Agenda Item 2

Review of New Information on Threats to Small Cetaceans

Document NR3

2018 Annual National Report: The Netherlands

Action Requested

Take note

Submitted by

The Netherlands



ASCOBANS National Reporting Format

1 January 2016 – 31 December 2018

As outlined in <u>ASCOBANS Resolution 8.1</u> on National Reporting, this format will cover the following Sections of the Annex to the Resolution, in addition to the standard Sections I and VII:

- Disturbance, incl. potential physical impacts (Section II B5, B6, B7)
- Habitat Change and Degradation incl. potential physical impacts (Section II C10, C11, C12, C13, C14)
- Area-based Conservation / Marine Protected Areas (Section II E16, E17)
- Education and outreach (Section VI A)

Exceptionally, the reporting period for questions here is 1 January 2016 – 31 December 2018, unless stated otherwise, to accommodate the requirements of the next Meeting of Parties to ASCOBANS, scheduled for 2020. The reports will inform discussion at the 25th Meeting of the Advisory Committee (AC25), which will be held in September 2019.

Where possible, National Coordinators should consult with, or delegate to, experts for particular topics so as to ease the reporting burden. The Secretariat has provided a list of potential country contacts as a starting point. Once the baseline information is in place, it should become easier to update in the future. Please include relevant web links where requested.

Please note that numbering of the sections refers to numbering as in Resolution 8.1. This means the first section in the current form is number 5 (Cetacean Watching Industry) and not number 1.

In your country, for the reporting period from 2016 to 2018, what does this report reveal about:

- The most successful aspects of implementation of the Agreement? (list up to five items)
 SCANSIII survey in 2016
- 2. The greatest challenges in implementing the Agreement? (list up to five items)
 Maintaining voluntary networks for data collection on stranded animals
- The main priorities for future implementation of the Agreement? (list up to five items)
 Development of the new Dutch Conservation Plan for Harbour porpoise

Section I: General Information

A. Country Information

1. Name of Party / Non-Party Range State: The Netherlands

2. Details of the Report Compiler

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Does the Report Compiler act as ASCOBANS National Coordinator (i.e. focal point)?
No ⊠ Yes

3. Details of contributor(s)

Topic(s) contributed to: Disturbance, Habitat Change and Degradation, Area-based Conservation / Marine Protected Areas & Education and outreach Name: Meike Scheidat Function: Senior Researcher Organization: Wageningen Marine Research Postal Address: Postbus 68, NL-1970 AB IJmuiden, The Netherlands Telephone: +31 317 487 108, mobile +31 630 459 335 Email: meike.scheidat@wur.nl

Topic(s) contributed to: Disturbance, Habitat Change and Degradation, Area-based Conservation / Marine Protected Areas & Education and outreach Name: Steve Geelhoed Function: Researcher Organization: Wageningen Marine Research Postal Address: Postbus 57, NL-1780 AB Den Helder, The Netherlands Telephone: + 31 612394531 Email: steve.geelhoed@wur.nl

Topic(s) contributed to: Disturbance, Education and outreach **Name:** Frank Zanderink / Annemieke Podt Function: Chairman / Board member Organization: Rugvin Foundation Postal Address: Jeruzalem 31 a, NL-6881 JL Velp, The Netherlands Telephone: +31 (0)26-3635444 Email: rugvinfoundation@gmail.com

Topic(s) contributed to: Disturbance, Habitat Change and Degradation Name: Lonneke IJsseldijk Function: Researcher Organization: Department of Pathobiology, Faculty of Veterinary Medicine, Utrecht University Postal Address: Yalelaan 1, NL-3584 CL, Utrecht The Netherlands Telephone: T +31 30 253 5312, M +31 6 244 556 98 Email: L.L.IJsseldijk@uu.nl

Topic(s) contributed to: Education and outreach Name: Marije Siemensma Function: Organization: Marine Science & Communication Postal Address: Bosstraat 123, NL-3971 XC Driebergen-Rijsenburg, The Netherlands Telephone: +31 6 16 830 430 Email: m.siemensma@msandc.nl

Topic(s) contributed to: Area-based Conservation / Marine Protected Areas Name: Peter Heslenfeld/Inger van den Bosch Function: Policy officer Organization: Rijkswaterstaat Water Verkeer en Leefomgeving Postal Address: Postbus 2232, NL-3500GE Utrecht, The Netherlands Telephone: +316-52014721 Email: peter.heslenfeld@rws.nl

Topic(s) contributed to: Habitat Change and Degradation Name: Elisa Bravo Rebolledo Function: Researcher Organization: Bureau Waardenburg Postal Address: Varkensmarkt 9, NL-4100 AJ Culemborg, The Netherlanda Telephone: +31 (0)6 45 16 20 15 Email: <u>e.l.bravorebolledo@buwa.nl</u>

Topic(s) contributed to: Habitat Change and Degradation Name: Sander de Jong Function: Policy officer Organization: Rijkswaterstaat Zee en Delta Postal Address: Telephone: Email: sander.de.jong@rws.nl

Topic(s) contributed to: Disturbance Name: Peter Paternotte Function: Organization: Netwerk Waterrecreatie-Stichting Waterrecreatie Nederland Postal Address: Telephone: Email: ppenaf@planet.nl

Topic(s) contributed to: Disturbance Name: Willem Dekker Function: Organization: Regioteam Noordzee Watersportverbond Postal Address: Telephone: Email: <u>wadek@planet.nl</u>

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Section II: Habitat Conservation and Management (threats and pressures on cetaceans)

B. Disturbance (incl. potential physical impacts)

5. Cetacean Watching Industry

AIM: to determine if the developing cetacean watching industry poses a threat to small cetaceans.

Relevant Resolutions: 8.9, 8.2, 8.1, 6.1, 5.4

Whale and dolphin watching is a global industry that can provide socio-economic benefits to local communities by attracting tourism, as well as strengthening public awareness of conservation needs. However, it also has the potential of being harmful when it interferes with the behaviour of animals in their natural environment and may even lead to injury or death. As the cetacean watching industry is still scarcely developed in some countries, collecting this data now allows tracking the development of the industry.

It is of particular importance to ASCOBANS to obtain an overview of the current scale of the activities and to monitor the development of the industry in the future. This is done by quantifying the number and locations of operators, reporting negative interactions and providing information on the development and implementation of any guidelines regarding cetacean watching.

Filling out this section accurately and completely will help to detect any indications of potential threats, allow timely mitigation action and enable Parties and Non-Party Range States to work towards a coordinated approach regarding the development of cetacean watching guidelines in the Agreement area.

Note: We are here only addressing commercial cetacean watching activities which take place from vessels and include viewing of small cetacean species. Operators are defined as those offering trips with a <u>primary focus</u>: they advertise specifically with the aim to see small cetaceans, or a <u>secondary focus</u>: they advertise either for other taxa, such as birds or seals, or large cetaceans, or more general for wildlife, but mention the opportunity to see small cetaceans.

Questions:

5.1. Do you have any commercial small cetacean watching industry operating in your country?

- □ No. Go to Question 5.3.
- Yes. Continue with Question 5.2.
- 5.2. In the table below, provide the sub-regions, ports and operators from which commercial cetacean watching takes place. Please tick the boxes if small cetacean watching is a primary and/or secondary focus of the operators and, in the first case what the target species are.

OSPAR / HELCOM	Dout	Operator	small cetacean watching			Link to website or	
Sub-region	Port		Prim	Primary focus / target species		contact details	
Oll Southern North Sea	Neeltje Jans, Zeeland Colijnplaat, Eastern Scheldt	Delta Safari		HP Harbour porpoise Choose a species Choose a species Choose a species		https://www.deltasafari.nl /bruinvis-watchen-in- zeeland/ https://www.deltasafari.nl /reizen/bruinvissen-safari- oosterschelde/ info@deltasafari.nl	
Choose a region				Choose a species Choose a species Choose a species Choose a species			

Overview of commercial small cetacean watching activities per sub-region.

Regions: This refers to the sub-regions as defined by the HELCOM and OSPAR. An overview of these and a map can be found in ANNEX A. **Target species:** chose from drop-down list provided, based on ASCOBANS list, see ANNEX B.

5.3. Does your country have a definition of the term 'harassment'?¹

- \Box No.
- ☑ **Yes.** Provide definition in table below:

The Netherlands has a number of regulations relating to Animal Welfare. These regulations define harassment, but mainly relate to domesticated animals. For wild animals the Nature Conservation Act, which follows the EU Habitats Directive directly, defines deliberate disturbance.

5.4. Have there been any incidents of harassment to small cetaceans in the context of commercial cetacean watching reported to authorities?

 \boxtimes No.

□ **Yes.** Provide information on table below.

Date:

In what context did this incidence occur?

What was the outcome for (a) the animal or (b) human? For example: behavioural response, injury, death.

Describe any legal procedures / court proceedings / convictions that took place:

Who is the responsible authority to receive such reports?

Link any link to websites or documentations of this incident:

If there were several reported incidents of harassment, copy the table and add another one.

¹ For example, the US Marine Mammal Protection Act uses the term harassment, and defines two levels: Level A harassment means any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild. Level B harassment refers to acts that have the potential to disturb (but not injure) a marine mammal or marine mammal stock in the wild by disrupting behavioural patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering. NB. The UK uses the term 'disturbance' in its legislation.

- 5.5. Does your country have any mitigation measures (codes of conduct/guidelines) in place in the event of disturbance or harassment in the context of commercial cetacean watching?
 - No.
 - \Box Yes. Please add below the type of measures and relevant information:

Disturbance or harassment of cetaceans in general falls under the Nature Conservation Act <u>https://business.gov.nl/regulation/code-conduct-nature-conservancy-act/</u> which is in place since 2017, and replaces

- The Nature Conservancy Act 1998. This act protected nature areas.
- The Flora and Fauna Act. This act protected wild animals and plants.
- The Forestry Act. This act protected forests.

5.6. Does your country have any operators that offer swimming with dolphins (or other small cetaceans)?

In some parts of the world this has become an important tourism industry with potential impacts for both cetaceans and swimmers. Although scarcely developed, it has occurred within the ASCOBANS Agreement Area, and requires at least background monitoring. Sometimes incidents occur and can lead to harm for cetaceans and/or swimmers.

- \boxtimes No. Go to Question 5.9.
- \Box **Yes**. Provide information in the table below.

Where (location):
Species:
Operator + link to website:
Any reported incidents between cetaceans or swimmers?
□ No.
□ Yes. Please describe:

If several incidences have been reported please copy this table.

5.7. List any incidents of harassment to cetaceans in your country in the context of swimming with small cetaceans reported to authorities – and the outcome if known (behavioural response, injury, death, any court proceedings).

Date: In what context did this incidence occur? What were the outcomes for (a) the animals or (b) humans? For example: behavioural response, injury, death.

Describe any legal procedures / court proceedings / convictions that took place:

Who is the responsible authority to receive such reports?

Link any link to websites or documentations of this incident:

If there were several reported harassments, copy the table and add.

- 5.8. Does your country have any mitigation measures (codes of conduct/guidelines) in place in the event of disturbance or harassment during swimming with small cetaceans in place?
 - □ No.
 - □ **Yes.** List below the type of measures and relevant information:

This may include regional measures.

Not specific for this case

5.9. Are there any solitary sociable dolphin interactions in your country?

Occasionally, individual solitary dolphins may associate with humans, resulting in increased interactions between the two which may lead to impacts upon either. Sometimes incidents occur and can lead to harm for cetaceans and/or swimmers.

\boxtimes No. Go to Question 5.12.

 \Box **Yes**. Provide information in the table below:

Where (location)	
Date	
Species	
Links to websites	
Any reported incidents between	
cetaceans or swimmers	

If several interactions have been reported please copy this table.

5.10. List any incidents of harassments to small cetaceans in the context of interactions with solitary sociable dolphins reported to authorities – and the outcome if known (behavioural response, injury, death, any court proceedings).

Date:
In what context did this incidence occur?
What were the outcomes for (a) the animals or (b) humans? For example: behavioural response, injury, death.
Describe any legal procedures / court proceedings / convictions that took place:
Who is the responsible authority to receive such reports?

Link any link to websites or documentations of this incident:

If there were several reported incidents, copy the table and add.

5.11. Does your country have any mitigation measures (codes of conduct/guidelines) in place in the event of interactions with solitary sociable dolphins?

imes No.

□ **Yes.** List below the type of measures and relevant information:

Not specific for this case.

This information will enable comparisons to be made across the Agreement area, and ultimately may lead to the provision of overall, consistent guidelines.

5.12. List initiatives/projects (including PhD, MSc) in 2016-2018 involving studies of the cetacean watching industry, "swim with small cetacean" operations, solitary sociable dolphin interactions and their possible effects on cetaceans (incl. title, organisation, lead author).

Provide weblinks if available.

5.13. List publications (reports, theses, papers in journals, books) from any study in your country in 2016-2018 relating to small cetacean watching industry, swim with dolphins (or small cetaceans) operations, solitary sociable dolphin interactions and their possible effects on cetaceans.

N/A

Provide weblinks if available.

5.14. Please provide web links to other relevant information in your country on cetacean watching industry, swim with dolphins (or small cetaceans) operations, solitary sociable dolphin interactions and their possible effects on cetaceans for this section.

Description	Web link

N/A	

5.15. Has there been any other notable instances / issues related to cetacean watching industry in 2016-2018 in your country?

no

5.16. Is the perceived level of pressure from commercial small cetacean watching in your country increasing, decreasing, staying the same or unknown?²

To be done on a species by species basis where applicable (see Annex B) and by region where relevant (see Annex A).

Scientific name of the species	Increasing	Decreasing	Staying the same	Unknown
Phocoena phocoena			Х	

□ **Not applicable.** Comments:

B. Disturbance (incl. potential physical impacts)

6. Recreational Sea Use

AIM: to determine whether recreational sea use is detrimental to small cetaceans and, if so, to identify types of activity and areas of concern.

Relevant Resolutions: 8.9, 8.2, 8.3, 8.1, 7.1, 6.1, 5.4

Recreational use of the sea by humans includes a wide variety of activities, some of which are known to have a potential negative impact on small cetaceans. This includes RIBs (rigid-hulled inflatable boats), hard-hulled boats exceeding 10 knots in speed, yachts and personal water crafts such as jet skis and kayaks; and excludes recreational fishing and sea-angling.

Interactions can cause animals to change behaviour and move away, but can also have more serious impacts, such as injury or even death due to collision. ASCOBANS has agreed on a number of resolutions that highlight the importance to review all available information on recreational use of the sea. Obtaining an overview of best practices and guidelines will enable comparisons to be made across the Agreement Area, and ultimately may lead to the provision of overall, consistent guidelines that might be developed at a regional or national level. In this section we strive to obtain an overview of potential risk areas and national sources that have data on incidents with small cetaceans related to recreational sea use.

Questions:

6.1. Are data on recreational sea use available for your country?

- □ No. Go to Question 6.3.
- \boxtimes **Yes.** Provide information in the table below:

 $^{^{\}rm 2}$ This is a question based on Resolution 8.1, Annex 1.

Type of information: The Maritime Research Institute Netherlands (MARIN) is working on estimates on recreational vessels, due in the last quarter of 2019 **Web link or other relevant link to data:** (where can this information be found)

6.2. Is information on main areas of recreational sea use available for your country?

Many range states are mapping human activities to fulfil obligations under the EU Maritime Spatial Planning Directive, MSFD, OSPAR, and HELCOM; this information is relevant (though often not readily accessible) to ASCOBANS in understanding the extent and trends of human activities potentially impacting small cetaceans.

- imes No.
- □ **Not applicable.** Comments:
- □ **Yes.** Provide information in the table below:

Which area: (Please refer to the overview of OSPAR & HELCOM sub-regions in Annex A, if possible.)
Type of information: (e.g. maps, GIS files, reports)
Is the data available online? No. Comments: Ves. Provide link:

- 6.3. Was there any incidents of disturbance or harassment to small cetaceans in relation to recreational sea use in your country?
 - \boxtimes No.
 - □ Unknown.
 - □ **Yes.** Provide information in the table below:

Date:	Location:		
In what context did this incidence occur? For example: what kind of recreational activity.			
What were the outcomes for (a) the animals or (b) humans? For example: behavioural response, injury, death.			
Description of any legal procedures / court proceedings / convictions:			
Link to websites or any documentations of this incident:			

- 6.4. Does your country have any mitigation measures (codes of conducts/guidelines/laws/rules) in place in the event of disturbance or harassment of cetaceans through recreational sea use?
 - □ No.
 - \boxtimes **Yes.** Provide information in table below:

The *Nature Conservation Act* requires an assessment of new activities that can potentially cause negative effects in harbour porpoises. Mitigation measures need to be taken when effects are expected.

6.5. List initiatives/projects (including PhD, MSc) in 2016-2018 involving studies on the disturbance or harassment of cetaceans through recreational sea use in your country (incl. title, organisation, lead author, web link).

None to our knowledge

6.6. List publications (reports, theses, papers in journals, books) in 2016-2018 from any study in your country relating to disturbance or harassment of cetaceans through recreational sea use .

6.7. Please provide web links to other relevant information for this section.

Description	Web link
None to our knowledge	

6.8. Have there been any other notable instances / issues in your country in the reporting period?

None to our knowledge

6.9. Is the perceived level of pressure from recreational sea use in your country increasing, decreasing, staying the same or unknown?³

To be done on a species by species basis where applicable (see Annex B) and by region where relevant (see Annex A).

Scientific name of the species	Increasing	Decreasing	Staying the same	Unknown
Phocoena phocoena				х

□ **Not applicable.** Comments:

B. Disturbance (incl. potential physical impacts)

7. Other Sources of Disturbance

AIM: to identify new sources of disturbance that can be a threat to small cetaceans.

Relevant Resolutions: 8.9, 8.1, 6.1

With human activities in the seas increasing particularly in the coastal zone, overlap of cetacean and human habitat use is not covered by the questions above. A human activity can for example cause a cetacean to change behaviour, or it can cause physical harm or death. This section aims to identify new sources of disturbance that can be a threat to small cetaceans. The issue of noise, for example, is covered under section B3.

7.1. Have there been any incidents of disturbance to small cetaceans in your country, not covered in the items above?

- 🛛 No.
- □ Unknown.
- \Box **Yes.** Please provide information in the table below:

Any incidents of disturbance to cetaceans not covered in Sections B5 or B6 by the report.

Date:	Location:			
Description of the event:				
What were the outcomes for (a) the animals or (b) humans? For example: behavioural response, injury, death.				
Describe and mitigation measures operating:				

³ This is a question based on Resolution 8.1, Annex 1.

Description of any legal procedures / court proceedings / convictions:

Link to websites to relevant information:

7.2. List initiatives/projects (including PhD, MSc) in 2016-2018 involving studies on other sources of disturbance in your country (incl. title, organisation, lead author, web link).

None to our knowledge

7.3. List publications (reports, theses, papers in journals, books) in 2016-2018 from any study in your country relating to other sources of disturbance.

None to our knowledge

7.4. Please provide web links to other relevant information.

Description	Web link

7.5. Has there been any other notable instances / issues in your country the reporting period?

None to our knowledge

C. Habitat Change and Degradation (incl. potential physical impacts)

10. Pollution and hazardous substances (incl. microplastics)

AIM: to illustrate progress, during the reporting period, on understanding, monitoring and mitigating impacts on cetaceans of important and emerging pollution-related hazards.

Relevant Resolutions: 8.9, 8.8, 8.7, 8.4, 8.3, 8.2, 8.1, 7.4, 7.1, 6.1, 5.7

Our oceans have been subject to a wide range of different types of pollution over the last decades. Toppredators such as small cetaceans that feed on higher trophic prey, tend to accumulate many of these potentially hazardous substances. There are a number of contaminants and pathogens that are known or suspected to have impacts on cetacean health, immune status or reproduction. These include for example: polychlorinated biphenyls (PCBs) and other persistent organic pollutants (POPs), oil pollution (polycyclic aromatic hydrocarbons), toxins from harmful algal blooms (HABs), sewage, radionuclides, toxic elements, tri-butyl tin (TBT), morbillivirus, and Brucella. In addition, micro- and nano-plastics are also present in the environment and their impacts are presently poorly understood.

Monitoring can be done in tissues of cetaceans obtained from live animals through biopsies, or from dead animals that are generally found on the shore. Necropsies allow the sampling of different tissues such as blubber, muscle, kidney or liver and these can be analyzed subsequently.

To better understand the impact of contaminants on cetacean health, to detect new emerging hazards and to work towards a common protocol for analyzing sampling Parties are asked to provide information on their programs.

NOTE: Macroplastics and discarded fishing gear are covered under Section C 9 Marine Debris.

Questions:

10.1. Does your country conduct monitoring of pollutants in small cetaceans?

Several pollutants have serious effects on individual cetaceans and can threaten populations. The aim is to capture the nature of existing monitoring and identify gaps in terms of which pollutants are monitored, the extend of this monitoring and the establishment of securely funded long-term data series.

□ No.

Yes.

Any comments:

10.2. Who is carrying out the pollutant monitoring program? Please provide information on the institution(s)/agencies that collect the samples and carry out the analyses. *Copy table if needed.*

Name: Department of Pathobiology, Faculty of Veterinary Medicine, Utrecht University Role in monitoring: *sample collection* Postal Address: Yalelaan 1, NL-3584 CL, Utrecht The Netherlands Contact Person: Lonneke IJsseldijk Telephone: T +31 30 253 5312, M +31 6 244 556 98 Email: L.L.IJsseldijk@uu.nl Weblink:

Name: Wageningen Marine Research Role in monitoring: *analyses* Postal Address: Postbus 77, NL-4400 AB, Yerseke, The Netherlands Contact Person: Martine van den Heuvel-Greve Telephone: +31 317 483 823 Email: martine.vandenheuvel-greve@wur.nl Weblink:

10.3. Select the small cetacean species that were covered by your monitoring program during the reporting period from 2016 to 2018. Mark the year in which the species was sampled with an x.

2016	2017	2018	Species ⁴	2016	2017	2018	Species
х	х	х	Harbour porpoise				Choose a species

Any comments:

10.4. Select the source of your samples (multiple answers possible)

- ⊠ Necropsy from stranding
- Necropsy from bycatch
- □ Sample from live stranding
- □ Biopsy from live animal
- □ Other (specify in comments)

Any comments:

10.5. Select the geographical coverage of your monitoring program (several answers are possible)

⁴ Please refer to Annex B for list of species, including scientific names.

OSPAR Region I Arctic Waters	OSPAR Region IV Bay of Biscay	HELCOM cont.
Norwegian Sea	and Iberian Coast	Gulf of Finland
	N. Bay of Biscay	Northern Baltic Proper
OSPAR Region II Greater North Sea	Iberian Sea	Western Gotland Basin
Dogger Bank	Gulf of Cadiz	Eastern Gotland Basin
🛛 Southern North Sea		Gulf of Riga
Northern North Sea	OSPAR Region V Wider Atlantic	Gdansk Basin
Channel	subregions?	Bornholm Basin
Norwegian Trench		Arkona Basin
Skagerrak	HELCOM	□ Kattegat
	L Bothnian Bay	□ Belt Sea
OSPAR Region III Celtic Sea	Bothnian Sea	□ The Sound
Celtic Sea	Archipelago Sea	
Irish Sea	Åland Sea	
Irish & Scottish W. Coast		

A map of the regions and sub-regions can be found in the Annex A.

10.6. Select the contaminant / pathogen analyses you have conducted for small cetaceans.

POPs (e.g. PCBs)	□ Radionuclides	🗆 Brucella	🛛 Others: potential
			infectious agents
🗆 Oil (e.g. PAHs)	🛛 Toxic elements	☑ Microplastics	□ Others:
□ HAB toxins	🗆 ТВТ	Nanoplastics	□ Others:
□ Sewage	Morbillivirus		

Any comments:

Pathogen analysis is conducted in suspected cases as after macro- and microscopic examination

10.7. Does your country determine microplastics in cetaceans?

□ No. Go to Question 10.9.

Yes. Please provide information in the table below:

Do you have a specific protocol to monitor microplastic in small cetaceans? No Xes

van Franeker, JA, Bravo Rebolledo, EL, Hesse, E, IJsseldijk, LL, Kuhn, S, Leopold, M & Mielke, L, 2018. Plastic ingestion by harbour porpoises *Phocoena phocoena* in the Netherlands: Establishing a standardised method. Ambio 47(4):387–397. <u>https://link.springer.com/article/10.1007%2Fs13280-017-1002-y</u>

There is currently no agreed protocol between Parties. Best practice needs to be established to make sure that all results obtained are comparable between research institutes. In particular, it is essential to avoid contamination of samples during processing, e.g. with airborne microplastic fibres.

10.8. List initiatives/projects (including PhD, MSc) in 2016-2018 in your country involving studies on impact of pollution and hazardous substances (incl. microplastics) on small cetaceans (incl. title, organisation, lead author.

KRM Monitoring Bruinvissen 2018-2020. Wageningen Marine Research. (Project Leader: Steve Geelhoed). Subproject: Contamination analyzes of blubber and tissue samples of harbour porpoises. (primary PCB's and to a lesser extent on PBDE's, HCB, HBCD. PFAS and OTC's.) Lead Scientist: Martine van den Heuvel-Greve (email: martine.vandenheuvel-greve@wur.nl)

Microplastics are quantified by Elisa Bravo Rebolledo

10.9. List publications (reports, theses, papers in journals, books) and other evidence from your country in 2016-2018 relating to the impact of pollution and hazardous substances (incl. microplastics) on small cetaceans.

We need to capture information on new knowledge arising from monitoring schemes or other research projects, especially results which enhance our understanding of impacts of hazardous pollutants and/or assess their known or

likely effects on cetacean population status (e.g. considering PCB concentrations in blubber in relation to threshold for inhibition of reproduction). Where relevant, please report separately per pollutant, species and area.

van Franeker, JA, Bravo Rebolledo, EL, Hesse, E, IJsseldijk, LL, Kuhn, S, Leopold, M & Mielke, L, 2018. Plastic ingestion by harbour porpoises *Phocoena phocoena* in the Netherlands: Establishing a standardised method. Ambio 47(4):387–397. <u>https://link.springer.com/article/10.1007%2Fs13280-017-1002-y</u>

van den Heuvel-Greve, M. J., Kwadijk, C. J. A. F., & Kotterman, M. J. J. (2016). Overdracht van contaminanten van moeder naar jong en chemische profielen in bruinvissen gestrand langs de Nederlandse kust. (Rapport / Wageningen Marine Research; No. C096/16). Wageningen Marine Research.

van den Heuvel-Greve, M. J., IJsseldijk, L., Kwadijk, C., & Kotterman, M. (2017). *Contaminants in harbour porpoises beached along the Dutch coast: A first overview of contaminants in all age classes*. (Wageningen Marine Research rapport; No. C069/17). Yerseke: Wageningen Marine Research. <u>https://doi.org/10.18174/422164</u>

10.10. If applicable, list any additional evidence/data of <u>reduced</u> impacts of pollutants on small cetaceans following implementation of national mitigation measures (e.g. decline of contaminant levels in blubber over time).

10.11. Provide web links to other relevant information to this section.

Description	Web link

10.12. Has there been any other notable instances / issues in your country in the reporting period?

10.13. Is the perceived pressure from pollution and hazardous substances in your country increasing, decreasing, staying the same or unknown?⁵

To be done on a species by species basis where applicable (see Annex B) and by region where relevant (see Annex A).

Scientific name of the species	Increasing	Decreasing	Staying the same	Unknown
Phocoena phocoena				х

□ Not applicable. Comments: Sample size is still small (<50), but PCB levels still above thresholds.

C. Habitat Change and Degradation (incl. potential physical impacts)

11. Ship Strikes

AIM: Understanding the potential risk of ship strike as a cause of injury/death in small cetaceans.

Relevant Resolutions: 8.9, 8.2, 8.1, 6.1, 5.4

Ship strikes are collisions between vessels and cetaceans. In the last decades evidence has emerged that ship strikes might occur more often than previously thought and can have a significant impact on small resident cetacean populations. Most research so far has focused on large cetaceans as those animals are often carried visibly into port at the bow of a vessel. For small cetaceans ship strike events are not well documented.

⁵ This is a question based on Resolution 8.1, Annex 1.

Ship strike occurrence is directly linked to the frequency of shipping activity, including such directed at cetaceans, i.e. cetacean watching. To quantify this risk, it is important to know what kind of vessels are involved in the strike, in particular the vessel speed as well as the type and size of vessel. But it is also important to have information on the cetaceans involved, in particular if the animals were engaged in a particular behaviour such as feeding.

Ship strike can cause direct death or injury in cetaceans. Even collisions that are non-fatal might leave individuals with a reduction in their survival chances. To determine the occurrence of ship-strikes different sources are used. For small cetaceans, direct observations are the rarest. Necropsies of stranded animals can find evidence of characteristic trauma and photographs of animals that survived ship strikes can show typical injuries, such as marks left by propellers. One way to quantify how many animals in a population are impacted by ship strike is to look at the percentage of animals in a photo-identification catalogue that show ship strike marks.

As this is still a not well documented threat this section aims to obtain an overview of what kind of data and research is available and ongoing in the Parties.

Questions:

11.1. Are there reports available in your country of ship strikes with small cetaceans from visual observations?

The International Whaling Commission (IWC) has a global database for ship strike incidents with cetaceans. Whether or not your country is Party to the IWC, it is encouraged for countries to provide all ship strike incident information to the IWC database.

No. Go to **Question 11.2.**

Yes. Please provide information in the table below:

Has the incident of a ship strike with a small cetacean been submitted to the IWC Ship Strike Database? ⊠ No □ Yes □ Unknown (But has been entered into the IWC Progress Report.)

Area: (check with OSPAR/HELCOM map in Annex A)

Choose a region

Species name (scientific), if known (see Annex B):

Date of incident:

Contact: (*if available contact details of the observer*)

Description of the observed incidence:

(Group size if other cetaceans presence, was the cetacean alive or dead after the collision, was the animal retrieved, indications of animal being dead before collusion, any other information; if known, provide information on the vessel type, name, speed of the vessel, any damage to the vessel or injuries to people)

If animal was retrieved and necropsied, is there a necropsy report for this cetacean? \Box No \Box Yes If yes, provide link/contact details:

List any other relevant links to websites or other information, photographs or publications, if available:

11.2. Are there reports in your country of vessel strikes from necropsies of stranded animals for 2016-2018?

- \Box No. Go to Question 11.3.
- **Yes**. Please provide information in the table below:

Overview of necropsied small cetaceans showing evidence of ship-strike.

	Location		Necropsied animals				
Year	Sub-area (OSPAR / HELCOM)	Species	Number of animals showing	Number of animals with known cause of death	Number of animals with cause of death ship strike BLUNT TRAUMA		

			ship strike markings ⁶		possible	certain
2018	Oll Southern North Sea	HP Harbour porpoise		50	1	2
2017	Oll Southern North Sea	HP Harbour porpoise		55	1 (plus 1 euthanized)	2
2016	Oll Southern North Sea	HP Harbour porpoise		55	0	3

Provide source of information and database link if applicable:

Reports (in Dutch) on the results of the necropsies conducted on harbour porpoise since 2009 can be downloaded at this link: <u>https://www.uu.nl/onderzoek/strandingsonderzoek/het-onderzoek/onderzoek/strandingsonderzoek/het-onderzoek/onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/het-onderzoek/strandingsonderzoek/</u>

<u>Comments:</u>

Blunt trauma can be caused through ship strike, however, there other potential causes cannot be ruled out.

2016: of 55 animals necropsied, 3 animals showed blunt trauma. For two the blunt trauma was likely the cause of death, but there might have been other health issues. The third animal was a live stranding that showed bleeding in the brain.

2017: of 55 animals necropsied two porpoises showed blunt trauma as cause of death; one porpoise showed blunt trauma but it could not be determined if it was the cause of death; one live stranding showed signs of blunt trauma and was euthanized

2018: of 50 animals necropsied two showed clear signs of blunt trauma as cause of death; one possible.

11.3. Does your country have a protocol in use to determine that a cause of death in post mortem examination is due to a vessel strike?

 \Box No.

 \boxtimes **Yes.** Please provide information below:

It is not a stand-alone protocol but part of a procedure to determine the likelihood the observed blunt trauma was caused by a ship-strike or other causes.

11.4. Is there evidence in your country from existing photo-identification catalogues of small cetaceans of any non-lethal ship strike for the 2016-2018?

For populations of small cetaceans, such as bottlenose dolphins, one can identify those animals in photo-identification catalogues of animals that show ship-strike evidence (e.g. scars). Monitoring the % of animals that show ship strike evidence can be a useful tool to monitor the development of this threat.

Yes. Please provide information in the table below:

Overview of ship strike evidence in photo-identification catalogues

	Location		Photo-identified animals in the catalogue		
Year Sub-area Species (OSPAR / HELCOM)		Species# individual animals in the photo-identification# animals showing ship strike markings (e.g. scars)		showing ship markings scars)	
			catalogue	possible	certain
2016	Oll Southern North Sea	HP Harbour porpoise	21 (sub)adult animals with 2 (unidentified) calves [cumulative identified animals up to 2016: 36]	0	0

⁶ These can be sub-acute (animal dies not immediately after the ship-strike) or chronic lesions (scar forming starts, but there is likely infection/inflammation) or healed lesions that are unrelated to the cause of death (although they could have affected an animals health status in the longer term).

No.

2017	Oll Southern North Sea	HP Harbour porpoise	36 (sub)adult animals with 4 (unidentified) calves [cumulative identified animals up to 2017: 42]	0	0
2018	Oll Southern North Sea	HP Harbour porpoise	42 (sub)adult animals with 5 (unidentified) calves [cumulative identified animals up to 2018: 48]	1	0

Comment: There is a photo-identification catalogue from Stichting Rugvin for a small harbour porpoise population in the Oosterschelde (Eastern Scheldt), an estuary in the southern part of the Netherlands. Some animals show healed wounds, for example from Grey seal attacks. There is one animal that shows a scar that has been identified as having been caused possibly by a ship-strike (this is animal L045R038 which can be seen online in the photo-id catalogue available at https://rugvin.nl/wp-content/uploads/2019/01/catalogus-2015-2018.pdf). No certain visible ship strike scars have been identified. Information can be found via Stichting Rugvin at www.rugvin.nl. The photo-identification webpage is updated regularly and is accessible at: <a href="https://rugvin.nl/oosterschelde/foto-id-bruinvissen-oosterschelde

11.5. Do you have any other photographs or evidence of ship strikes outside of photo-identification catalogue? ⊠ No □ Yes

Provide links where applicable Not to our knowledge.

11.6. List initiatives/projects (including PhD, MSc) involving studies of ship strike and its possible effects on small cetaceans for 2016-18 in your country (incl. title, organisation, lead author)

None to our knowledge

11.7. List publications (reports, theses, papers in journals, books) from your country relating to small cetacean ship strikes

Provide web links if available.

Necropsy reports, available at <u>https://www.uu.nl/onderzoek/strandingsonderzoek/het-onderzoek/onderzoeksverslagen</u>:

IJsseldijk, L.L., M.J.L. Kik, & A. Gröne (2019). Postmortaal onderzoek van bruinvissen (*Phocoena phocoena*) uit Nederlandse wateren, 2018. Biologische gegevens, gezondheidsstatus en doodsoorzaken. Wettelijke Onderzoekstaken Natuur & Milieu, WUR. WOt-technical report 150. 34 blz.; 8 fig.; 3 tab.; 25 ref; 2 Bijlagen.

IJsseldijk, L.L., M.J.L. Kik, & A. Gröne (2018). Postmortaal onderzoek van bruinvissen (*Phocoena phocoena*) uit Nederlandse wateren, 2017. Biologische gegevens, gezondheidsstatus en doodsoorzaken. Wettelijke Onderzoekstaken Natuur & Milieu, WUR. WOt-technical report 116. 50 blz.; 10 fig.; 5 tab.; 44 ref; 2 Bijl.

IJsseldijk, L.L., M.J.L. Kik, L. Solé & A. Gröne (2017). Postmortaal onderzoek van bruinvissen (*Phocoena phocoena*) uit Nederlandse wateren, 2016. Wettelijke Onderzoekstaken Natuur & Milieu, WUR. WOt-technical report 96. 41 blz.; 10 fig.; 3 tab.; 13 ref; 2 Bijlagen.

11.8. List any management / policy actions related to mitigating ship strike for small cetaceans (rerouting, tracking animals, ship speed limits) in your country

Provide web links if available.

11.9. Has there been any other notable instances / issues of ship strike on small cetaceans in your country in the reporting period?

Not to our knowledge.

11.10. Is the perceived level pressure from ship strikes on small cetaceans in your country increasing, decreasing, staying the same or unknown?⁷

To be done on a species by species basis where applicable (see Annex B) and by region where relevant (see Annex A).

Scientific name of the species	Increasing	Decreasing	Staying the same	Unknown
Phocoena phocoena				x

□ Not applicable.

Comments:

There was an increase in blunt trauma as a cause of death from necropsies of harbour porpoises in recent years. It is not clear if this represents an actual increase in ship strike occurrence as the sample of stranded porpoises that are analyzed is comparatively small (ca 50 annually) and might not be comparable between years. Nevertheless, it is cause for concern as this is the first time such numbers of possible ship strike events have been documented.

C. Habitat Change and Degradation (incl. potential physical impacts)

12. Climate change (incl. ocean acidification)

AIM: To illustrate progress on understanding, monitoring and mitigating negative effects on small cetaceans of important and emerging climate-change-related hazards.

Relevant Resolutions: 8.9, 8.4, 8.3, 8.2, 8.1, 7.4, 7.1, 6.1, 5.7

It is certain that climate change is altering the habitat of cetaceans. However, our understanding on how the predicted changes will impact different species and populations is still lacking. CMS⁸ highlights the importance on addressing potential issues through the engagement of researchers to better understand the underlying processes, as well as conservation managers and policy makers to monitor changes and to mitigate negative impacts. Focussing on tangible climate change effects relevant to cetaceans, such as ocean warming, prey depletion / prey range shifts, ocean acidification, increased frequency and intensity of ocean storms, changes in sea ice, weakening of the North Atlantic Drift, we need to gather evidence on the existence and nature of climate change effects on small cetaceans and evaluate current monitoring programmes and mitigation measures.

This section aims to provide an overview of what kind of activities are already ongoing in the member states to address climate change. The focus is hereby on those actions specifically regarding cetaceans as well as the most likely impacts on their habitat and prey. Climate change represents possibly the most important future threat to the status of cetaceans in the ASCOBANS region. Direct effects may arise due to ocean warming, resulting in (generally northward) in distribution shifts so that the animals continue to occupy waters with temperature regimes compatible with their thermal niches. Key indirect effects will result from changes in prey distribution and abundance due to ocean warming, ocean acidification and changes in ocean current systems.

Questions:

12.1. Does your country monitor climate effects on cetaceans?⁹

Climate change will have a multiplicity of possible direct and indirect effects on cetaceans. Attempting to quantify this is challenging, these questions are aimed to provide an overview of the type of monitoring programmes that are conducted that may provide indirect evidence of climate change on cetaceans.

 \Box No. Go to Question 12.3.

⁷ This is a question based on Resolution 8.1, Annex 1.

⁸ <u>CMS Resolution 12.21</u> on Climate Change and Migratory Species.

⁹ This refers to direct and indirect effects.

12.2. Which effects has your country been monitoring in the reporting period from 2016 to 2018?

Overview of monitoring activities related to climate change effects on small cetaceans. Please add additional direct or indirect effects if applicable.

Monitoring activity	Comments (if possible, provide e.g. contact / link to project)
⊠ Changes in small cetacean abundance	Aerial surveys DCS; Steve Geelhoed
⊠ Changes in small cetacean distribution	Aerial surveys DCS; Steve Geelhoed
□ Changes in small cetacean migration or movement range	
oxtimes Changes in small cetacean migration or movement timing	Land-based sea watching trektellen.nl
Changes in small cetacean community structure	
\Box Changes in reproductive success and timing in small cetaceans	
Changes in prey (fish) abundance and distribution	Wageningen Marine Research does stock assessments on commercial species
□ Changes in timing of prey (fish) spawning and migration	
⊠ Changes in fishing effort	Wageningen Marine Research, Wageningen Economic Research
Changes in the occurrence of pathogens (from sampled individuals)	Department of Pathobiology, Faculty of Veterinary Medicine, Utrecht University. See 10.6
□ Incidences of algal blooms (if yes, where; specify year)	

12.3. List new initiatives / projects which provide evidence / data about climate change effects on small cetaceans in your country in 2016-2018 (title, organization, lead author; include the species concerned, the climate change effect observed, who did the work)

Provide web links if available. Not to our knowledge

12.4. List new reports/publications which provide evidence / data of climate change effects on small cetaceans in your country in 2016-2018 (title, organization, lead author; include the species concerned, the climate change effect observed, who did the work)

Provide web links if available. Not to our knowledge

12.5. Are there any actions / measures in your country to reduce identified climate change impacts on small cetaceans (directly or indirectly)?

🛛 No.

□ **Yes.** Please describe below:

In order to plan future monitoring and mitigation we need to be aware of current gaps and emerging issues.

12.7. List any emerging potential issues related to climate change effects on small cetaceans

12.8. Has there been any other notable instances / issues on climate change effects on small cetaceans in your country in the reporting period?

12.9. Is the perceived level of pressure from climate change to small cetaceans in your country increasing, decreasing, staying the same or unknown?¹⁰

To be done on a species by species basis where applicable (see Annex B) and by region where relevant (see Annex A).

Scientific name of the species	Increasing	Decreasing	Staying the same	Unknown
Phocoena phocoena				х

□ **Not applicable.** Comments:

C. Habitat Change and Degradation (incl. potential physical impacts)

13. Physical Habitat Change (e.g. from construction)

AIM: Human activities in the Agreement area have the potential to impact upon small cetaceans. Tracking those activities causing physical habitat change and better understanding their relative impacts will help shape any necessary mitigation action required.

Relevant Resolutions: 8.11, 8.9, 8.6, 8.4, 8.3, 8.2, 8.1, 7.1, 6.2, 6.1, 5.7

Human activities in the Agreement area have the potential to impact upon small cetaceans. Tracking those activities that cause physical habitat change and obtaining a better understanding of their relative impacts will help shape any necessary mitigation action.

This section aims to review new information on physical habitat change, e.g. from construction, and its impacts on small cetaceans, their prey and their habitat, and make recommendations to Parties and other relevant authorities for further action.

The collation of this information will contribute to the development of risk maps showing the spatial and temporal (by season) distribution of activities that have an impact on cetaceans, including information provided in National Reports, taking into account the work done by other organisations.

Note: In the term "physical habitat change", we include a) coastal/marine construction – artificial islands, harbours, bridges, oil/gas platforms, wind turbines, tidal turbines; and b) seabed damage – dredging, bottom trawling.

Questions:

13.1. Provide spatial information on locations (in form of maps and/or links) of physical habitat change in your country by activity type (dredging, marine construction, coastal construction) for 2016-18.

Many range states are mapping human activities to fulfil obligations under the EU Maritime Spatial Planning Directive, MSFD, OSPAR, and HELCOM; this information is relevant (though often not readily accessible) to ASCOBANS in understanding the extent and trends of human activities potentially impacting small cetaceans.

¹⁰ This is a question based on Resolution 8.1, Annex 1.

Activity: dredging/sand extraction
Which area: OII Southern North Sea
Type of information: maps
Is the data available online? 🔲 No. Comments:
Yes. Provide link:
Sand extraction areas
https://www.arcgis.com/home/webmap/viewer.html?url=https%3A%2F%2Fgeoservices.rijkswaterstaat.nl%2Farcgi
s2%2Frest%2Fservices%2FGDR%2Fwingebieden_noordzee%2FFeatureServer&source=sd_(tick wingebieden
Noordzee-zandwindgebieden vergund, and wingebieden Noordzee – zoekgebied mer 2018-2027)
Dredge dump areas
https://www.arcgis.com/home/webmap/viewer.html?url=https%3A%2F%2Fgeoservices.rijkswaterstaat.
nl%2Earcgis2%2Erest%2Eservices%2EGDB%2Estort_loswal%2EEeatureServer&source=sd



13.2. Does your country have any cases of impacts on physical habitat change (e.g. dredging, marine construction, coastal construction) for small cetaceans for 2016-18?

🛛 No.

 \Box **Yes.** Describe in the table below:

Provide web links if available.

13.3. Does your country have any mitigation measures to prevent impacts on small cetaceans during physical habitat change activities (e.g. dredging, marine construction, coastal construction)?

□ No.

 \Box **Yes.** Describe in the table below:

Overview of mitigation measures related to small cetaceans and physical habitat change activities.

Provide web links if available.

13.4. List initiatives/projects (including PhD, MSc) in your country in 2016-2018 involving studies of impacts from physical habitat change on small cetaceans (incl. title, organisation, lead author).

Not to our knowledge.

13.5. List publications (reports, theses, papers in journals, books) in 2016-2018 in your country relating to potential impacts of physical habitat change on small cetaceans.

Not to our knowledge

13.6. Provide web links to other relevant information.

Not to our knowledge

13.7. Has there been any other notable instances / issues in your country regarding physical habitat change in the reporting period?

Not to our knowledge

13.8. Is the perceived level of pressure from physical habitat change) in your country increasing, decreasing, staying the same or unknown?¹¹

To be done on a species by species basis where applicable (see Annex B) and by region where relevant (see Annex A).

Scientific name of the species	Increasing	Decreasing	Staying the same	Unknown
Phocoena phocoena				Х

□ Not applicable. Comments:

C. Habitat Change and Degradation (incl. potential physical impacts)

14. Other issues

Question:

14.1. List any other issues not mentioned above.

¹¹ This is a question based on Resolution 8.1, Annex 1.

E. Area-based Conservation / Marine Protected Areas

16. List of protected areas, e.g. Natura 2000 sites

AIM: to provide information on existing and proposed marine protected areas with cetaceans as part of the selection criteria.

Relevant Resolutions: 8.2, 8.1, 5.7

Marine protected areas (MPAs) are considered under numerous agreements (including the Convention on Biological Diversity, Habitats Directive, Bern Convention, Ramsar Convention, OSPAR Convention, HELCOM, ACCOBAMS) as a tool to achieve conservation goals. Part of ASCOBANS remit is to provide expert advice for the conservation and management of small cetaceans. This includes inviting Parties and Range States to continue or initiate research aimed at locating areas of special importance to the survival (in particular breeding and feeding) of small cetaceans as suitable sites for the establishment of protected areas, and to implement appropriate management actions in these areas on their own or in the context of other intergovernmental bodies to ensure the protection of small cetaceans.

To monitor the progress of such work to fulfil the obligations of Resolution 5.7 (2006) and actions in the 2017-2020 workplan, ASCOBANS requires information (e.g. location, species, status, spatial data, management plans and monitoring) on existing and proposed marine protected areas with cetaceans as part of the selection criteria.

It is of particular interest to ASCOBANS to obtain an overview of the current scale of marine protected areas and to review best practice approaches to management of marine protected areas, in order to make recommendations to Parties, taking MPAs beyond being just 'paper parks'.

Questions:

16.1. Please complete and/or update the following table, providing details of existing or proposed MPAs with cetaceans forming part of the selection criteria.

Please copy the table for each MPA.

Name (full name of MPA)	Dogger Bank		
ASCOBANS Action Plan	☐ Jastarnia Plan☑ North Sea Plan	 WBBK Plan Not Applicable 	
OSPAR / HELCOM sub-area	OII Dogger Bank		
Size (m ²)	4.734.770.000		
Cetacean species forming part of selection criteria	Harbour Porpoise		
MPA status	 Designated Submitted Under consultation 	 Recommended Other, please specify: 	
Date of designation (if applicable)	2016		
Legislation / Directive	Habitats Directive		
Are there management measures in place?	 No. (Fisheries management measures joint recommendation submitted to European Commission in June 2019, awaiting approval) Yes. Provide link: 		
Link to shapefiles and/or or online map	https://www.synbiosys.alterra.nl/natura2000/googlemapsgebied.aspx?id =n2k164&groep=13		

	https://www.synbiosys.alterra.nl/natura2000/documenten/gebied
Link to any other online information	en/164/PUBLICATIEVERSIE_N2K164_definitief%20besluit%20Dogg
	ersbank%20met%20kaart.pdf

Name (full name of MPA)	Cleaver Bank		
ASCOBANS Action Plan	☐ Jastarnia Plan☑ North Sea Plan	WBBK Plan Not Applicable	
OSPAR / HELCOM sub-area	Choose a region		
Size (m ²)	1.538.680.000		
Cetacean species forming part of selection criteria	Harbour Porpoise		
MPA status	 Designated Submitted Under consultation 	 Recommended Other, please specify: 	
Date of designation (if applicable)	2016		
Legislation / Directive	Habitats Directive		
Are there management measures in place?	No. (Fisheries management measures joint recommendation submitted to European Commission in June 2019, awaiting approval)		
Link to shapefiles and/or or online map	https://www.synbiosys.alterra.nl/natura2000/googlemapsgebied.aspx?id =n2k165&groep=13		
Link to any other online information	https://www.synbiosys.alterra.nl/natura2000/documenten/gebied en/165/PUBLICATIEVERSIE N2K165 definitief%20besluit%20Kla verbank%20met%20kaart.pdf		

Name (full name of MPA)	Frisian Front Birds Directive		
ASCOBANS Action Plan	□ Jastarnia Plan⊠ North Sea Plan	 WBBK Plan Not Applicable 	
OSPAR / HELCOM sub-area	Choose a region		
Size (m ²)	2.881.970.000		
Cetacean species forming part of selection criteria	Harbour Porpoise (MPA was designated for Guillemot, but proposed measures aim at reducing bycatch in set nets, thus porpoises will benefit)		
MPA status	 Designated Submitted Under consultation 	 Recommended Other, please specify: 	
Date of designation (if applicable)	2016		
Legislation / Directive	Birds Directive		
Are there management measures in place?	 No. (Fisheries management measures joint recommendation submitted to European Commission in June 2019, awaiting approval) Yes. Provide link: 		
Link to shapefiles and/or or online map	https://www.synbiosys.alterra.nl/natura2000/googlemapsgebied.aspx?id =n2k166&groep=13		
Link to any other online information	https://www.synbiosys.alterra.nl/natura2000/documenten/gebieden/16 6/PUBLICATIEVERSIE N2K166 definitief%20besluit%20Friese%20Front%2 0met%20kaart.pdf		

Name (full name of MPA)	Frisian Front MSFD Area		
ASCOBANS Action Plan	☐ Jastarnia Plan☑ North Sea Plan	 WBBK Plan Not Applicable 	
OSPAR / HELCOM sub-area	Choose a region		
Size (m ²)	1.000.000.000		
Cetacean species forming part of selection criteria	Harbour Porpoise (MPA was not designated for HP, but proposed measures aim at reducing bottom trawling, which will benefit porpoises in the long run)		
MPA status	 Designated Submitted Under consultation 	 Recommended Other, please specify: MSFD areas are not formally designated, CFP is legal basis 	
Date of designation (if applicable)	N/A		
Legislation / Directive	Marine Strategy Framework Directive		
Are there management measures in place?	 No. (Fisheries management measures joint recommendation submitted to European Commission in June 2019, awaiting approval) Yes. Provide link: 		
Link to shapefiles and/or or online map			
Link to any other online information	https://www.noordzeeloket.nl/publish/pages/158924/marine_strategy_ part_1_main_document_20182024.pdf		

Name (full name of MPA)	Central Oystergrounds MSFD Area		
ASCOBANS Action Plan	 ☐ Jastarnia Plan ☑ North Sea Plan 	 WBBK Plan Not Applicable 	
OSPAR / HELCOM sub-area	Choose a region		
Size (m ²)	1.000.000.000		
Cetacean species forming part of selection criteria	Harbour Porpoise (MPA was not designated for HP, but proposed measures aim at reducing bottom trawling, which will benefit porpoises in the long run)		
MPA status	 Designated Submitted Under consultation 	 Recommended Other, please specify: MSFD areas are not formally designated, CFP is legal basis 	
Date of designation (if applicable)	N/A		
Legislation / Directive	Marine Strategy Framework Directive		
Are there management measures in place?	 No. (Fisheries management measures joint recommendation submitted to European Commission in June 2019, awaiting approval) Yes. Provide link: 		
Link to shapefiles and/or or online map			
Link to any other online information	https://www.noordzeeloket.nl/publish/pages/158924/marine_strategy_ part_1_main_document_20182024.pdf		

Name (full name of MPA)	Noordzee-kustzone
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ASCOBANS Action Plan	 □ Jastarnia Plan ☑ North Sea Plan 	 WBBK Plan Not Applicable
OSPAR / HELCOM sub-area	Choose a region	
Size (m ²)	1.444.740.000	
Cetacean species forming part of selection criteria	Harbour Porpoise	
MPA status	 Designated Submitted Under consultation 	 Recommended Other, please specify:
Date of designation (if applicable)	2010	
Legislation / Directive	Habitats Directive	
Are there management measures in place?	 □ No. ☑ Yes. Provide link: <u>https://rwsnatura2000.nl/Gebieden/noordzeekustzone/NZKZ_Doc</u> umenten/default.aspx#folder=389024 	
Link to shapefiles and/or or online map	https://rwsnatura2000.nl/Gebieden/noordzeekustzone/NZKZ_Doc umenten/default.aspx#folder=343139	
Link to any other online information		

Name (full name of MPA)	Vlakte van de Raan	
ASCOBANS Action Plan	 □ Jastarnia Plan ☑ North Sea Plan 	 WBBK Plan Not Applicable
OSPAR / HELCOM sub-area	Choose a region	
Size (<i>m</i> ²)	175.210.000	
Cetacean species forming part of selection criteria	Harbour Porpoise	
MPA status	 Designated Submitted Under consultation 	 Recommended Other, please specify:
Date of designation (if applicable)	2010	
Legislation / Directive	Habitats Directive	
Are there management measures in place?	 □ No. ☑ Yes. Provide link: <u>https://rwsnatura2000.nl/Gebieden/VvdR_Vlakte+van+de+Raan/</u> VvdR_Documenten/default.aspx#folder=479202 	
Link to shapefiles and/or or online map	https://www.synbiosys.alterra.nl/natura2000/googlemapsgebied.aspx?id =n2k163&groep=10	
Link to any other online information		

Name (full name of MPA)	Voordelta	
ASCOBANS Action Plan	□ Jastarnia Plan⊠ North Sea Plan	 WBBK Plan Not Applicable
OSPAR / HELCOM sub-area	Choose a region	

Size (m ²)	835.300.000		
Cetacean species forming part of selection criteria	Harbour Porpoise		
MPA status	☑ Designated □ Recommended □ Submitted □ Other, please specify: □ Under consultation □ Other, please specify:		
Date of designation (if applicable)	2008		
Legislation / Directive	Habitats Directive		
Are there management measures in place?	 □ No. ☑ Yes. Provide link: https://rwsnatura2000.nl/Gebieden/VD_Voordelta/VD_Documenten/Ha ndlerDownloadFiles.ashx?idnv=593295 		
Link to shapefiles and/or or online map	https://www.synbiosys.alterra.nl/natura2000/googlemapsgebied.aspx?id =n2k113&groep=10		
Link to any other online information			

Name (full name of MPA)	Wadden Sea		
ASCOBANS Action Plan	Jastarnia PlanNorth Sea Plan	 □ WBBK Plan ⊠ Not Applicable 	
OSPAR / HELCOM sub-area	Choose a region		
Size (m ²)	2.710.230.000		
Cetacean species forming part of selection criteria	Harbour Porpoise		
MPA status	 Designated Submitted Under consultation 	 Recommended Other, please specify: 	
Date of designation (if applicable)	2008		
Legislation / Directive	Habitats Directive		
Are there management measures in place?	 No. Yes. Provide link: https://www.synbiosys.alterra.nl/natura2000/gebiedendatabase.aspx?su bj=n2k&groep=1&id=n2k1&topic=introductie 		
Link to shapefiles and/or or online map	https://www.synbiosys.alterra.nl/natura2000/googlemapsgebied.aspx?id =n2k001&groep=1		
Link to any other online information			

Name (full name of MPA)	Westerschelde & Saeftinghe	
ASCOBANS Action Plan	 □ Jastarnia Plan □ WBBK Plan □ North Sea Plan ⊠ Not Applicable 	
OSPAR / HELCOM sub-area	Choose a region	
Size (m ²)	436.500.000	
Cetacean species forming part of selection criteria	Harbour Porpoise	

MPA status	 Designated Submitted Under consultation 	 Recommended Other, please specify: 	
Date of designation (if applicable)	2010		
Legislation / Directive	Habitats Directive		
Are there management measures in place?	 No. Yes. Provide link: https://www.synbiosys.alterra.nl/natura2000/gebiedendatabase.aspx?su bj=n2k&groep=10&id=n2k122&topic=introductie 		
Link to shapefiles and/or or online map	https://www.synbiosys.alterra.nl/natura2000/googlemapsgebied.aspx?id =n2k122&groep=10		
Link to any other online information			

Name (full name of MPA)	Oosterschelde		
ASCOBANS Action Plan	Jastarnia PlanNorth Sea Plan	 □ WBBK Plan ⊠ Not Applicable 	
OSPAR / HELCOM sub-area	Choose a region		
Size (m ²)	369.800.000		
Cetacean species forming part of selection criteria	Harbour Porpoise		
MPA status	 Designated Submitted Under consultation 	 Recommended Other, please specify: 	
Date of designation (if applicable)	2010		
Legislation / Directive	Habitats Directive		
Are there management measures in place?	 No. Yes. Provide link: https://www.synbiosys.alterra.nl/natura2000/gebiedendatabase.aspx?su bj=n2k&groep=10&id=n2k118 		
Link to shapefiles and/or or online map	https://www.synbiosys.alterra.nl/natura2000/googlemapsgebied.aspx?id =n2k118&groep=10		
Link to any other online information			

16.2. Provide information on management measures particularly relevant to small cetaceans in MPAs listed above. Including any temporal/spatial restriction of activities (i.e. seasonal fishery closures, changes to vessel activity etc.).

In order to monitor implementation of MPA management measures and make recommendations on best practice, we need to understand what management measures are being used and be aware of examples of what approaches are proving effective.

MPA-specific measures for cetaceans are lacking. Generic measures to reduce bycatch and impacts of underwater noise are considered

16.3. Provide details of existing or proposed monitoring schemes related to the effectiveness of MPAs / management measures listed above for small cetaceans.

16.4. Recommend any best practice approaches to management (threat mitigation) of MPAs listed above for small cetaceans.

16.5. List new initiatives/projects involving studies of cetaceans relating to MPAs in your country (title, organization, lead author; include the species concerned, who did the work)

In order to plan future approaches for MPA management and monitoring we need to be aware of current gaps and emerging issues.

Provide web links if available.

16.6. List new reports/publications involving studies of cetaceans relating to MPAs in your country (title, organization, lead author; include the species concerned, who did the work)

Provide web links if available.

16.7. Provide web links to other relevant information.

https://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2011/WGM ME/wgmme_2011_final.pdf

ICES WGMME report, including ToR d. Catalogue the Marine Protected Areas for marine mammals in the ICES area and evaluate the efficacy of MPAs for cetaceans

Section VI: Information and Education

A. Education and outreach

AIM: to determine if there are gaps in the outreach and education activities and if further materials should be produced in your country or by the Secretariat (e.g. on certain themes, species, regions, languages, for certain target audiences).

Relevant Resolutions: 8.3, 8.2, 5.8, 8.13

ASCOBANS Communication, Education and Public Awareness (CEPA) Plan¹² was presented at the 17th Meeting of the Advisory Committee. The purpose of the CEPA Plan was to identify actions and activities to be undertaken by the Secretariat, Parties and relevant partners. In addition, the Advisory Committee recommended the following overarching principles: (i) Carefully identifying the audience – e.g. children, students, policy makers, fishers – and making materials appropriate to each particular audience; (ii) Noting that different localities, communities and cultures may require different approaches; (iii) Preparing outreach and education materials in relevant languages (including on the website); and (iv) Building joint initiatives with 'partner' organizations and others. The CEPA aimed for more effective engagement with audiences, greater impact upon audiences, closer relationship with key conservation issues; more effective connection with educational, fundraising and promotional initiatives; and more effective and easily understood communication of relevant areas of science. In this spirit, the purpose of this section is to highlight successes and to identify potential gaps in outreach and education activities and related materials.

Questions:

¹² See <u>AC17 Report</u>, Annex 10 (starting on page 65).

1. Please list education/outreach <u>activities</u> in 2016-2018 in your country, which are of relevance to conservation of small cetaceans in ASCOBANS' remit (e.g. activities during the International Day of the Baltic Harbour Porpoise in May)

Organiser	Name of activity	Date(s)	Location	Target	Links (for further information)
Stichting Rugvin	Studio Porpoise (porpoise listening station)		Oosterschelde (Eastern Scheldt)	General public	https://rugvin.nl/oosterschelde/studio- bruinvis/
Stichting Rugvin	Courses cetacean observation				https://rugvin.nl/voorlichting/cursus- walvisobservatie/
SOS Dolfijn	Travelling whale hospital		North Sea	General public, children	https://www.sosdolfijn.nl/kids- corner/reizende-walvisziekenhuis
SOS Dolfijn	Lessons for schools			children	https://www.sosdolfijn.nl/meer- leren/lespakket
University Utrecht	Stranding network day	Bi- annually	Utrecht	Volunteers stranding network	
Werkgroep zeezoogdieren	Marine mammal days	Annually	Haarlem, Groningen, Texel	General public	https://werkgroepzeezoogdieren.nl/
Ministry Infrastructure and Water Management	Development of harbor porpoise game: "Bruinsvisbord"			General public, children	

2. Please list current information/outreach <u>materials</u> produced in your country, which are of relevance to ASCOBANS' remit and species.

Name of publication (incl. translation into English, where applicable)	Author(s)	Publisher	Year	Links (to download publication)	Can ASCOBANS distribute the link to publication for outreach purposes?
					□ No □ Yes

3. List other organisations engaged in outreach relevant to ASCOBANS' remit, incl. web links.

4. Please list other initiatives relevant to ASCOBANS' remit that are not included above.

5. List any gaps in your country's outreach relevant to ASCOBANS' remit. What would be needed to fill these gaps?

6. List outreach activities foreseen for 2020, in which you would like ASCOBANS to be involved. *The next Meeting of the Parties to ASCOBANS is scheduled to be held in 2020.*

7. Resources permitting, are there any materials that you think the ASCOBANS Secretariat should produce?

□ No.

□ **Yes.** Please describe what, and why:

8. Has there been any notable instances / issues in your country related to education and outreach in the reporting period?

Section VII: Other Matters

A. Other information or comments important for the Agreement:¹³

- Bycatch estimation for the Dutch bottom-set gill-net fleet using REM was made

B. Difficulties in implementing the Agreement:

¹³ Opportunity to include other information relevant to the topics covered in this form but which are missing.

ANNEX A: Overview of the sub-regions as defined by OSPAR and HELCOM.

Choose an item.

Drop-down menu sub-regions OSPAR and HELCOM

Choose an item.

OSPAR Region I Arctic Waters	OSPAR Region IV Bay of Biscay	HELCOM cont.
Norwegian Sea	and Iberian Coast	Gulf of Finland
	N. Bay of Biscay	Northern Baltic Proper
OSPAR Region II Greater North Sea	🗖 Iberian Sea	Western Gotland Basin
Dogger Bank	Gulf of Cadiz	Eastern Gotland Basin
Southern North Sea		Gulf of Riga
Northern North Sea	OSPAR Region V Wider Atlantic	Gdansk Basin
Channel	subregions?	
Norwegian Trench		Arkona Basin
Skagerrak	HELCOM	□ Kattegat
	□ Bothnian Bay	D Belt Sea
OSPAR Region III Celtic Sea	Bothnian Sea	\square The Sound
Celtic Sea	Archipelago Sea	
Irish Sea	🗖 Åland Sea	
Irish & Scottish W. Coast		





A map of the Baltic Sea drainage basins (catchment area), and marine subdivisions, including basins.

- 1. Bothnian Bay
- 2. Bothnian Sea
- 3. Archipelago Sea
- 4. Åland Sea
- 5. Gulf of Finland
- 6. Northern Baltic Proper
- 7. Western Gotland Basin
- 8. Eastern Gotland Basin
- 9. Gulf of Riga
- 10. Gdansk Basin
- 11. Bornholm Basin
- 12. Arkona Basin
- 13. Kattegat
- 14. Belt Sea
- 15. The Sound

ANNEX B: Species covered by ASCOBANS.

Code	Common name	Scientific name
AWSD	Atlantic white-sided dolphin	Lagenorhynchus acutus
BBW	Blainville's beaked whale	Mesoplodon densirostris
BD	Bottlenose dolphin	Tursiops truncatus
CBW	Cuvier's beaked whale	Ziphius cavirostris
CD	Short-beaked Common Dolphin	Delphinus delphis
FKW	False killer whale	Pseudorca crassidens
GBW	Gervais' beaked whale	Mesoplodon europaeus
HP	Harbour Porpoise	Phocoena phocoena
KW	Killer Whale	Orcinus orca
LFPW	Long-finned pilot whale	Globicephala melas
NBW	Northern bottlenose whale	Hyperoodon ampullatus
PKW	Pygmy killer whale	Feresa attenuata
PSW	Pygmy sperm whale	Kogia breviceps
RD	Risso's dolphin	Grampus griseus
RTD	Rough-toothed dolphin	Steno bredanensis
SBW	Sowerby's beaked whale	Mesoplodon bidens
SD	Striped dolphin	Stenella coeruleoalba
SFPW	Short-finned pilot whale	Globicephala macrorhynchus
твw	True's beaked whale	Mesoplodon mirus
WBD	White-beaked dolphin	Lagenorhynus albirostris

Drop down menu Small Cetacean Species:

Choose an item.