

Agenda Item 15.1

National Reporting

Reports from Parties

Document Inf.15.1.g

**2014 Annual National Report:
Netherlands**

Action Requested

- Take note

Submitted by

Netherlands



**NOTE:
DELEGATES ARE KINDLY REMINDED
TO BRING THEIR OWN COPIES OF DOCUMENTS TO THE MEETING**

2014 ASCOBANS Annual National Reports

This questionnaire has been pre-filled with answers given in 2013 National Report - please update!

This format for the ASCOBANS Annual National Reports was endorsed by the 6th Meeting of the Parties in 2009. Reports are due to be submitted to the Secretariat by 31 March of each year.

Parties are requested to use this report to provide NEW information on measures taken or actions towards meeting the objectives of the Conservation and Management Plan and the Resolutions of the Meeting of the Parties.

The 7th Meeting of the Parties in 2012 agreed to move to online reporting with immediate effect. In order to benefit fully from the opportunities for synergies among CMS Family treaties afforded by this tool, Parties decided that a revised national report format be developed by a small working group assisted by the Secretariat for consideration by the Advisory Committee in preparation for the 8th Meeting of the Parties. While retaining the questions related only to ASCOBANS, it should align more closely to the format used in CMS, AEWa and EUROBATs.

General Information

Name of Party

> The Netherlands

Report prepared by

This should indicate the name and affiliation of the lead person for filling in the report.

Name	Meike Scheidat
Function	Senior Researcher
Organization	IMARES
Address	Haringkade 1, 1976 CP IJmuiden, The Netherlands
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Coordinating Authority and National Coordinator

Please confirm the Coordinating Authority responsible for the national implementation of the Agreement, and give the name and contact details of the officially appointed National Coordinator (Focal Point).

> Jeroen Vis (Dutch Ministry of Economic Affairs)

P.O.Box 20401, 2500 EK The Hague, The Netherlands

Email: g.a.j.vis@minez.nl

List of National Institutions

List of national authorities, organizations, research centres and rescue centres active in the field of study and conservation of cetaceans, including contact details

> Ministry of EZ (Dutch Ministry of Economic Affairs); P.O.Box 20401, 2500 EK The Hague, The Netherlands.

Email contact: g.a.j.vis@minez.nl

> Ministerie of I&M (Infrastructure and Environment), DG Water. P.O.Box 20901, 2500 EX the Hague, The Netherlands. Email contact: Rene.dekeling@minvenw.nl

> IMARES Wageningen UR (Institute for Marine Resource and Ecosystem Studies), Dept. Fish ecology; P.O. Box 68, 1970AB IJmuiden, The Netherlands. Email contact: mscheidat@wur.nl; www.imares.nl

> NIOZ Royal Netherlands Institute for Sea Research, Landsdiep 4, 1791 SZ 't Horntje, The Netherlands. Email contact: Kees.Camphuysen@nioz.nl; www.nioz.nl

> SEAMARCO (Sea Mammal Research Company), Applied research for marine conservation, Julianalaan 46, 3843 CC Harderwijk, The Netherlands. Tel (Office): +31-(0)341-456252; Email contact: researchteam@zonnet.nl

> Stichting Rugvin; Jeruzalem 31a; 6881 JL Velp; the Netherlands; Tel: (+31) (0)26-3635444. Email contact: rugvin@planet.nl; www.rugvin.nl

- > TNO, Netherlands Organisation for Applied Scientific Research; P.O. Box 96864, 2509 JG The Hague, The Netherlands. Phone +31 (0)88-8664119.
Email contact: Frans-Peter.Lam@tno.nl
- > Stichting de Noordzee. Natuur, Ruimtelijke Ordening. Drieharingstraat 25. 3511 BH Utrecht, The Netherlands. Phone +31 302340016. www.noordzee.nl
- > Naturalis Netherlands Centre for Biodiversity Naturalis. Postbus 9517, 2300 RA Leiden, The Netherlands. +31 71 568 76 00. Email contact: guido.keijl@ncbnaturalis.nl; www.naturalis.nl
- > Department of Pathobiology, Faculty of Veterinary Medicine, Utrecht University, Yalelaan 1, 3584 CL Utrecht.
- > Coastal & Marine Union (EUCC). P.O. Box 11232, 2301 EE Leiden, The Netherlands. Phone +31 71 5122900. Email contact: m.siemensma@kustenzee.nl ; www.eucc.net
- > Marine Science & Communication (MS&C). Bosstraat 123, 3971 XC Driebergen, The Netherlands. Phone +31(6)16830430. Email contact: m.siemensma@msandc.nl
- > SOSDolfijn. P.O.Box 293, 3840 AG Harderwijk, The Netherlands. Phone +31 341 467438.

Habitat Conservation and Management

Fisheries Interactions

Direct Interaction with Fisheries

1.1 Investigations of methods to reduce bycatch

> IMARES Wageningen UR and Marine Science and Communication (MS&C) started a Remote Electronic Monitoring project in December 2012 to investigate bycatch of harbour porpoises by Dutch gill net fishery (targeting sole, seabass, cod, turbot and brill). This project will last until 2016 and includes the monitoring of 10 to 12 vessels. The project is funded by the Dutch Ministry of Economic Affairs.

1.2 Implementation of methods to reduce bycatch

> In December 2013 the Coastal & Marine Union (EUCC) finished its study on bycatch mitigation within the project funded by the European Fisheries Fund and the Dutch Ministry of Economic Affairs: "bycatch mitigation harbour porpoise". The main aim is to mitigate bycatch of harbour porpoises in the winter set net fishery on cod, turbot and brill in collaboration with the industry. The workability and efficiency of a new pinger (BananaPinger Fishtek UK) and a DDD acoustic device are investigated using both field trials, a behavioural study on a porpoise at research facility SEAMARCO ('BananaPinger' Prototype) and an acoustic evaluation of the BananaPinger by SEAMARCO. The project was a close collaboration between the Dutch Fisheries Organisation, the Expert group on set net fishery, ten Dutch winter season set net fishermen and the Coastal & Marine Union. A short projectfilm about the Harbour Porpoise in general, its current threats and bycatch mitigation was part of the project (<http://studiobib.nl/documentaire-de-fluisteraars-van-de-zee-coastal-marine-union-eucc/>). Summarizing it can be said already that the BananaPinger seems to be a pinger which is good to use for fishermen in terms of practical handling on board. It seems to be robust for gill net fisheries. The acoustic evaluation of the BananaPinger (follow up of the prototype) shows an avoidance response of the harbour porpoise, the distance varies with the background noise. Based on the acoustical evaluation however it is recommended to further investigate the optimal spacing between the pingers. Please contact the EUCC for further questions on this study (project contact Marije Siemensma).

1.3 Other relevant information

Other relevant information, including bycatch information from opportunistic sources

> none

1.4 Report under EC Regulation 812/2004

Please provide the link to your country's report under EC Regulation 812/2004.

> Report EU regulation 812/2004:

Couperus, A. S. 2015. Annual report on the implementation of Council Regulation (EC) No 812/2004 - 2013., p. 15. Ijmuiden. Centrum voor Visserijonderzoek (CVO) CVO report 15.001.

Reduction of Disturbance

2.1 Anthropogenic Noise

Please reference and briefly summarise any studies undertaken

> TNO participates in the 3S-project, together with main partners FFI (Norway), SMRU (UK) and WHOI (USA) and several associate partners. Additional baseline data was gathered in 2014. In 2014 multiple publications appeared that address different aspects of the response of animals to sonar sound and compare this to other types of responses (e.g. killer whale playbacks).

> In August 2014, TNO participated in a multidisciplinary study around the Island Jan Mayen, hosted by the Royal Netherlands Navy with the ocean patrol vessel HNLMS Zeeland. Some systematic whale sighting surveys were performed for a number of days. Many species were sighted, but in particular an unexpected large number of minke whales and killer whales was found. Near the coast harbour porpoises were observed. Northern bottlenose whales were not found to be present in this season.

> ESOMM conference 2014. Frans-Peter Lam organized the international meeting Effects of Sound in the Ocean on Marine Mammals (ESOMM), held in September 2014 Amsterdam. Marije Siemensma (Marine Science and Communication) was co-organizer.

An impact assessment of effects of clearance of historical unexploded ordnance on the harbour porpoise in the Southern North Sea was carried out for the Netherlands Ministry of Defence. The work was carried out by a collaboration between TNO, IMARES and SEAMARCO.

The ZKO project "Effects of underwater noise on fish and marine mammals in the North Sea".

[<http://www.nwo.nl/projecten.nsf/pages/2300168538>] is done in collaboration of TNO, IMARES and SEAMARCO.

The objective of one of the PhDs involved is to develop the knowledge required for calculating sound maps of biological relevance for the Dutch North Sea.

Michael Ainslie represents NL on the EC expert Technical Group Underwater Noise "TG Noise". This Working Group was set up by the EC to advise Member States on interpretation of Descriptor 11 and its two indicators (11.1.1 and 11.2.1).

In 2014 TNO has been involved in a large number of national and international meetings concerned with among others: acoustical terminology, noise from ships and pile driving, deep ocean ambient noise, noise reduction. This is done in the framework of an international network of experts.

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> References:

Alves A., Antunes R., Bird A., Tyack P., Miller P.J.O., Lam F.P.A. & Kvasdheim P.H. (2014) Vocal matching of naval sonar signals by long-finned pilot whales (*Globicephala melas*). *Marine Mammal sci* (DOI: 10.1111/mms.12099).

Antunes R., Kvasdheim P.H., Lam F.P.A., Tyack, P.L., Thomas, L., Wensveen P.J. & Miller P.J.O. (2014) High response thresholds for avoidance of sonar by free-ranging long-finned pilot whales (*Globicephala melas*). *Mar. Poll. Bull.* (DOI: 10.1016/j.marpolbul.2014.03.056)

Kastelein, R.A., Hoek, L., Gransier, R., Rambags, M. & Claeys, N. (2014) "Effect of level, duration, and inter-pulse interval of 1-2 kHz sonar signal exposures on harbor porpoise hearing," *J. Acoust. Soc. Am.* 136, 412-422. DOI: <http://dx.doi.org/10.1121/1.4883596>.

Kastelein R.A., Schop J., Gransier R., Steen N. & Jennings N. (2014) "Effect of series of 1-2 kHz and 6-7 kHz up-sweeps and down-sweeps on the behavior of a harbor porpoise (*Phocoena phocoena*)," *Aquatic Mammals* 40(3), 232-242, DOI 10.1578/AM.40.3.2014.232.

Kastelein, R.A., Schop, J., Gransier, R., and Hoek, L. (2014) "Frequency of greatest temporary hearing threshold shift in harbor porpoises (*Phocoena phocoena*) depends on the noise level," *J. Acoust. Soc. Am.* 136, 1410-1418, DOI: 10.1121/1.4892794.

Kvasdheim P., Lam FP., Miller P., Wensveen P., Visser F., Sivle L.D., Oudejans M., Kleivane L., Curé C., Ensor P., van Ijsselmuide S. & Dekeling R. (2014) Behavioural responses of cetaceans to naval sonar signals - the 3S-2013 cruise report. FFI-rapport 2014/00752. (<http://rapporter.ffi.no/rapporter/2014/00752.pdf>).

Kastelein R.A., Hoek L., Gransier, de Jong, Terhune & Jennings (2014) Hearing thresholds of a harbor porpoise (*Phocoena phocoena*) for playbacks of seal scarer signals, and effects of the signals on behavior, *Hydrobiologia*, September 2014

Miller P.J.O., Antunes R., Wensveen P., Samarra F.I.P., Alves A.C., Tyack P., Kvasdheim P.H., Kleivane L., Lam F. P., Ainslie M. & Thomas L. (2014) Dose-response relationships for the onset of avoidance of sonar by free-ranging killer whales. *J. Acoust. Soc Am.* 135, 975-993

Özkan Sertlek, H. & Ainslie, M.A. (2014) A depth-dependent formula for shallow water propagation. *The Journal of the Acoustical Society of America*, 136, 573-582 (2014), DOI:<http://dx.doi.org/10.1121/1.4884762>

Shamir L., Yerby C., Simpson R., von Benda-Beckmann A., Tyack P., Samarra F., Miller P., Wallin J. (2014) Classification of large acoustic datasets using machine learning and crowdsourcing: Application to whale calls *J. Acoust. Soc Am.* 135, 953 <http://dx.doi.org/10.1121/1.4861348>

van der Schaar M., Ainslie M.A., Robinson S.P., Prior M.K. & André M. (2014) Changes in 63 Hz third-octave band sound levels over 42 months recorded at four deep-ocean observatories, *Journal of Marine Systems* 130, 4-11.

Visser F., Miller P.J.O., Antunes R.N., Oudejans M.G., Mackenzie M.L., Aoki K., Lam F.P.A., Kvasdheim P.H., Huisman J. & Tyack P.L. (2014) The social context of individual foraging behaviour in long-finned pilot whales (*Globicephala melas*). *Behaviour* (DOI: 10.1163/1568539X-00003195).

von Benda-Beckmann, A.M., Wensveen P.J., Kvadsheim P.H., Lam F.P.A., Miller P.J.O., Tyack P.L. & Ainslie M.A. (2014) Modelling effectiveness of gradual increases in source level to mitigate effects of sonar on marine mammals. *Cons. Biol.* DOI: 10.1111/cobi.12162

Wensveen P. J., Huijser L.A.E., Hoek L. & Kastelein R.A. (2014) "Equal latency contours and auditory weighting functions for the harbour porpoise (*Phocoena phocoena*)," *J. Exp. Biol.* 217, 1-11 DOI:10.1242/jeb.091983.

> Conference Proceedings:

Binnerts B., von Benda-Beckmann A.M. & van Beek P.J.G. (2014) Underwater sound due to a subsea high speed turbo compressor, In Papadakis, JS Bjorno, L., Proceedings 2nd International Conference and Exhibition on Underwater Acoustics, UA2014, 22-27 June, Rhodes, Greece, 265-270

Colin M.E.G.D., Binnerts B., Ainslie M.A., Benda-Beckmann A.M., Booth C., Bouton N., ... & Slabbekoorn H.W. (2014) Ship sound mapping in the North Sea. In Papadakis, JS Bjorno, L., Proceedings 2nd International Conference and Exhibition on Underwater Acoustics, UA2014, 22-27 June, Rhodes, Greece, 871-878.

Sertlek H.O., Aarts G., Brasseur S., Slabbekoorn H., Cate C. T., von Benda-Beckmann A. M., & Ainslie M.A. (2014) Sound maps of the Dutch North Sea for natural and anthropogenic sound sources. In Papadakis, JS Bjorno, L., Proceedings 2nd International Conference and Exhibition on Underwater Acoustics, UA2014, 22-27 June, Rhodes, Greece, 903-910.

van Beek P., Binnerts B., Nennie E. & von Benda-Beckmann S. (2014) Underwater sound and vibrations due to oil & gas activities. Proceedings of the ASME 2014 33rd International Conference on Ocean, Offshore and Arctic Engineering, OMAE2014, June 8-13, 2014, San Francisco, California, USA.

> Other reports:

ANSI/ASA S1.1-2013 Acoustical Terminology, Acoustical Society of America (New York, 2014)

Dekeling R.P.A., Tasker M.L., Van der Graaf A.J., Ainslie M.A, Andersson M.H., André M., Borsani J.F., Brensing K., Castellote M., Cronin D., Dalen J., Folegot T., Leaper R., Pajala J., Redman P., Robinson S.P., Sigray P., Sutton G., Thomsen F., Werner S., Wittekind D. & Young J.V. (2014) Monitoring Guidance for Underwater Noise in European Seas, Part I: Executive Summary, JRC Scientific and Policy Report EUR 26557 EN, Publications Office of the European Union, Luxembourg, 2014, doi: 10.2788/29293

Dekeling R.P.A., Tasker M.L., Van der Graaf A.J., Ainslie M.A, Andersson M.H., André M., Borsani J.F., Brensing K., Castellote M., Cronin D., Dalen J., Folegot T., Leaper R., Pajala J., Redman P., Robinson S.P., Sigray P., Sutton G., Thomsen F., Werner S., Wittekind D. & Young J.V. (2014) Monitoring Guidance for Underwater Noise in European Seas, Part II: Monitoring Guidance Specifications, JRC Scientific and Policy Report EUR 26557 EN, Publications Office of the European Union, Luxembourg, 2014, doi: 10.2788/29293

Dekeling R.P.A., Tasker M.L., Van der Graaf A.J., Ainslie M.A, Andersson M.H., André M., Borsani J.F., Brensing K., Castellote M., Cronin D., Dalen J., Folegot T., Leaper R., Pajala J., Redman P., Robinson S.P., Sigray P., Sutton G., Thomsen F., Werner S., Wittekind D. & Young J.V. (2014) Monitoring Guidance for Underwater Noise in European Seas, Part III: Background Information and Annexes, JRC Scientific and Policy Report EUR 26557 EN, Publications Office of the European Union, Luxembourg, 2014, doi: 10.2788/29293

2.2 Ship Strike Incidents

Please list all known incidents and provide information separately for each

	Date	Species	Type of Injury	Fatal Injury (Yes/No)	Type of Vessel (length, tonnage, speed)	Location (coordinates)	More Information (name, email)
Incident	none						
Incident							
Incident							
Incident							www.walvisstrandingen.nl
Incident							www.walvisstrandingen.nl
Incident							
Incident							
Incident							

Incident							
Incident							

2.3 Major Incidents

Major Incidents Affecting Significant Numbers of Cetaceans (two or more animals)

	Date	Location	Type of Incident	Further Information
Incident	none			
Incident				

2.4 Pollution and Hazardous Substances

Please report on main types of pollution and hazardous substances (including source, location and observed effects on cetaceans). Please provide information on any new measures taken to reduce pollution likely to have an impact.

> Contaminant concentrations (PCBs, organotin, PFOS) are analysed in beached *P. phocoena* (neonates and juveniles) (2007-ongoing). A pilot study shows that chemical profiles of harbour porpoises that beached in the Netherlands may differ from those stranding along the Danish coastline (Van den Heuvel-Greve et al., 2014).

> Reference:

Van den Heuvel-Greve M.J., Kwadijk C. & Kotterman M. (2014) Contaminants in beached harbour porpoises in the Netherlands; blubber quality, neonates and chemical profiles (in Dutch). IMARES report C113/14

2.5 Other Forms of Disturbance

Please provide any other relevant information, e.g. relating to recreational activities affecting cetaceans.

> none

Marine Protected Areas

Marine Protected Areas for Small Cetaceans

3.1 Relevant Information

Please provide any relevant information on measures taken to identify, implement and manage protected areas for cetaceans, including MPAs designated under the Habitats Directive and MPAs planned or established within the framework of OSPAR or HELCOM.

> In the Dutch Continental Shelf and Coastal Waters, six sites have been identified as marine protected areas. Three offshore areas; Dogger Bank (Doggersbank), Cleaver Bank (Klaverbank) and Frisian Front (Friese Front), and three in the coastal zone; Noordzeekustzone in the north and Voordelta 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 and Birds Directives. All of these marine protected areas, except the Voordelta and Frisian Front, have been designated as a special protection zone for the harbor porpoise. The three coastal areas were designated by the Dutch minister. The three offshore areas will follow later, probably by the end of 2015.

The areas 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, because the protection of the harbour porpoise will cover the whole Dutch EEZ. The conservation target will probably be formulated as follows: "Maintain the extent and quality of the habitat in order to maintain the population in a sustainable condition".

3.2 GIS Data

Please indicate where GIS data of the boundaries (and zoning, if applicable) can be obtained (contact email / website).

> Noordzee

<http://www.noordzeeloket.nl/projecten/noordzee-natura-2000/>

official GIS shapefiles for Natura 2000 gebieden:

<http://nationaalgeoregister.nl/geonetwork/srv/dut/search#|8829e5dd-c861-4639-a6c8-fdbb6e3440d2>

database Natura 2000 species and habitats:

<http://www.synbiosys.alterra.nl/natura2000/default.aspx?main=natura2000>

general information:

www.natura2000.nl

map of the European Natura 2000 network:

<http://natura2000.eea.europa.eu/#>

http://ec.europa.eu/maritimeaffairs/atlas/maritime_atlas/#lang=EN;bkgd=5:1;mode=1;pos=11.754:54.605:4;theme=14:1:1;

Surveys and Research

4.1 Abundance, Distribution, Population Structure

Overview of Research on Abundance, Distribution and Population Structure

> Aerial surveys to estimate the abundance of Harbour porpoises were conducted on the Dutch Continental Shelf in July 2014 (Geelhoed et al., 2014). These surveys were conducted along predetermined track lines using distance sampling methods in four areas: A "Dogger Bank", B "Offshore", C "Frisian Front" & D "Delta". Between 11 and 16 July the entire Dutch Continental Shelf (DCS) was surveyed. 229 sightings of 273 individual Harbour Porpoises were collected. Porpoise densities varied between 0.37-3.08 animals/km² in the areas A-D. The overall density on the entire Dutch Continental Shelf was 1.29 animals/km². The total numbers of Harbour Porpoises on the Dutch Continental Shelf (areas A-D) in March were estimated at ca. 77 000 animals (C.I.: 43 000-154 000). In total 24 sightings of other marine mammal species were made. These comprised 24 sightings of in total 24 single seals, which remained unidentified except 1 Grey Seal *Halichoerus grypus* on 16 July. Three individual Minke whales were seen on effort in the Dogger Bank area on 12 July. One pod of three White-beaked Dolphin was recorded the same day.

> The NZG Marine Mammals Database is part of the Dutch Seabird Group (NZG) (established by Kees Camphuysen). Its aim is to collect all sightings of marine mammals in and around the Netherlands. The main number of sightings come from two research programs: seawatching and offshore seabird surveys. More information is available at: www.trektellen.nl

> Strandings (live and dead) are collated in a database presented at the website www.walvisstrandingen.nl (see section C). Records of live sightings as well as dead animals are also found at www.waarneming.nl and www.telmee.nl.

> The Rugvin foundation is a volunteer based organisation conducting cetacean surveys in the Southern North Sea and Oosterschelde and member of the Atlantic Research Coalition (ARC). In 2014 they continued their monitoring programme for the Stena ferry line platforms between Hoek van Holland and Harwich. In 2014, 245 harbour porpoises were counted. There were no undetermined individuals.

> The Rugvin Foundation has been collecting data in the Oosterschelde using C-PODs (passive acoustic data loggers), on both sides of the storm surge barrier, that sits between the North Sea and the Oosterschelde. The project was finalized early 2014.

> References:

Geelhoed S.C.V., Lagerveld S., Verdaat J.P. & Scheidat M. (2014) Marine mammal surveys in Dutch waters in 2014. IMARES Report number C180/14

> .

4.2 Technological Developments

New Technological Developments

> none

4.3 Other Relevant Research

> none

Use of Bycatches and Strandings

Post-Mortem Research Schemes

5.1 Contact Details

Contact details of research institutions and focal point

> Department of Pathobiology, Faculty of Veterinary Medicine, Utrecht University, Yalelaan 1, 3584 CL Utrecht, The Netherlands. 0031 30 253 3591

5.2 Methodology

Methodology used (reference, e.g. publication, protocol)

> T. Kuiken, M. García Hartmann M Proceedings of the first ECS workshop on cetacean pathology; dissection techniques and tissue sampling. ECS Newsletter 17, (1991) Special Issue.

> 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 Jauniaux and Siebert

5.3 Samples

Collection of samples (type, preservation method)

> Depending on conservation state:

1. A variety of specific organs/tissues or tissues with pathologic changes. Depending on the type of research formalin-fixed, paraffin-embedded, or frozen to -20°C (-80°C for virology research)
2. Gastric contents (frozen to -20°C handed to IMARES)
3. Liver, fat and muscle (frozen to -20°C handed to IMARES)
4. Skin (ethanol)
5. Teeth (water or frozen to -20°C handed to IMARES)
6. Parasites (70% alcohol)
7. Swabs from the genital openings

5.4 Database

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

> Excel, Access

5.5 Additional Information

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

> All strandings are collated in a database and shown on the website of Naturalis (www.walvisstrandingen.nl). In 2014, 581 animals were stranded: 573 harbour porpoises, 2 fin whales, 1 short-beaked common dolphin and 1 long-finned pilot whale were registered. Furthermore, bone segments were found of orca (1 lower jaw), common bottle nose dolphin (1 lower jaw), white beaked dolphin (1 lower jaw) and a common minke whale (1 skull).

Activities and Results

5.6 Necropsies

Number of necropsies carried out in the reporting period

	Recorded cause of death	Number
<i>Phocoena phocoena</i>	see section 5.7	23
<i>Tursiops truncatus</i>		
<i>Delphinus delphis</i>		

Stenella coeruleoalba		
Grampus griseus		
Globicephala melas		
Globicephala macrorhynchus		
Lagenorhynchus albirostris		
Lagenorhynchus acutus		
Orcinus orca		
Hyperoodon ampullatus		
Mesoplodon bidens		
Kogia breviceps		
Other (please specify under number)		
Other (please specify under number)		
Other (please specify under number)		
Other (please specify under number)		
Other (please specify under number)		
Other (please specify under number)		

5.7 Other Relevant Information

Please provide any other relevant information on post-mortem / stranding schemes

> 23 harbour porpoises from 2014 were necropsied at the Department of Pathobiology of the University of Utrecht. These were 7 adults, 9 juveniles and 7 neonates. 12 were male, 11 were female. Of the six adult females 4 were lactating and one was pregnant.

The cause of death was: bycatch (5 in total; 2 certain, 1 highly probable, one possible); Grey seal attack (6); infectious disease (8); lack of food (4 in total; 2 emaciation with one unknown cause and one with severe parasites, also 2 cases of starvation of neonates) and 1 case of birth problems.

An additional 28 animals from the region of the Oosterschelde and Westerschelde were analysed specifically for diet research.

> Between January and December 2014 Electronic Monitoring systems have been installed on a number of Dutch set net vessels. During this time two bycaught animals have been called in by fishermen and brought ashore for further pathological research. Both animals were juvenile males. Necropsy findings suggest that asphyxiation as a result of bycatch was the cause of death.

Relevant New Legislation, Regulations and Guidelines

6.1 New Legislation, Regulations and Guidelines

Please provide any relevant information

> Marine Science and Communication and IMARES provided an internal report on the current status of the implementation of the Dutch harbour porpoise conservation plan (Camphuysen & Siemensma, 2011) for the Ministry of Economic Affairs.

> References:

Camphuysen CJ & ML Siemensma (2011) Conservation plan for the Harbour Porpoise *Phocoena phocoena* in The Netherlands: towards a favourable conservation status. NIOZ Report 2011-07, Royal Netherlands Institute for Sea Research, Texel.

Ministerie van Infrastructuur en Milieu ism Ministerie van Economische Zaken, Landbouw en Innovatie (2014) Ontwerp Mariene strategie voor het Nederlandse deel van de Noordzee 2012-2020 Deel 2. KRM-Monitoringprogramma

Public Awareness and Education

7.1 Public Awareness and Education

Please report on any public awareness and education activities to implement or promote the Agreement to the general public and to fishermen.

> Vereniging Kust & Zee, the Dutch section of the Coastal & Marine Union (EUCC) annually publishes the printed "Kust en Zeegids". Furthermore the EUCC regularly distributes digital newsletters with relevant information on their projects. It also communicates news through its website www.kustzee.nl and www.eucc.nl.

> The EUCC is part of the ECNC group <http://www.ecncgroup.eu> which is the European Expertise Centre for Biodiversity and Sustainability. In 2013 they established the 'Healthy Seas, a Journey from Waste to Wear' initiative in collaboration with Aquafil and Star Sock, which continued in 2014. The main objective of the Healthy Seas initiative is to remove waste, in particular fishing nets and other marine litter, from the seas for the purpose of recycling these into textile products.

> IVN Consulentenschap Zeeland, the National Park Oosterschelde in collaboration with Rugvin Foundation and Marine Science & Communication initiated a project on the Harbour Porpoise in the Oosterschelde Estuary. The project "Welcome Porpoise" has continued in 2014 and aims to make visitors of the National Park aware of porpoises in the Oosterschelde (<http://www.np-oosterschelde.nl/>). In September 2012 a brochure as one of the project results has been presented to visitor of the National Park Oosterschelde. Focus of this brochure is to learn visitors where to observe Harbour Porpoises, from either boat or land and how to recognise this small whale. Further more the brochure informs about the Harbour Porpoise in general.

> The Rugvin Foundation also informs the public via posters on the Stena Line ferries about how to observe harbour porpoises (see B, 4.1).

> In 2011, the North Sea Foundation, a Dutch NGO, has initiated two projects to raise awareness on marine litter, MyBeach <http://www.mybeach.info/> and Coastwatch <http://www.coastwatch.nl>. MyBeach is a special area at the beach, next to a beach pavilion, where visitors keep the beach clean. You can recognize this area by information boards, bins and beach flags. Beach cleanups and litter counts are organized here, with use of the 'Strandscanner', a special app for the smartphone to count specific litter items. This project continued in 2014.

Possible difficulties encountered in implementing the Agreement

Difficulties in Implementing the Agreement

Please provide any relevant information

> None