials in storage and in landfills where these were disposed of prior to the more stringent requirements for such sites being enacted, and to the substantial reservoir of PCBs already in the marine environment. Further efforts to limit or eliminate PCB discharges to the marine environment

are still needed. Statistically robust case-control studies show strong evidence for PCB-induced infectious disease mortality in UK-stranded harbour porpoises (at mean blubber PCB concentrations around 20-25mg/kg lipid weight) (Jepson et al., 2005; Hall et al 2006). Even greater concerns exist in other species where the mean blubber PCB concentration in UK-stranded bottlenose dolphins is 100mg/kg lipid weight (n=15) (Jepson et al 2008) and 225mg/kg (n=5) in killer whales for the same period 1992-2005 (CEFAS data).

For BDEs, nine congeners were: BDE28, BDE47, BDE66, BDE85, BDE99, BDE100, BDE138, BDE153 and BDE154. The maximum ΣBDE concentration observed was 15.7 $mgkg^{-1}$ lipid wt in an animal which died in 1993. The median concentrations peaked around 1998, and have reduced by between 55% and 76% to 2008. The BDE congeners found in UK marine mammals arise primarily from the penta-mix PBDE product, which was banned in the EU in 2004.

A study was conducted by Sinead Murphy while based at the Sea Mammal Research Unit examining the effects of contaminants on the reproductive status of porpoises and common dolphins in a study funded by ASCOBANS.

Jepson, P.D., Bennett, P.M., Deaville, R., Allchin, C.R., Baker, J.R., Law, R.J. (2005) Relationships between polychlorinated biphenyls and health status in harbor porpoises (*Phocoena phocoena*) stranded in the United Kingdom. *Environmental Toxicology and Chemistry* 24, 238-248.

Jepson, P.D., Tregenza, N. and Simmonds, M.P. (2008) Disappearing bottlenose dolphins (*Tursiops truncatus*) – is there a link to chemical pollution? (Scientific Committee of the *International Whaling Commission* 2008)

Law, R.J., Bersuder, P., Barry, J., Deaville, R., Reid, R.J., Jepson, P.D. (2010) Chlorobiphenyls in the blubber of harbour porpoises (*Phocoena phocoena*) from the UK: levels and trends 1991-2005. *Marine Pollution Bulletin* 60, 470-473.

Law, R.J., Barry, J., Bersuder, P., Barber, J.L., Deaville, R., Reid, R.J., Jepson, P.D. Levels and trends of BDEs in blubber of harbour porpoises (*Phocoena phocoena*) from the UK, 1992-2008. (in review)

2.5 Other Forms of Disturbance

BELGIUM
A case against Belgium by the European Commission (case 2003/2081) for not complying with article 12, 1a, of Directive 92/43 (bycatch of porpoises in recreational activities), was "*closed (…) following the adoption of new Flemish legislation strengthening the protection of species such as porpoise*" (25 June 2009). In this new Decree, that came into force on 1 September 2009, no concrete measures or basis for measures regarding recreational beach fisheries are foreseen, and no specific protection measures for porpoises are taken up. Also no new measures for this kind of recreation were taken by the authorities competent for marine fisheries
DENMARK
None
FINLAND
None

FRANCE
None
GERMANY
None
LITHUANIA
There is no information.
NETHERLANDS
IMARES finalized a study on the possible impact of an operating wind farm off the North Sea coast of The Netherlands (close to Egmond at Sea). The outcome has provided reference data on occurrence and distribution of harbour porpoises in the wind farm area and two reference areas before and after construction. Both boat surveys and the deployment of stationary hydrophones (T-PODs) have been used to acquire the necessary baseline data. The results of the study indicate that harbour porpoises use the area of the wind farm after construction. The data will be published in 2010 when the final report of the study has been completed.
POLAND
The use of speedboats and jet skis s increasing in the Polish zone of the coast. The growth of recreational services in the form of fast hard hull dinghy cruises which offer dozens of cruises daily at several locations along the Polish coast is particularly evident. Research on the development of scale of this phenomenon has not yet been carried out, nor have any cases of direct collision with cetaceans been reported.

Fig.6. An example of the recreational use of hard hull dinghies In the Hel region (Puck Bay).

There have been reports of infringements of legal regulations (Regulation No.55/06 of the Voivode of the Pomerania Province of 15th May 2006 on the Coastal Landscape Park) which limit the use of speedboats on the protected bodies of water, i.e. the Coastal Landscape Park in the internal section of the Bay of Puck, which are part of the Nature 2000 system and BSPA HELCOM set up to protect the porpoises, among other things.

SWEDEN
None

UNITED KINGDOM
Between 1992 and 2004, incidences of acute and chronic gas embolic lesions have been identified in a number of species: short-beaked common dolphins (5 cases), Risso's dolphins (4 cases), harbour porpoises (2 cases) a Sowerby's beaked whale and a Blainville's beaked whale in UK waters (Jepson et al., 2005b; Jepson, 2006). Subsequent to these, no additional observations of gas emboli were observed in animals stranding in UK waters apart from a single case in a harbour porpoise from Northern Ireland in 2007 (Tony Patterson, pers com) and a Risso's dolphin in Wales in 2009.

3 MARINE PROTECTED AREAS FOR SMALL CETACEANS

BELGIUM
A study was done concerning potential marine protected areas (MPAs) in the implementation of the Habitats Directive in Belgian waters. It concluded that, while seasonally relevant numbers/densities of harbour porpoises occur in Belgian waters, it was not opportune to establish MPAs specifically for porpoises, given their high mobility and the fact that it was not possible to indicate specifically important areas on the basis of the data available. The results of the study were subject to public consultation from 25 January until 28 February 2010. Degraer, S., U. Braeckman, J. Haelters, K. Hostens, T. Jacques, F. Kerckhof, B. Merckx, M. Rabaut, E. Stienen, G. Van Hoey, V. Van Lancker & M. Vincx (2009). Studie betreffende het opstellen van een lijst met potentiële Habitatrichtlijn gebieden in het Belgische deel van de Noordzee. Eindrapport in opdracht van de Federale Overheidsdienst Volksgezondheid, Veiligheid van de Voedselketen en Leefmilieu, Directoraat-generaal Leefmilieu. Brussel, België. 93 pp. (in Dutch).
DENMARK
In 2009 17 NATURA2000 sites have been established in the Danish waters based on satellite taggings, acoustic surveys and aerial surveys.
FINLAND
None
FRANCE
Between October 2008 and February 2010, 95 marine Natura 2000 sites have been designated by France. Among all existing Natura 2000 sites in the ASCOBANS area, Bottlenose dolphin is present in 39 and Harbour porpoise in 37, both on the Channel and Atlantic coast. Council Management Plan of the Marine Protected Area in Iroise Sea (West Brittany) in progress. National Agency for the Marine Protected Areas (Brest): work has been started for the creation of others MPA, through a national strategy
GERMANY
In June 2009, UNESCO declared the Wadden Sea as World Heritage site. Knowledge on

distribution, abundance and habitat use of harbour porpoises in the Wadden Sea area is restricted to the offshore areas, especially west of the islands Sylt and Amrum. Due to its importance as a breeding area, it was designated as a 'whale sanctuary' in 1999. However, little is known about harbour porpoises in the water of the Inner Wadden Sea. The Inner Wadden Sea is characterised by a complex system of channels and streams alternates with exposed mudflats and sand banks. A four-month study on the occurrence of harbour porpoises was conducted within one tidal system in the Inner Wadden Sea area east of Sylt using static acoustic monitoring (SAM). Three C-PODs were deployed at different locations within a channel in the Lister basin since August 2009. All C-POD's regularly detected numerous harbour porpoise clicks and thus provided detailed information with a high temporal resolution on harbour porpoise presence in the tideways. This is the first evidence of regular harbour porpoises presence in tideways more than 20km away from the open sea. [Hoeschle, Brandt et al., BioConsult SH]

LITHUANIA

No protected areas for cetaceans are identified in Lithuania.

NETHERLANDS

A study started in 2006 to identify candidate Special Areas of Conservation (SACs) under the Habitats Directive and OSPAR in the Dutch sector of the North Sea. In the Dutch Continental Shelf and Coastal Waters 4 sites have been identified as marine areas: Doggersbank, Klaverbank and two parts of the coastal zone, Noordzeekustzone in the north and Vlakte van de Raan in the south. These areas have been notified to the EU commission as Special Areas of Conservation (SACs) under the European Habitats Directives and the two coastal areas are about to be designated by the Dutch minister. They will also be reported to the OSPAR Secretariat as MPA's according to the OSPAR Convention. These future SACs will also be designated for small cetaceans, but additional measures for their protection are unlikely. The conservation target will probably be formulated as follows: "Maintain the extent and quality of habitat in order to maintain the population".
http://www2.minlnv.nl/thema/groen/natuur/natura2000_2006/noordzee_4habitatrlg/Inspraak_aanmelding.htm
http://www.noordzeenatura2000.nl/index.php?option=com_docman&task=cat_view&gid=57&Itemid=89

POLAND

On 23-25 November a Nature 2000 biogeographical seminar took place In Sopot, Poland. As a result of the seminar, the representatives of the European Commission decided that the expansion of areas incl. PLH 220032 of the Puck Bay and the Hel Peninsula to protect the porpoises was essential in the Polish zone of the Baltic. Furthermore, it was decided to supplement and correct the evaluation of homes and species in the standard data forms in order to discover the presence of porpoises, among other species, in selected sections of Polish Baltic waters.

On 31 December 2009, the Minister of the Environment selected five areas protected for the needs of the HELCOM Baltic Sea Protected Area. There area areas dedicated to porpoise protection, among other things, in the Pomerania and the Puck Bays.

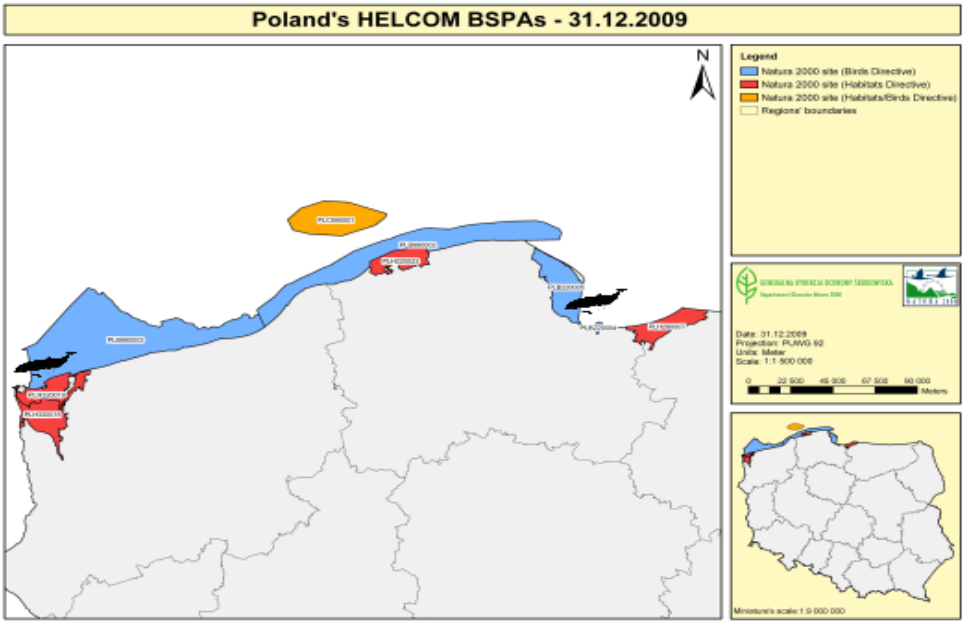


Fig. 7 Map of the Polish protected areas nominated by the Minister of the Environment to the HELCOM Baltic Sea Protected Areas.

SWEDEN

After the assessment by the EU Commission of the Natura 2000 network in the Baltic and Atlantic regions, SEPA has been commissioned to report to the government of possibilities to add harbour porpoise to the species list in some existing sites as well as considering designating new ones on the west coast of Sweden, pending the results of the survey in Skälderviken. At the moment there are three Natura 2000 sites with harbour porpoise. The sites are Stora Middelgrund, Vrångöskärgården and Koster-Väderöfjorden.

UNITED KINGDOM

One potential offshore SAC, the Wyville Thompson Ridge, identified for its habitat features, lists bottlenose dolphins. This site is likely to be submitted to the European Commission for consideration in October 2010 (see (http://www.jncc.gov.uk/page-4535).

Work is continuing in the UK to identify additional sites for harbour porpoise. A public consultation has recently been completed for three offshore sites which were identified for their habitat features, but also list harbour porpoises (see http://www.jncc.gov.uk/page-3995). These are North West Rockhall pSAC, Haisborough, Hammond and Winterton pSAC and Inner Dowsing, Race Bank and North Ridge pSAC. The Government has yet to decide whether to submit these pSACs to the European Commission in October 2010.

3.1 Sources of GIS data of the boundaries (and zoning, if applicable)

BELGIUM

None

DENMARK

None

FINLAND

None

FRANCE
Agence des aires marines protégées Président : Jérôme Bignon, député de la Somme Directeur : Olivier LAROUSSINIE Adresse du siège et contact : Agence des aires marines protégées 16 quai de la Douane 29229 Brest Cedex 2 standard : +33 (0)2 98 33 87 67 télécopie : +33 (0)2 98 33 87 77 Ministère de l'Écologie, de l'Énergie du Développement durable et de la Mer Grande Arche Tour Pascal A et B 92055 La Défense CEDEX Natura 2000 network : charlotte.de-pins@developpement-durable.gouv.fr Téléphone tél : + 33 (01) 40 81 21 22
GERMANY
http://www.bfn.de/habitatmare/de/schutzgebiete-uebersicht.php
LITHUANIA
None
NETHERLANDS
More information on the marine Natura2000 sites in the Netherlands can be obtained at: http://www.noordzeenatura2000.nl/
POLAND
Precise data on the borders of these areas is held by the General Directorate for Environmental Protection in Warsaw (www.gdos.gov.pl/en/kontakty). They are also represented in the website:http://natura2000.gdos.gov.pl/natura2000/en/jednostki.php
SWEDEN
None
UNITED KINGDOM
None

B. SURVEYS AND RESEARCH

4.1 Overview of Research on Abundance, Distribution and Population Structure

BELGIUM
See 2.1. An overview was made of strandings and sightings of porpoises in Belgium and the Netherlands, together with data on population structure of stranded animals, threats such as bycatch, and proposals for measures. The report was commissioned by the International Fund for Animal Welfare (IFAW) and can be consulted online. Reference: Haelters, J. & Camphuysen, K., 2009. The harbour porpoise in the southern North Sea: abundance, threats and research- & management proposals. Royal Belgian Institute of Natural Sciences (RBINS/MUMM) and the Royal Netherlands Institute for Sea Research (NIOZ); report commissioned by the International Fund for Animal Welfare (IFAW); 56 p. And a summary in: Bycatch Communication Network Newsletter Issue 13 Aug-Sept 2009.
DENMARK
The population structure of harbour porpoises based on genetics have been carried out in the Baltic region and is now published: Wiemann, A., Andersen, L.W., Berggren, P., Siebert, U., Benke, H., Teilmann, J., Lockyer, C., Pawliczka, I., Skora, K., Roos, A., Lyrholm, T., Paulus, K.B., Ketmaier, V. & Tiedemann, R. 2010. Mitochondrial Control Region and microsatellite analyses on harbour porpoise (*Phocoena phocoena*) unravel population differentiation in the Baltic Sea and adjacent waters. Conservation Genetics 11:195–211. Other new publications of interest: Eskesen, I.G., Teilmann, J., Geertsen, M.B., Desportes, G., Riget, F., Dietz, R., Larsen, F., Siebert, U. (2009). Stress level in wild harbour porpoises (*Phocoena phocoena*) during satellite tagging measured by respiration, heart rate and cortisol. Journal of the Marine Biological Association of the United Kingdom – JMBA 89(5): 885-892. Galatius A., Sonne, C., Kinze, K.K., Dietz, R. and Bech Jensen, J.E. 2009. Occurrence of the degenerative disease Spondylosis deformans in a museum sample of white-beaked dolphins (*Lagenorhynchus albirostris*) from Danish waters. J Wildlife Dis. 45(1): 19-28. Tougaard, J., Carstensen, J., Teilmann, J., Skov, H., Rasmussen, P. (2009). Pile driving zone of responsiveness extends beyond 20 km for harbor porpoises (*Phocoena phocoena*, (L.)), Journal of the Acoustical Society of America 126(1):11-14.
FINLAND
Finland will take part to SAMBAH (Static Acoustic Monitoring of the Baltic Sea Harbour porpoise) project. Project is partly funded from EU Life+ programme. In the project, 300 SAM units will be used over a two years period (2011-2012). 45 units will be deployed in Finnish waters. More info available on http://www.sambah.org.
FRANCE
Monitoring of the coastal group of bottlenose dolphins (Oceanopolis Brest in Iroise Sea), photo-identification, home range, population structure... Photo identification of bottlenose dolphins of the Bay of Mont Saint Michel and Cotentin (GECC, GMN, AL Lark) Boat surveys on cetaceans in the southern Bay of Biscay (GEFMA); relationship between cetacean populations and climate change (MNHN in the framework of a regional programme

on the marine environment).

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

Systematic boat survey of cetaceans in relation to oceanographic, planktonic and pelagic fish patterns in the Bay of Biscay (PELGAS Program, Ifremer, CRMM/ULR : PELGAS spring survey carried out yearly on the continental shelf of the bay of Biscay: Pelagic fish, plankton, physical parameters and top predators are recorded simultaneously IBTS Program, Ifremer, CRMM/ULR: IBTS winter survey carried out yearly on the english channel area: Pelagic fish, plankton, physical parameters and top predators are recorded simultaneously

EVOHE: Program Ifremer, CRMM/ULR: EVOHE fall scientific fishing sampling carried out yearly on the bay of Biscay with top predators recorded on line transect.

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

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

Cetacean distributions and relative abundances were surveyed over the shelf of the Bay of Biscay (May) and English Channel (January) by CRMM/ULR in order to determine relative abundances, preferential habitats and relationships with distribution of small pelagic fish as determined by simultaneous acoustic survey carried out by Ifremer/ Instituto Español de Oceanografía (IEO) research vessel Thalassa. This survey followed a standardized protocol in use since 2003 in Bay of Biscay area (PELGAS survey) and since 2007 in the English Channel (IBTS survey) and since 2009 in the bay of Biscay in fall. In 2007 and 2008, collaboration between CRMM/ULR and the Centro Oceanográfico de Vigo (IEO) allowed data on cetacean distribution to be collected by using standardized protocol and same research vessel during April and September pelagic fish survey in the south of the Bay of Biscay (PELACUS survey).

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

GERMANY

New data for a marine mammal data base (containing sightings, strandings, worldwide maps of occurrence and characteristics of 126 species) were integrated from freely available and provided sources. For the use within the German Fleet prototypes of identification tables of marine mammals were prepared, containing information on species characteristics, behaviour, abundance and distribution. [Velte, Federal Ministry of Defence]

A combined effort of the county of Wesermarsch and the Society for Dolphin Conservation Germany to detect harbour porpoises passing the river Weser by PODs is ongoing. See: http://www.delphinschutz.org/projekte/weser/index.htm [Czeck, National Park Administration Wadden Sea of Lower Saxony]

LITHUANIA

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

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

downloaded and batteries exchanged.

The T-PODs for harbour porpoise detection have been purchased and programmed, later on deployed to first survey site for survey. So far, within the year 2007/2009, no harbour porpoises were detected near deployment locations.

NETHERLANDS

IMARES conducted aerial surveys within a research project funded by LNV and RWS to cover part of the southern coastal Dutch waters to estimate abundance of harbour porpoises during different times of the year. The first aerial surveys using distance sampling methodology and were conducted in May 2008 and November 2008. In 2009 surveys were conducted in February to April, August and November and the results can be found in Scheidat & Verdaat (2009). Analyses of habitat use and abundance estimates are ongoing and will be expected to be published in 2010.

The NZG Marine Mammal Database is part of the Dutch Seabird Group (NZG) and was established by Kees Camphuysen. Its aim is to collect all sighting of marine mammals in and around The Netherlands. The main number of sightings come from two research programmes: seawatching and offshore seabird surveys. The first programme (NZG/CvZ) became established in 1972, offshore surveys started in the late 1980s. For 2009 the data entry is still ongoing. From 1 January to 9 March 225 sightings of harbour porpoises were registered (number of individuals was 733). The database can be accessed at: http://home.planet.nl/~camphuys/Cetacea.html.

The Rugvin Foundation is a volunteer-based organisation conducting cetacean surveys in the Southern North Sea and the Oosterschelde estuary. Monthly cetacean surveys are being conducted from the bridge of the Stena Line ferry between Hoek van Holland and Harwich. And next to that, in the Oosterschelde estuary, research is being carried out to estimate the minimum number of Harbour Porpoises and calves throughout the year (a minimum of 37 individuals were counted during the September 2009 survey) and to determine whether Harbour Porpoises pass the Storm Surge Barrier (using C-Pods).

Information on cetacean strandings are collated in a central database on the website of Naturalis (www.walvisstrandingen.nl).

References:

Scheidat, M. & H. Verdaat. 2009. Distribution and density of harbour porpoises in Dutch North Sea waters. IMARES report C125/09. Available upon request from meike.scheidat@wur.nl

POLAND

Regional research activity which provides information on the occurrence of harbour porpoises in the Polish Baltic zone included a project on the active protection of porpoises in the Puck Bay. It was however, limited exclusively to that area. Data from POD detectors located at the entrance to the bay confirmed the presence of porpoises here. This research will be continued for the next year. The report of its achievements will be presented In 2011.

Additional data are expected from a project carried out by the WWF-Poland and SMIOUG- „Support Restoration of Baltic Mammals".

Indirectly, information abort porpoise occurrence can be concluded from voluntary fishing reports on bycatch. In 2009 there were two reports which covered the southern part of the Gulf of Gdańsk.

A new project which has been designer to provide data on the distribution of porpoises in Polish maritime areas is the SAMBAH Project ("Static Acoustic Monitoring of the Baltic Sea Harbour Porpoise") subsidized by EU LIFE+. Two Polish research institutes – SMIOUG and

IMGW became its co-beneficiaries in 2009. It is planed to finish this project in 2014.

A map of the distribution of reports of bycaught, stranded, and observed porpoises In the Polish zone of the Baltic for the years 1990-2009 can be fund in: Pawliczka I. 2009. Czynna ochrona fok i morświnów w Polsce (*Active Protectionof Seals and Porpoises In Poland*). Pages: 241-260 in: B.Bobek, J.Mikoś i R.Wasilewski (eds) Gospodarka Łowiecka i Ochrona Dzikich Zwierząt na Pomorzu Gdańskim (*The Fishing Economy and Protection of Wild Animals on the Baltic Coast).* Polskie Towarzystwo Leśne, Regionalna Dyrekcja Lasów Państwowych w Gdańsku, Gdańsk 2009

SWEDEN

A Life Nature application for the SAMBAH project was approved and the Grant Agreement was signed in November 2009 by Kolmårdens Djurpark as the Coordinating Beneficiary. This project is running over 5 years (2010-2014), and aims at producing an estimate of the total abundance and distribution of harbour porpoises in the Baltic. Three of the countries around the Baltic (Finland, Poland and Denmark) are associated Beneficiaries, whereas the Baltic States will be subcontractors to Sweden. The project is based upon data from passive acoustic porpoise echolocation loggers, which will be kept in operation during 2011 and 2012. This data will be used as input to state of the art population density statistics, and subsequently allow for habitat modelling.

The abundance of harbour porpoise has been investigated in “Skälderviken”, a bay on the south western coast of Sweden. PCL:s Porpoise click loggers were being used. The fishing effort of gillnets in the same areas was surveyed and will be compared to the porpoise abundance. If the results show a high abundance of harbour porpoise, Sweden will consider designating an MPA for harbour porpoise in the area.

UNITED KINGDOM

One of the key requirements of Article 11 of the Habitats Directive is the development of a strategic monitoring and surveillance programme for cetaceans to provide an ability to undertake systematic assessments. Such a programme is currently under development by JNCC as part of the UK Marine Monitoring and Assessment Strategy (UKMMAS), through collaboration with the other Countryside Agencies and the Sea Mammal Research Unit (University of St Andrews). The programme will take a ‘natural’ population approach and JNCC are therefore discussing how to take an internationally coordinated approach with other Member States through ICES and ASCOBANS. As of this mechanisms are being developed that will enable as much of the cetacean surveillance undertaken in European waters by agencies, research bodies and the voluntary sector to be included and used in the conservation status assessments through JCP, a web-based portal for effort-related sightings data.

At the individual country level, surveying and monitoring has been undertaken in Welsh waters for various species including bottlenose dolphin, harbour porpoise, Risso’s dolphin and baleen whales.

In Scotland, a variety of projects are ongoing focusing on abundance, stock structure and diet of killer whales, distribution and habitat preferences of white beaked dolphins, and the distribution, abundance and population structure of bottlenose dolphins. In England, assessing distribution and abundance of white beaked dolphins has recently commenced off the Northumberland coast.

The Northern Ireland Environment Agency (NIEA) have implemented a systematic cetacean monitoring programme. Monthly shore-based effort watches are now conducted from 12 key sites using a standard monitoring methodology. This provides data from inshore waters to address local management issues and the potential identification of SACs in future years

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4.2 New Technological Developments

BELGIUM
None
DENMARK
None
FINLAND
None
FRANCE
None
GERMANY
None
LITHUANIA
None
NETHERLANDS
Within the mainframe of the project We@Sea a 12 channel acoustic cetacean detector was developed for permanent underwater use on the bow of FRV "Tridens". Main ambition of this development is to have a system, which supports the direction of visual observations and to

increase the signal to noise ratio. In this perspective the system benefits of the relatively low noise condition underneath the ship's bow. Cetacean echolocation signals are received through a ship-based forward-facing semi-circular 12-channel hydrophone array. The dome shell was designed to withstand slamming forces developed on the bow of FRV "Tridens" at a sailing speed of 17 knots according the classification of the American Bureau of Shipping High speed naval craft 2003. The system consists of conditioning and digitizing hardware. A software framework was developed to distinguish echo-location signals of cetaceans, to identify cetacean species and to plot the acoustic encounters as an overlay on a oceanographic GIS map together with the ship's course. The software supports detection of dolphin vocalisations in a range of 2 to 150 kHz and also a number of operational functions such as replay and simulation modes. The equipment was tested at sea on the former pilot boat "Kluut" while artificial echo-location signals were projected at known distances from off another vessel "Blue Marlin". After the first successful fieldtest the software modules were further adapted and tuned. This system offers great opportunities for high speed sailing and operations on smaller vessels, which enables surveys through hazardous coastal zones, like windfarms, while new software functions, like mapping and sorting of detections are standard and will reduce post analysis time. This new approach has great potential does not require deck handling/time and is a serious candidate to replace the current towed techniques.
POLAND
None
SWEDEN
None
UNITED KINGDOM
None

4.3 Other Relevant Research

BELGIUM
none
DENMARK
None
FINLAND
None
FRANCE
The French stranding network is nationally coordinated by CRMM/ULR (Centre de Recherche sur les Mammifères Marins, Université de La Rochelle) under an agreement with the Ministry in charge of the Environment. Local voluntary observers, generally under local supervision by various institutions or NGOs (Oceanopolis, GEFMA, GECC, GMN, OCEAM, CMNS, Picardie Nature, ONCFS…), have been trained to process stranded cetaceans under a common standardized protocol. An annual synthesis of all strandings reported in France is produced by CRMM/ULR. Statistics of stranding for the coast of France in 2008 indicate more than 800 cetaceans reported (2009 compilation not yet ready), data input in

progress (CRMM/ULR and all National Stranding Scheme field correspondents). Stranding data provides information on mortality causes, demographic structure (age and reproductive status), diet (stomach content), trophic levels (stable isotopes) and subpopulation structure or movement pattern (stable isotopes, heavy metals and contaminants).
GERMANY
A pilot study about the classification of marine mammal signatures with methods of speech recognition (e.g. Hidden Markov Models) was conducted. The study will be continued for the next two years. [Velte, Federal Ministry of Defence] Collecting information about incidental strandings and sightings-by-chance is continued (see http://www.nationalparkwattenmeer.niedersachsen.de/master/C43559691_N28553490_L20_D0_I5912119.html) [Czeck, National Park Administration Wadden Sea of Lower Saxony]
LITHUANIA
None
NETHERLANDS
An ongoing Passive Acoustic Monitoring study using CPODs is conducted in the Ems estuary (close to the border between Germany and the Netherlands) by IMARES. The aim is to monitor changes in abundance (and behaviour) of harbour porpoises in relation to building activities associated with the extension of the harbour in the Eemshaven, and the deepening of the estuary for traffic.
POLAND
None
SWEDEN
None
UNITED KINGDOM
Countryside Council for Wales (CCW) had 6 TPODs deployed in coastal locations in the Cardigan Bay SAC. The use of acoustic data loggers such as TPODs provide a method of collecting data continuously irrespective of light and weather conditions and is particularly useful for collecting data on rates of habitat use and revealing diel cycles of activity about which we currently know little. Bottlenose dolphin and harbour porpoise detection rates are negatively correlated and increased competition for limited prey may be a factor that may also be a reason for the rise in porpoise deaths resulting from attacks by bottlenose dolphin

C. USE OF BY-CATCHES AND STRANDINGS

5 POST-MORTEM RESEARCH SCHEMES

BELGIUM
Contact details of research institutions / focal point
Jan Haelters, Royal Belgian Institute of Natural Sciences (RBINS), Department MUMM Thierry Jauniaux, University of Liège (ULg) Jan Haelters, Royal Belgian Institute of Natural Sciences (RBINS), Department MUMM Thierry Jauniaux, University of Liège (ULg)
Methodology used (reference, e.g. publication, protocol)
Standardised methodology, a.o. described in: Jauniaux, T., Garcia Hartmann, M., Haelters, J., Tavernier J. & Coignoul, F., 2002. Echouage de mammifères marins: guide d'intervention et procedures d'autopsie. Annales de medicine vétérinaire 146: 261-276 Kuiken & Hartmann, G., 1991. Proceedings of the first ECS workshop on cetacean pathology: dissection techniques and tissue sampling. ECS newsletter 17.
Collection of samples (type, preservation method)
Depending on the state of decomposition, all relevant samples for toxicology, histopathology, parasitology, virology, bacteriology, genetics, diet and age are collected. In some cases cranium or entire skeletons are collected. Preservation: different according to the sample: formaldehyde, alcohol, freezing at –18°C or –80°C, tissue slide, …
Database (Number of data sets by species, years covered, software used, online access)
+20.000 samples, including some samples from animals stranded or bycaught in The Netherlands and France; samples originating from +900 animals of different species, including pinnipeds
Additional Information (e.g. website addresses, intellectual property rights, possibility of a central database)
A web application is being developed which will contain data on strandings and sightings of marine mammals in Belgium (now available on www.mumm.ac.be), and allow for the provision of selected samples for dedicated scientific research: see: Jauniaux, T., De Cauwer, K., De Winter, J., Haelters, J., Jacques, T.G., Scory, S. & Coignoul, F., 2009. The Belgian Marine Mammal Biobank: a tool to stimulate tissue exchange. Report submitted to the meeting of the Advisory Committee of ASCOBANS, Bruges, 20-24 April 2009. Doc. AC16/44.

DENMARK
Contact details of research institutions / focal point
Data on cetacean strandings are collected and compiled by the Nature and Forest and Nature Agency together with the Fisheries and Maritime Museum, Esbjerg (Lasse F Jensen)
Methodology used (reference, e.g. publication, protocol)
None
Collection of samples (type, preservation method)
None
Database (Number of data sets by species, years covered, software used, online access)
None
Additional Information (e.g. website addresses, intellectual property rights, possibility of a central database)
None
FINLAND
Contact details of research institutions / focal point
None
Methodology used (reference, e.g. publication, protocol)
None
Collection of samples (type, preservation method)
None
Database (Number of data sets by species, years covered, software used, online access)
None
Additional Information (e.g. website addresses, intellectual property rights, possibility of a central database)
None

FRANCE
Contact details of research institutions / focal point
Centre de Recherche sur les Mammifères Marins, Université de La Rochelle, La Rochelle CRMM/ULR willy.dabin@univ-lr.fr
Methodology used (reference, e.g. publication, protocol)
Standardized protocol derived from ECS necropsy workshop 2005 (Jauniaux, T. Beans, C; and Dabin W. 2005. Stranding, Necropsy and sampling: Collection data, sampling level end techniques)
Collection of samples (type, preservation method)
Biodemographics samples: gonads (formalin) and teeth (frozen) Diet and feeding ecology: stomach contains (frozen) and blubber fatty acids and stable isotope (frozen) Genetics: skin and kidney (frozen and alcohol) Toxicologic: heavy metal and POP's analysis on muscle, liver and kidney (frozen with specific packaging) Parasitology (alcohol) Histopathology (formalin) Bacteriology and virology (frozen)
Database (Number of data sets by species, years covered, software used, online access)
Access 2000 data base since 1972 with 15517 stranding recorded with 2689 individuals sampled
Additional Information (e.g. website addresses, intellectual property rights, possibility of a central database)
http://crmm.univ-lr.fr/ with interactive stranding maps
GERMANY
Contact details of research institutions / focal point
Lower Saxony: LAVES-Institute for Fish & Fishery Products Schleusenstr. 1, D-27472 Cuxhaven [Dr Ramdohr] Schleswig-Holstein: Forschungs- und Technologiezentrum Westküste (FTZ) Werftstr. 6, 25761 Büsum [Dr Siebert]
Methodology used (reference, e.g. publication, protocol)
Basic biological and anatomical data were collected and registered so far. Necropsy is postponed due to laboratory capacity. [Ramdohr, LAVES]

Post mortem examination were performed according to the Proceedings of the First ECS Workshop on Cetacean Pathology (Kuiken and Hartmann, 1993, Siebert et al. 2001, 2006). Measurement were taken in metric systeme. [Siebert, FTZ]

Collection of samples (type, preservation method)

Pathological samples will be collected and examined during necropsy if required. [Ramdohr, LAVES]

All organ systems were examined macroscopically and samples of lesions and different organ systems, including lungs, trachea, stomach (1st, 2nd, and 4th compartment), intestine, esophagus, liver, pancreas, thyroid gland, adrenal gland, kidney, urinary bladder, testis, uterus, ovary, spleen, thymus, pulmonary and intestinal lymph nodes, retropharyngeal lymph nodes, heart, aorta, skeletal muscles, rete mirabilis of the intercostal musculature, skin, blubber, brain, spinal cord, eye, bone, bone marrow, and tissue of the aural peribullar cavity, blood, urine etc. Formalin, alcohol, other special fixation, frozen at –20-30°C or 70-80°C, OCT etc. [Siebert, FTZ]

Database (Number of data sets by species, years covered, software used, online access)

Data were collected and registered for administrative purpose so far. Scientific analysis is postponed. [Ramdohr, LAVES]

MySql, Postgresql, Access, Excel

Between 1990 and 2009 the following number of data sets has been collected per species (data recorded until 04.02.10):
Phocoena phocoena: 2647
Delphinus delphis: 5
Lagenorhynchus albirostris: 25
Lagenorhynchus acutus: 1
Stenella caeruleoalba: 1
Delphinapterus leucas: 1
Delphinapterus ampullatus:1
Physeter macrocephalus: 6
Balaenoptera acutorostrata: 6
Balaenoptera physalus:6
Globicephala melaena: 3
Tursiops truncatus: 1
Mesoplodon bidens: 1 [Siebert, FTZ]

Additional Information (e.g. website addresses, intellectual property rights, possibility of a central database)

Look at:
Collecting information about incidental strandings and sightings-by-chance is continued (see http://www.nationalparkwattenmeer.niedersachsen.de/master/C43559691_N28553490_L20_D0_I5912119.html) [Czeck, National Park Administration Wadden Sea of Lower

Data should be put in an international data base after publication. Use and interpretation of data sets should be restricted. Exchange and comparison of all data collected in different countries. This will give a more precise picture of the different subpopulations of harbour porpoise. [Siebert, FTZ]

LITHUANIA
Contact details of research institutions / focal point
None
Methodology used (reference, e.g. publication, protocol)
None
Collection of samples (type, preservation method)
None
Database (Number of data sets by species, years covered, software used, online access)
None
Additional Information (e.g. website addresses, intellectual property rights, possibility of a central database)
None
NETHERLANDS
Contact details of research institutions / focal point
Department of Pathobiology, Faculty of Veterianry Medicine, Utrecht University, Yalelaan 1, 3584 CL Utrecht, 030 253 3591
Methodology used (reference, e.g. publication, protocol)
Adapted from: T.Kuiken, Diagnosis of By-Catch in Cetaceans, Proceedings of the 2nd BCS Workshop on Cetacean Pathology, Montpellier, France 1994. European Cetacean Society Newsletter, 26:38-43 and protocols provided by Janiaux and Siebert
Collection of samples (type, preservation method)
Depending on conservation state: 1. a variety of specific organs/tissues or tissues with pathologic changes , formalin-fixed, paraffin-embedded 2. gastric contents (frozen handed to Imares) 3. liver, fat and muscle (-20) 4. skin (ethanol) 5. teeth (water)
Database (Number of data sets by species, years covered, software used, online access)
Excel, Access

Additional Information (e.g. website addresses, intellectual property rights, possibility of a central database)
All strandings are collated on the website of Naturalis (www.walvisstrandingen.nl). In 2009 (1.1.09 to 31.12.09) 478 harbour porpoises, 3 white-beaked dolphins, 1 killer whale and 1 *Mesoplodon bidens* were found on the beaches and registered
POLAND
Contact details of research institutions / focal point
Hel Marine Station, Institute of Oceanography, University of Gdańsk Iwona Pawliczka, iwona.pvp@ug.edu.pl
Methodology used (reference, e.g. publication, protocol)
Post-mortem analyses are performer according to the procedure described in: Kuiken, T and Hartmann, M.G. (1993). Dissection techniques and tissue sampling. Proceedings of the ECS Workshop, Leiden.
Collection of samples (type, preservation method)
Hel Marine Station, Institute of Oceanography, University of Gdańsk as a consequence of research carried out as part of its statutory activities, collects data on dead porpoises and dolphins from either bycatch or stranded on the coast. Dead specimens, if they come to the Station, are analysed to the extend that the state of remains allow. The standard range of samples taking includes : - ascertaining the species - the location of the event - the specific or supposed cause of death - ascertainment of length and body mass - ascertainment of sex - taking fatty tissue for genetic investigation - taking teeth to ascertain the animal's age - a full post-mortem analysis and storage of biological samples following Kuiken &Hartmann 1993
Database (Number of data sets by species, years covered, software used, online access)
Data have been entered into a standard Access database since 1998.There is no online access to his database. The database contains 113 reports on bycatch or stranding of porpoises and 16 reports on other species of small cetaceans. *Stenella coeruleoalba, Lagenorhynchus albirostris, Lagenorhynchus acutus, Physeter catodon*)
Additional Information (e.g. website addresses, intellectual property rights, possibility of a central database)
Contact: Marine Station IOUG (Iwona Pawliczka iwona.pvp@ug.edu.pl)

SWEDEN
Contact details of research institutions / focal point
Anna Roos, Dep of Contaminant research, Swedish Museum of Natural History, PO Box 50007, SE 104 05 Stockholm. Anna.roos@nrm.se
Methodology used (reference, e.g. publication, protocol)
We follow a common protocol made for cetaceans
Collection of samples (type, preservation method)
Skin, blubber, kidney, muscle, liver, brain, lung, spleen, teeth etc are taken and stored frozen. Also if some organs are stored in formalin.
Database (Number of data sets by species, years covered, software used, online access)
We use a specially formed database, in MSQL. But older data is still also in Excel-sheets, since 1960s. No online access yet
Additional Information (e.g. website addresses, intellectual property rights, possibility of a central database)
The museum also hosts a web page where the public can report live porpoises: http://www.nrm.se/tumlare. It will be translated to English shortly.
UNITED KINGDOM
Contact details of research institutions / focal point
UK Cetacean Strandings Investigation Programme (CSIP). Contact point- Rob Deaville, Institute of Zoology, Regents Park, London, NW1 4RY, ENGLAND
Methodology used (reference, e.g. publication, protocol)
Methodology in Jepson *et al* (2005) followed (Jepson, P.D. (editor) (2005) Cetacean Strandings Investigation and Co-ordination in the UK 2000-2004. Final report to the *Department for Environment, Food and Rural Affairs.* Pp 1-79. http://randd.defra.gov.uk/Document.aspx?Document=WP01011_8244_FRP.pdf
Collection of samples (type, preservation method)
A range of samples are routinely collected according to the method of Jepson *et al* (2005). A variety of tissues are routinely sampled for any bacteriological, virological and/or histopathological investigations when deemed appropriate. Any non-routine samples are also collected as necessary. A number of preservation methods are employed; stored frozen at -20^{o}C or -80^{o}C; stored in 70% ethanol (parasites); or in 10% buffered formalin (fixed samples)

Database (Number of data sets by species, years covered, software used, online access)
The CSIP holds data on over 9600 cetaceans which were found stranded around the UK between 1990 and 2009. In addition, detailed pathological data is also held on over 2700 UK stranded cetaceans which were necropsied by the CSIP during the same period. Data collected on strandings and during necropsies are now routinely recorded in a recently created web-accessed relational database (http://data.ukstrandings.org). A proportion of data held on this system will be made publicly available via the NBN gateway (http://www.nbn.org.uk/).
Additional Information (e.g. website addresses, intellectual property rights, possibility of a central database)
Further information on the CSIP is available at www.ukstrandings.org. Intellectual property rights to the data directly generated as a result of CSIP research belong to Defra. Institute of Zoology have recently submitted a proposal to the ASCOBANS Secretariat, on a feasibility study into the creation of a centralised point of access for selected data collected by stranding networks within the ASCOBANS region. If successful, it is hoped that this will be the first step towards the creation of a central database on strandings and necropsies, encompassing ASCOBANS Parties and Range

5.1 Number of Necropsies Carried out in Reporting Period:

Species	Recorded cause of death
BELGIUM	
Balaenoptera physalus (1)	Ship strike
Phocoena phocoena (66)	Preliminary data: Total number of porpoises, including stranded animals, dead animals found at sea, animals delivered by fishermen: 66 Provisionally: Number of bycaught animals: 15 Number of animals died naturally: 9 Number of animals with unknown cause of death: 42
Stenella coeruleoalba (1)	Natural*
Lagenorhynchus albirostris (1)	Unknown
This solitary striped dolphin, very rare in Belgian waters, was present in a dock in the harbour of Antwerp for two weeks, before being found dead, totally weakened. See: HaHaelters, J. & Verbelen, D., 2009. Gestreepte dolfijn in Antwerpse haven. Zoogdier 20(4): 30-31. Verbelen D. & Haelters J., 2010. Fonske duikt op in Antwerpse Haven. In: Herremans M., Berwaerts K., Driessens G., Guelinckx R., Hens M., Jacobs M., Jooris R., Lewylle I., Leysen K., Nijs G., Steeman R., Van de Meutter F., Van Dorsselaer P., Veraghtert W., Verbelen D., Verbeylen G., Verdonckt F. & Vermeersch G., 2010. Jaarverslag 2008 - 2009. Markante resultaten van Natuurpunt Studie. Rapport Natuur.studie 2010/1, Natuurpunt Studie, Mechelen : 51–52	

DENMARK	
The number of harbour porpoise strandings in Denmark in 2008 was much larger than previously reported, (223 individuals instead of 94). In 2009 a total of 137 harbour porpoise stranded in Denmark. Thus there has been a drastically increase in the number of strandings in Denmark, just as has been observed in Germany and Netherlands.	
FINLAND	
	None
FRANCE	
Delphinus delphis	79 necropsies
Phocoena phocoena	13
Stenella coeruleoalba	5
Tursiops truncatus	5
Grampus griseus	2
Globicephala mela	6
Halichoerus grypus	2
Ziphius cavirostris	1
Hyperoodon ampulatus	1
Orcinus orca	1
Balaenoptera physalus	1
Megaptera noveanglia	1
GERMANY	
Mecklenburg-Vorpommern: Phocoena phocoena: 52	Recorded strandings and bycatch, only partially necropsied [Dähne, German Oceanographic Museum]
Lower Saxony: Phocoena phocoena: 56 Mesoplodon bidens: 1 (not collected)	Recorded strandings, only partially to be necropsied (necropsies are postponed) [Ramdohr, LAVES-Institute for Fish & Fishery Products]
Schleswig-Holstein: Phocoena phocoena Mesoplodon bidens	 262 (data recorded until 04.02.10) 1 [Siebert, FTZ]

LITHUANIA	
None	
NETHERLANDS	
Harbour porpoise	92 total, unknown cause of death 15%, cachexia 20%, starvation 9%, infectious disease 14%, other causes of death 1% and by-catch 41%
POLAND	
None	
SWEDEN	
Harbour porpoise 21 individuals were sampled at SMNH during 2009: 17 of them died in 2009, 2 in 2008 and 2 in 2007. Of these, 10 carcasses were sent to SMNH for necropsy, the rest were only samples or parts of and were sent to the SMNH so it was not possible to do a full necropsy of them.	At least 4 individuals had drowned, one emancipated newborn calf was shot, and the rest were found dead with unknown cause of death. Several of them have probably drowned but were in such a state (rotten) that it was not possible to say. One porpoise was probably killed by a boat.
UNITED KINGDOM	
Harbour porpoise (*Phocoena phocoena*, n=50)	Bottlenose Dolphin Attack (n=9) Starvation (neonate) (n=9) Starvation (n=9) Bycatch (n=6) Live Stranding (n=3) Dystocia and/or Stillborn (n=3) Pneumonia, Parasitic and Bacterial (n=3) Pneumonia, Parasitic (n=2) Physical Trauma (n=1) Generalised Bacterial Infection (n=1) (Meningo)encephalitis (n=1) Gastritis and/or Enteritis (n=1) Others (n=1) Not Established (n=1)
Short-beaked common dolphin (*Delphinus delphis, n*=15)	Bycatch (n=9) Physical Trauma, Boat/ship strike (n=1) (Meningo)encephalitis (n=1) Starvation (neonate) (n=1) Dystocia and/or Stillborn (n=1) Others (n=1) Not Established (n=1)
Striped dolphin (*Stenella coeruleoalba*, n=7)	Live Stranding (n=3) Starvation (n=2) Generalised Bacterial Infection (n=1) (Meningo)encephalitis (n=1)

White beaked dolphin (*Lagenorhynchus albirostris*, n=6)	Live Stranding (n=5) Not Established (n=1)
Northern bottlenose whale (*Hyperoodon ampullatus*, n=5)	Live Stranding (n=3) Others (n=1) Starvation (n=1)
Bottlenose dolphin (*Tursiops truncatus*, n=2)	Bycatch (n=1) Not Established (n=1)
Atlantic white-sided dolphin (*Lagenorhynchus acutus*, n=2)	Live Stranding (n=2)
Minke whale (*Balaenoptera acutorostrata*, n=2)	Physical Trauma, Boat/ship strike (n=1) Not Established (n=1)

5.2 Other relevant information on post-mortem / strandings schemes
BELGIUM
None
DENMARK
None
FINLAND
None
FRANCE
None
GERMANY
None
LITHUANIA
None
NETHERLANDS
478 harbour porpoises stranded on Dutch beaches in 2009. Post-mortem examinations of 92 animals were done at the Department of Pathobiology, Faculty of Veterinary Medicine, Utrecht University. Within the pilot study of the Dolphin Saver, all fishermen have a permit from the government to land by-caught harbour porpoises. If by-catch occurs the animals are brought to the department of pathobiology at the University of Utrecht for further examination In 2009, the North Sea Foundation started setting up a rapid alert system (RAS) for stranding events of porpoises. A plan of action was developed to increase information gathering on stranding events of dead harbour porpoises. In the event of a stranding event, Dutch police, researchers, pathologists, Ministry of Agriculture, Nature and Food Quality, and nature protection organisations, will work together to find the cause of the stranding

event. In 2010 the RAS will be established and evaluated after each stranding event. Kastelein et al. (2009) observed a Congenital Diaphragmatic Hernia (CDH) in a stranded juvenile male striped dolphin. The 2- to 3-y-old animal had survived with its stomachs and intestines in the thoracic cavity, which had caused a large size difference between its two lungs. The animal also had a relatively small penis. The animal's combination of anomalies was either due to a genetic syndrome or caused by maternal exposure to toxic agents. Reference: Kastelein, R.A., van Dooren, M.F., Tibboel, D. (2009) A case study of congenital diaphragmatic hernia in a juvenile striped dolphin (*Stenella coeruleoalba*). Aquatic Mammals 35(1), 32-35.
POLAND
None
SWEDEN
One female, probably drowned, was very old. She had at least 10 scars in ovaries from previous pregnancies. Also, one female was pregnant
UNITED KINGDOM
CSIP Annual Report to Defra for the period 1st January-31st December 2008 http://randd.defra.gov.uk/Document.aspx?Document=WC0601_8030_ANN.pdf

D. LEGISLATION

6.1 Relevant New Legislation, Regulations and Guidelines

BELGIUM
New Flemish legislation on the protection of species (15 May 2009): *Besluit van de Vlaamse Regering met betrekking tot soortenbescherming en soortenbeheer*. Belgian Official Journal of 13 August 2009. This legislation came into force on 1 September 2009. No concrete measures are taken, but the legal protection of porpoises.
DENMARK
None
FINLAND
None
FRANCE
None
GERMANY
A new Federal Nature Protection Law (“BNatSchG”=Bundesnaturschutzgesetz) was decided 29.7.2009, which contains a new chapter on “marine nature protection” (chapter 6). This legislation will become valid from 1.3.2010 onwards.

LITHUANIA
In 2009 started national new project “Preparation of Protection Actions Plans for Rare Species and Populations Regulations Actions Plans for Invasive Species” in which is including the species harbour porpoise. There is preparing a plan for this species focusing to ASCOBANS implementation. The Institute of Ecology is working on this.
NETHERLANDS
Minor changes in EU regulation 812/2004 are planned. Main new item is the requirement to report in a standard format.
POLAND
No new regulations referring to the protection of cetaceans have been enacted in national law. However, it should be noted that under the supervision of the Minister of the Environment the ratification procedure for the „International Convention for the Regulation of Whaling” was completed in 2009. On 13th March, the President of the Republic of Poland, Lech Kaczyński, signed the appropriate ratification document. After becoming a formal member of the International Whaling Commission on 17th April.
SWEDEN
In 2009, 3 MPA :s were established along the west coast of Sweden applying restrictions regarding fisheries. On of these, in the south of Kattegatt, is a large area where there are varying fisheries regulations in different zones. In certain zones there is total closure of all fisheries all year round. In this area, harbour porpoises are common. Other areas with restrictions of the fisheries are also established further north. In 2010 another 3 MPA:s with fishery restrictions will be established in the Baltic Sea. In 2009 Sweden´s first marine national park was established in the Koster Archopelagio in Skagerakk. Certain regulations will apply in the use of leisure boats as well as fisheries
UNITED KINGDOM
The Habitats Directive requires Member States to take the necessary measures to establish a system of strict protection for all cetaceans that includes the issue of disturbance. JNCC in collaboration with the other Countryside Agencies developed guidance for those carrying out activities in the marine environment, to help determine the likelihood of committing an offence, how this can be avoided, and, as a last resort, whether the activity could go ahead under licence. With respect to the consequence of certain developments, if the activities involved are not likely to be detrimental to the Favourable Conservation Status of a population but a cetacean species could still be harmed (injured or significantly disturbed), then the applicant should apply for a licence from the relevant regulator to undertake these activities should mitigation or alternative solutions not be viable.

E. INFORMATION AND EDUCATION

7.1 Public Awareness and Education

BELGIUM
A necropsy workshop was organized (*3rd Cetacean Necropsy Workshop: special issue on cetaceans inner ear, including beaked whales,* Jauniaux T., André M., Dabin W., Morell M., Coignoul F.) on June 17-18 at the University of Liege (Department of Veterinary Pathology). There were 18 participants from countries in Europe and Africa, and 26 marine mammals were necropsied, mostly porpoises. The main issue was the dissection of the inner ear and a demonstration of the skull morphology of cetaceans, including beaked whales. On 14 October 2009 a temporary exhibit on whales and dolphins was opened to the public at the Museum for Natural Sciences (RBINS), Brussels. In this temporary exhibit attention is paid to relevant threats and nature conservation aspects, including on international agreements and conventions such as Ascobans and IWC. The exhibit will close on 29 August 2010. More information on www.naturalsciences.be. For a few days at the start of the holiday season on 1 July 2009, the Belgian art group Captain Boomer reconstructed the magic of a sperm whale stranding on the beach of Ostend. The realistic 18m sperm whale had been constructed out of wood, aluminium and polyester by artist Zephyr (Dirk Claessen). The public was informed about the steps that were taken for scientific research after such a stranding, and about threats and conservation of cetaceans. Two initiatives towards the public to record, report and distribute marine mammal sightings continue: www.waarnemingen.be: an initiative of *Natuurpunt Studie vzw* and *Stichting Natuurinformatie* www.zeezoogdieren.org: an initiative originating from *Natuurpunt Antwerpen-Noord vzw* Besides that, MUMM reports strandings and selected sighting records online on www.mumm.ac.be.
DENMARK
Fjord&Bælt houses 4 harbour porpoises in captivity for public outreach and research activities. More information available at www.fjord-baelt.dk The web page www.hvaler.dk makes daily updates on cetacean and seal observations by the public in Danish and adjacent waters. The National Environmental Research Council http://www.dmu.dk/Dyr_planter/Dyr/Havpattedyr/Marsvin/ and the National Forest and Nature Agency http://www.skovognatur.dk/DyrOgPlanter/Artsleksikon/Pattedyr/Hvaler/Marsvin/Marsvin.htm have updated information on harbour porpoise abundance, protected areas, and research activities.
FINLAND
Finland has continued the harbour porpoise sighting campaign and received information of five sightings of totally 5 animals in year 2009. The Ministry of the Environment and the Ministry of Agriculture and Forestry have established a common practice of recommending fishermen to avoid fishing with nets in coastal areas where harbour porpoises have been sighted. SAMBAH project (see 4.1) will start wide dissemination actions for public and stakeholders about harbour porpoise starting Jan 1 2010

FRANCE
Public conferences (Oceanopolis-Brest and CRMM/ULR) National stranding network: training for volunteers and national meeting (CRMM/ULR) Observer training in the frame of fishing observation scheme, council regulation 812/04 (CRMM/ULR) Annual Symposium of French stranding network, annual stranding report, research with biological samples from stranding, network scheme animation. Regional stranding network: training for volunteers and annual meeting (LEMM/Océanopolis) Movie on cetaceans and ferries survey produced by Brittany Ferries and Oceanopolis broadcasted onboard the ferries+ conference on board Information concerning the “Year of the Dolphin” on the Oceanopolis website. New exhibition on cetaceans: National Museum Paris, partnership Oceanopolis. An itinerant version circulate in Europe
GERMANY
In the light of spreading information about the occurence and biology of harbour porpoises some minor projects can be mentioned: In 2009 for the first time the effort of a ‘whale watching tour by foot’ was offered by the National Park Information Centre in Wilhelmshaven. Even if this is more to be seen as an additional event with unpredictable results, harbour propoises were frequently observed in the last years passing the shoreline near Wilhelmshaven during spring and an informational plate about the local situation was designed and will be put up in spring 2010. At the National Park Information Centre on Norderney the project ‘Meereslauschen’ has ended. A hydrophone collects underwater sounds (also sounds from harbour porpoises), the results were transmitted into the information centre. [Czeck, National Park Administration Wadden Sea of Lower Saxony] GRD’s sightings project of harbour porpoises in the Weser river was successfully continued in 2009. We received a number of sightings published under www.weserwale.de. For 2010 we plan the deployment of 2 C-PODs to receive additional information on this riverine occurrence of porpoises. [Koschinski, Society for Dolphin Conservation Germany] Several press releases by three NGOs (GSM, GRD and NABU) together on underwater detonations, boat/ship noise and pile-driving noise were published in the course of the year and interviews were given to media upon request. A diving association’s speed boat contest (“4 Elements Challenge”) was opposed. For this reason press releases were prepared as well as an on-line petition to the German parliament. As a result of strong media interest, authorities felt obliged to limit the speed of the rigid-hull inflatable boats to 16 knots inside SACs and in the inner Kiel Fjord and Eckernförde Bight and to 24 knots in the outer Kiel Bight (from 35 knots originally intended). [Koschinski] Several press releases were published in the course of the year and interviews were given to media upon request. The sightings project (since 2002) is well-respected and known to a wide public, especially along the cost of the Baltic Sea region. It increasingly provides interesting information, such as reports on the appearance of a white harbour porpoise in the Western Baltic in the winter of 2008/9 (photos available). The sightings data are posted on-line, and BfN is regularly publishing the map with the data put together by GSM staff. The sightings map is interactive, i.e. all information can be

accessed by a simple click. Lectures were held to school classes and other interested groups, and information was distributed during the international fair “Hanseboot”.

On the occasion of the IDHP 2009, GSM organised a meeting with members, media and other interested people in “Hohe Düne” (Marina of Warnemuende) with several interesting lectures about harbour porpoises and harbour seals. This event was, of course, accompanied by a press release. [Deimer]

LITHUANIA

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

Lithuanian Sea Museum celebrated International Harbor Porpoise Day in 2009 too.

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

NETHERLANDS

The Rugvin Foundation communicates its research findings through press releases, articles and media interviews. Next to that, at the September 2009 Oosterschelde survey it collaborated with WWF´s LifeGuard project:

http://lifeguard.wnf.nl/index.cfm?act=missie2.vervolg&varpag=14 LifeGuard is aimed for young people aged 12 to 18 years. The core of the campaign consists of missions where young people can participate in (in this case the Harbour Porpoise Survey).

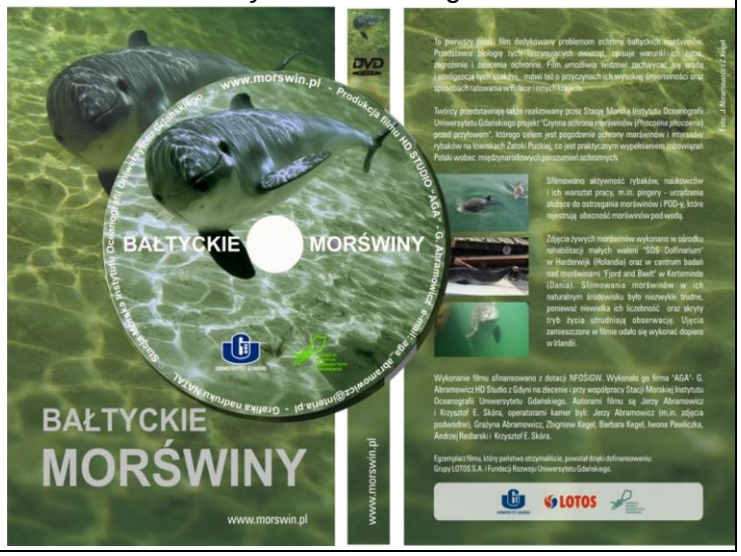
A new website has been launched in 2009 by SOS Dolfijn: http://www.sosdolfijn.nl/. It provides an overview on rehabilitation of small cetaceans (in Dutch).

An article on underwater noise and underwater life has been published in : “Kust en Zeegids” this is a publication from the Netherlands section of the Coastal & Marine Union (EUCC) p. 32-33, 2009. Min. AN&FQ. In this article tourists and visitors of the Netherlands and Belgian coast are made aware of the impact of increasing underwater noise on sea mammals and fish.

POLAND

In 2009, the efforts to increase the public awareness about the harbour porpoises as a species which requires special protection In the Baltic Sea was continued.

Funds for the activities carried out in 2009 came mainly from the budget of the Hel Marine Station of the University of Gdańsk and the Foundation for the Development of the University of Gdańsk, the National Fund for Environmental Protection and Water Management, the Regional Fund for Environmental Protection and Water Management in Gdańsk, the EU’s Infrastructure and Environment Operational Programme, the Polish Post Office and the LOTOS Group.



The greatest coverage was achieved by the Polish Post Office’s campaign issuing a series

of stamps titled „Mammals of the Baltic" which presented image of three protected species of seal as well as that of the harbour porpoise. The print run for each stamp was 540 000. Special envelopes and postcards were also issued.

The first day of issue (31.07.2009) was marked by a ceremony which took place at the sealarium of Hel Marine Station IOUG.

The second most important event was the publication of a film DVD entitled „Baltic Harbour Porpoises", which was created by IOUG Hel Marine Station group. It was distributed to all coastal environmental and marine environment protection institutions, fisheries and pro-ecology organizations, schools, and biology teacher training courses. The donors for the first edition were the National Fund for Environmental Protection and Water Management and the University of Gdańsk, and further editions were funded by the Regional fund for Environmental Protection and Water Management in Gdańsk, the LOTOS Group and the Marine station together with the foundation for the Development of the university of Gdańsk.

This film (from the ASCOBANS International Day of the Baltic Harbour Porpoise) was screened daily at the IOUG Hal Marine Station and during the summer season also at the outdoor cinema which enjoyed great success at the "Planet Ocean" photographic exhibition which the authors (from the "European Earth Centre" Foundation) enriched with educational information covering the rare and endangered species an the Baltic Sea.

Engaging public awareness about the necessity of supporting the protection of the Baltic harbour porpoises was also aided by articles in the local and national Polish press, information in radio and television programs, and the news service on the website- www.morsiwn.pl.the. The cycle of monthly full-page articles in the coastal "Dziennik Bałtycki" newspaper were particularly valuable because they reached readers in the fishing community. The printing of this cycle was financed by the LOTOS GROUP.

The complement this, there was a course for biology teachers from schools at various levels in the province of Pomerania. The syllabus focused on broadening knowledge of the biodiversity of the Baltic Sea with prominence given to the endangered resources of Baltic harbour porpoises and methods of protecting them. The course was intended to assist the introduction of the topic to biology syllabi in primary, middle, and secondary schools.

In the centre for marine nature education, run on the Polish coast by the Hel Marine Station the shop is now stocking new souvenirs with images of the porpoises.

As the same time, thanks to the efforts of both this institution and the Foundation of the Development of the University of Gdańsk, a special tinned fish product – "Porpoise's Delight"- labeled as a foodstuff produced using fishing techniques which are safe for the Baltic porpoises – was brought onto the market. This is probably the first "Harbour porpoise friendly product"

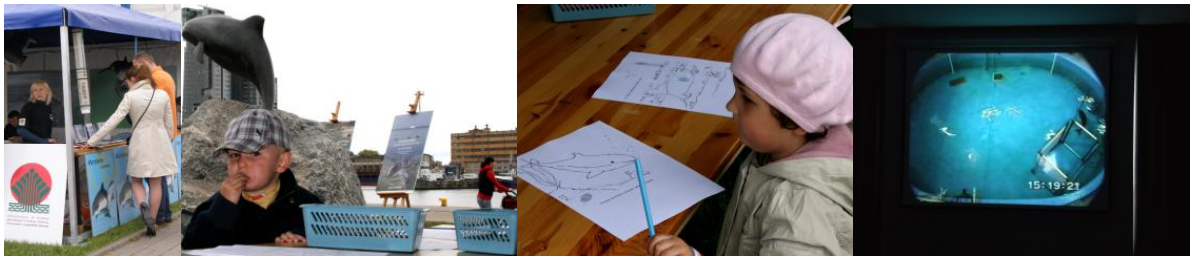
on the commercial market (most likely not only in Poland). Sales of the product were strengthened by a special outdoor advertising campaign.

A large outdoor campaign with an image of the porpoise was also conducted in conjunction with project- „Billboard in Nature" and „Nature on the Waves" – run by the local „Friends of Hel" association, the IOUG Marine Station and the Foundation for the Development of the University of Gdańsk. Both campaigns served to emphasise environmental protection In the Nature 2000 area – the Puck Bay and the Hel Peninsula, which is dedicated to protection on

the porpoise, among other things. The billboards were located on main streets, and posters and leaflets on ferries sailing on the Gulf of Gdańsk and the Puck Bay. The main funds for this activity were provided by Regional Fund for Environmental Protection an Water Management in Gdańsk.

As part of the promotional campaign for ASCOBANS and efforts to protect the porpoise two annual outdoor events were organized. The first was an information and educational stand and exhibition organised at the porpoise monument in Gdynia on 17th May during the International Day of the Baltic Harbour Porpoise. The event's message was mainly directed towards the promotion of the protective activities of the ASCOBANS agreement and international cooperation on saving these animals in the Baltic. In the evening, in the

conference hall of Institute of Oceanography of the University of Gdańsk in Gdynia, there was a public presentation of films about the methods used to save the small cetaceans.



In the same place but two weeks later as part of the Baltic Festival of Science a second, similar stand was organised. This time, as well as promoting protection of the Baltic harbour porpoise, the audience was told about the research methods used for these animals by Polish scientists.

As a part of the information camping aimed at the fisheries sector, on the 16th – 18th June 2009 the Hel Marine Station IOUG organised a special exhibition at the POLFISH 2009 international Fair of Fish Processing and Fish Products

The outdoor stand organised on 25th July on the Hel Peninsula In the Hel Marine Station as part of the annual “Day of Fish” event was similar in both character and message.

Different message was presented by a stand promoting Hel Marine Station's project on active protection of the porpoises in the Bay of Puck, which was organized between 24th and 27th November 2009 in the heart of the country, in Poznań, at the POEKO International Trade Fair for Environmental Protection. Here, the information was mainly directed to representatives of the environmental protection sector and showed the need to protect the marine environment as part of international obligations – the Bonn Convention (ASCOBANS Agreement) and the Helsinki Convention (HELCOM Recommendation 17/2). The audience for the content and materials presented also included people from outside the sector visiting the fair, in particular teenagers from Poznań schools.

As a conclusion to the Year of the Baltic Sea in Pomerania Province, on 16th December at the City museum in Gdynia the 5th International Biennial of Painting and Unique Fabrics – EKO BALT Gdynia 2009 – was opened. The Biennial is patroned by the Mayor of Gdynia and its honorary patrons are the Minister of Culture and National Heritage, the Marshal of Pomerania Province, and the Mayors of Gdańsk an Sopot. One of the exhibits dealt with the endangered Baltic harbour porpoises and the necessity to protect them.

In 2009, the Hel Marine Station organised further informational meetings with fishermen. This time, discussions were held with owners of traditional small boats using anchored gillnets in the Puck Bay. Discussions covered the need to co-operate and respect the equipment and sea areas used for research and fishing, methods of marking fishing equipment, and the need for mutual information exchange, among other topics.

In 2009, there was also an educational and information campaign started up on the protection of porpoises conducted as part of the joint WWF-Poland and Hel. Marine Station "Support Restoration of Baltic Mammals in Poland" project.

A Project website was set up [www.ssakibaltyckie.pl] and a pocket guide on Baltic mammals was published [www.ssakibaltyckie.wwf.pl/poradnik.pdf]

The information website dedicated to issues concerning the conservation of the Baltic harbour porpoise - www.morswin.pl.

SWEDEN

The day of the harbour porpoise is celebrated every year through exhibitions and presentations at Havets Hus in Lysekil.

A new brochure was produced by SEPA in the autumn 2009. The aim of this production is to raise awareness of the general public as well as encouraging people to report sightings and stranded of bycaught harbour porpoises to the Swedish Museum of Natural History in Stockholm (SMNH). The brochure will be distributed to ferry-companies, birdwatchers, boat-clubs etc. in the spring.

Since a group of porpoises were spotted in the archipelago of Stockholm a press release from SMNH received a lot of attention. Porpoises in the central Baltic are spotted every year but this was a group of several individuals, and that is unusual.

UNITED KINGDOM

Defra hosted 'Marine Month' in March 2010 to raise awareness across the whole department of issues relating to the marine environment. As part of this, ASCOBANS provided an exhibition to highlight the work, aims and objectives of the Agreement.

POSSIBLE DIFFICULTIES ENCOUNTERED IN IMPLEMENTING THE AGREEMENT

BELGIUM
None
DENMARK
None
FINLAND
None
FRANCE
None
GERMANY
None
LITHUANIA
None
NETHERLANDS
None
POLAND
One of the recommendations of the Agreement is to gather reliable knowledge on a scale of threats to small cetaceans. This can be obtained by means engaging both small and large financial resources (e.g. a programme for bycatch observers, specialized hydroacoustic research, etc). It seems that the simplest and least expensive activities include bycatch reporting by fishermen and transport of dead animals to research centres. The number of reports on bycatch has dropped rapidly during last 5-7 years. After discussions with fishermen it became clear that the observed drop of reporting activity has been a result of the EU Regulation no. 812/2004 which came into force. Another issue is the co-operation of sea users in research on distribution of porpoises by using passive hydroacoustic detectors (e.g. POD). There is a growing conflict over the use of sea space which is causing a great deal of difficulty in maintaining underwater research locations untouched. In this situation, in 2009 the Ministry of Environment undertook a range of initiatives on strengthening contacts with the Department of Fisheries in the Ministry of Agriculture and Rural Development in order to prevent failure of planned conservation activities on critically endangered (according to IUCN 2008) resources of the Baltic harbour porpoise.
SWEDEN
None
UNITED KINGDOM
None