Agenda Item 2	Review of New Information on Threats and Other Issues Relevant to Small Cetaceans
National Report 2	**2022 Annual National Report: The Netherlands**
Action Requested	Take note
Submitted by	The Netherlands

Note: Delegates are kindly reminded to bring their own document copies to the meeting, if needed.

ASCOBANS

2022 ASCOBANS National Report

The deadline for the submission of National Reports is **31 May 2023**.

As outlined in ASCOBANS Resolution 8.1 (Rev.MOP9) National Reporting, this form will cover the year 2022 (Year 3), and the following topics included in the Annex to the Resolution, in addition to the standard Sections I (General Information) and VII (Other Matters):

- Cetacean watching industry (Section II B5)

- Recreational sea use (Section II B6)

- Other sources of disturbance (Section II B7)

- Pollution and hazardous substances (incl. microplastics) (Section II C10)

- Ship strikes (Section II C11)

- Climate change (Section II C12)

- Physical habitat change (Section II C13)

- Other issues (Section II C14)

- Protected areas (Section II E16)

- Education and outreach (Section VI A)

The national reports submitted will inform discussions at the 28th Meeting of the ASCOBANS Advisory Committee (26-28 September 2023).

- All questions apply to the reporting period of 1 January - 31 December 2022.

- Region in the tables refers to the sub-regions as defined by the HELCOM and OSPAR, and Areas refers to the sub-areas as defined by ICES. An overview and maps of these can be found in **Annex A**. Species can be chosen from the list provided, based on ASCOBANS species list, see **Annex B**.

- Throughout the form, please include relevant web links where applicable.

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.

For any questions, please do not hesitate to contact the Secretariat: ascobans.secretariat@ascobans.org.

High-level Summary of Key Messages

In your country, for 2022 (Year 3), what does this report reveal about:

The most successful aspects of implementation of the Agreement?(List up to five items)

››› - Successful SCANS-IV (Small Cetaceans in European Atlantic waters and the North Sea) survey
- Continuation and formalisation (e.g. WOT - statutory research tasks) of monitoring tasks on abundance (including SCANS), post mortem examinations and contaminants.
- Development of an EU LIFE proposal (CIBBRiNA) with multiple stakeholders and parties to assess bycatch of cetaceans in the North Sea
- Initiation of a pilot to investigate the potential to tag porpoises for determining habitat use in the southern North sea
- Evaluation of the Dutch Harbour Porpoise Conservation Plan (2020)

The greatest challenges in implementing the Agreement? (List up to five items)

››› - Data sharing barriers
- Long term funding for e.g. SCANS
- Not having the right organisations at the table, e.g. navies, fishers
- Too many technical outputs and too few communicable key messages for policy makers

The main priorities for future implementation of the Agreement? (List up to five items)

››› - Collaboration between navies on underwater noise from explosions (and also pinger use in Baltic)
- Harmonising strandings databases, or at least determining the potential and appetite for this
- Collaborating on bycatch work, among others within CIBBRiNA

I. General Information

A. Country Information

Name of Party / Non-Party Range State:

››› Netherlands

Details of the Report Compiler

Name:

››› Anne-Marie Svoboda

Function:

››› Senior Policy Advisor

Organization:

››› Department of Nature & Biodiversity Ministry of Agriculture

Postal Address:

››› Bezuidenhoutseweg 73 | 2594 AC | The Hague

Telephone:

››› +31 6 11376219

Email:
››› A.M.Svoboda@minlnv.nl

Does the Report Compiler act as ASCOBANS National Coordinator (i.e. focal point)?
☑ Yes

Details of contributor(s)

Please provide the following details per contributor:
Topic(s) contributed to, Name, Funciton, Organization, Postal Address, Telephone, and Email.
››› Wageningen Marine Research, Wageningen University and Research, Postbus 68, 1970 AB IJmuiden, The Netherlands:
Meike Scheidat meike.scheidat@wur.nl,
Jip Vrooman jip.vrooman@wur.nl,
Steve Geelhoed steve.geelhoed@wur.nl.
contributed to all sections of the report.
Sander de Jong - Physical habitat change (Section II C13)
Rijkswaterstaat Zee & Delta
sander.de.jong@rws.nl
Deltasafari - Commercial Cetacean watching
Marko Oudenaarden
info@deltasafari.nl
Ecomare - Information and education
Ruijslaan 92
1796 AZ De Koog Texel
Daphna Lavy
daphnalavy@texelsmuseum.nl
Stichting SOS Dolfijn- Information and education
Van Ewijckskade 1
1761 JA Anna Paulowna
Sanne Hessing
sanne.hessing@sosdolfijn.nl
Anne-Marie Svoboda. Senior Policy Officer – Aquatic species
Ministry of Agriculture, Nature and Food Quality, Bezuidenhoutseweg 73 | 2594 AC | The Hague

A.M.Svoboda@minlnv.nl
contributed and reviewed all sections

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, 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 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 **primary focus:** they advertise specifically with the aim to see small cetaceans, or a **secondary focus:** 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.

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

☑ Yes

5.2. Please identify the total number of operators conducting commercial cetacean watching in your country and provide details in the table.

Please provide details in **this table** - download and then attach it using the blue link button below.
In the table, provide the sub-regions in which commercial cetacean watching takes place. Identify if small cetacean watching is a primary and/or secondary focus of the operators and, in the first case, what the target species are.
☑ 0-5

5.3. Does your country have a definition of the term 'harassment' in general and/or as it relates to the Cetacean Watching Industry?

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.
☑ Yes

Provide definition:

››› 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 towards small cetaceans in the context of commercial cetacean watching reported to authorities during the reporting period?

☑ No

5.5. 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 small 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 small cetaceans and/or

swimmers.
☑ No

5.7. 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 small cetaceans and/or swimmers.
Please provide details in **this table** - download and then attach it using the blue link button below.
Select "Yes" when you have attached the table.
☑ Yes. Please provide details in the table.

You have attached the following documents to this answer.

Sec-II_B_5.7_0.xlsx

5.8. 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, swimming with cetaceans, and interactions with solitary sociable dolphins?
☑ Yes. Please provide information below.

Per measure (may include regional measures), please include: date of implementation, application region (Annex A), whether the measure has been effective (include comments), and other relevant information.
››› Not specifically, however, the Netherlands Animal Welfare act is applicable.

5.9. List any incidents of harassment to small cetaceans during the reporting period in the context of interactions with solitary sociable dolphins reported to authorities - and the outcome if known (behavioural response, injury, death, any court proceedings).

Per date, please provide: the context of incidence, outcome for (a) the animal or (b) human (e.g. behavioural response, injury, edath), legal procedures/court proceedings/convictions that took place, responsible authority for such reports, and link to websites or documentation of the report.
››› A bottlenose dolphin (Tursiops truncatus) known by the name of “Zafar” was first observed in the Netherlands on the 2nd of May 2020, closely following a boat from Brittany, France, all the way into the port of Amsterdam after passing the locks at IJmuiden. After a day of residency in the industrial port of Amsterdam, the animal was successfully lured back into the North Sea. The dolphin was observed lastly on the 5th of May following a fishing vessel heading north in coastal waters near Callantsoog. Seven days later, a dead bottlenose dolphin stranded at Wijk aan Zee and through photo-identification, the animal was identified to be Zafar. A post-mortem
investigation revealed that this subadult, 14 year old male had a moderate to good
body condition, no sign of significant disease, and had been feeding shortly prior to death. Injuries on the animal fit with an anthropogenic source causing mortality, and the nature and severity of the lesions were most consistent with vessel collision. Based on the sightings and stranding location and the stomach content, the animal probably died within the Dutch coastal waters of Noord-Holland. This animal was first sighted in 2017 as a solitary-sociable dolphin. The skeleton of Zafar is exhibited in Ecomare on Texel.

5.10. Relevant new research/work/collaboration on the cetacean watching industry, "swim with small cetacean" operations, solitary sociable dolphin interactions and their possible effects on small cetaceans in your country.

List initiatives/projects (incl. PhD, MSc); publications (reports, theses, papers in journals, books) from any study; web links to other relevant information).
››› IJsseldijk et al., 2020. Fatal attraction: The death of a solitary-sociable bottlenose dolphin due to anthropogenic trauma in the Netherlands. Lutra 63 (1-2): 17-32

5.11. Have there been any other instances/issues related to the cetacean watching industry during the reporting period in your country?
☑ No

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

Please provide the nature of the evidence and describe per species (Annex B) where applicable:
››› Number of operators and the number of trips is limited. One operator (Deltasafari) ceased harbour porpoise trips in 2019, and now offers four North Sea bird tours with porpoise as secondary aim.

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, 8.3, 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 the use of RIBs (rigid-hulled inflatable boats), hard-hulled boats exceeding 10 knots in speed, yachts and personal watercrafts such as jet skis, kayaks and surfboards; 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.

6.1. Are data on recreational sea use available for your country?
☑ Yes. Please provide information below.

Provide the type of information (e.g. number of licensed recreational vessels per region, tourist number per region, other) and web link or other relevant link to the data (where can this information be found)
››› There are about 400 000 recreational vessels in use in the Netherlands (but this includes freshwater recreation). https://www.rijkswaterstaat.nl/water/scheepvaart/pleziervaart
The Netherlands has a relatively long coastline, with many accessible beaches that are visited by many local and international tourists, especially in summer. In addition, the Dutch North Sea sees a lot of recreation(al boating) from surfers, recreational fishermen, sailors and divers.
Map of recreational areas along the coast:
https://www.noordzeeloket.nl/functies-gebruik/recreatie-toerisme/
Coastal tourism is increasing: until 2030, the Dutch tourism agency expects growth mainly in coastal areas (+56 per cent). In 2017, the Dutch coast attracted 6.5 million tourists; by 2030, it is expected to reach 10 million. https://www.nbtc.nl/nl/site/bestemming-nederland/perspectief-2030.htm

6.2. Is the 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.
☑ No

Provide per region (Annex A): type of information (e.g. maps, GIS, reports), whether the data is available online, and link to data, or comment on unavailability.
››› There is some local information on tourism and recreation in the various provinces, or for various types of recreation. However, there is no comprehensive overview of all recreational sea use in the region.

6.3. Were there any incidents of disturbance or harassment to small cetaceans in relation to recreational sea use in your country?
☑ No

6.4. Does your country have any mitigation measures (codes of conduct/guidelines/laws/rules) in place in the event of disturbance or harassment of small cetaceans through recreational sea use?
☑ Yes. Please provide information below.

Per measure, please provide: the date of implementation, Region (Annex A), whether the measure has been effective (yes or no) with comments, and other relevant information.
››› 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. Relevant new research/work/collaboration on disturbance or harassment of small cetaceans through recreational sea use in your country?

List initiatives/projects (incl. PhD, MSc); publications (reports, theses, papers in journals, books) from any study; web links to other relevant information.
››› recreational boating activities in the Wadden Sea:
Meijles, E. W., Daams, M. N., Ens, B. J., Heslinga, J. H., & Sijtsma, F. J. (2021). Tracked to protect - Spatiotemporal dynamics of recreational boating in sensitive marine natural areas. Applied Geography, 130,

[102441]. https://doi.org/10.1016/j.apgeog.2021.102441

6.6. Have there been any other instances/issues related to recreational sea use in your country during the reporting period?

☑ No

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

☑ Unknown

7. Other Sources of Disturbance

AIM: to identify new sources of disturbance that could be a threat to small cetaceans.
Relevant Resolutions: 8.9, 6.1
Overlap of small cetacean and human habitat use is not covered by the questions above, while human activities in the seas are increasing, particularly in the coastal zone. Human activities can, for example, cause a small cetacean to change behaviour, or it can cause physical harm or death. This section aims to identify new sources of disturbance that could be a threat to small cetaceans. The issue of noise is covered under section B3.

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

Any incidents of disturbance to small cetaceans not covered in Sections B5 or B6.
☑ Yes. Please provide information below.

Per incident of disturbance, please provide: a description of the event, date, Area (Annex A), outcome for (a) the animal or (b) human (e.g. behavioural response, injury, death), describe mitigation measures, legal procedures/court proceedings/convictions, links to relevant information (websites, etc.)
››› In summer 2022 (July 19th), three beaked whales approached the shore in Zandvoort (a popular beach town, region II, southern North Sea), on a busy day. One of the whales beached, but was refloated by bystanders: https://nos.nl/artikel/2437479-zandvoortse-badgasten-behoeden-walvis-voor-aanspoelen
However, as the whale swam away, a woman attempted to climb on its back, prompting outrage from onlookers.
The woman was then sought by the authorities, and turned herself in to the police the next day. After spending one night in custody, she was subsequently released. She faced online threats after the incident and, partly because of this, the Public Prosecution Service decided to impose conditional dismissal with a probation period of one year: https://www.ad.nl/binnenland/vrouw-die-op-rug-van-dolfijn-klom-niet-vervolgd-opgelucht-dat-ze-dit-boek-kan-sluiten~a596922d/
No further sightings of the whales occurred, but a dead beaked whale washed ashore in Texel in August, potentially linked to the incident: https://www.rtlnieuws.nl/nieuws/nederland/artikel/5327794/dode-spitssnuitdolfijn-strand-texel

7.2. Relevant new research/work/collaboration on other sources of disturbance in your country.

List initiatives/projects (incl. PhD, MSc); publications (reports, theses, papers in journals, books) fromany study; web links to other information.
››› N/A

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

10. Pollution and Hazardous Substances (incl. microplastics)

AIM: to illustrate progress on understanding, monitoring and mitigating impacts of important current and emerging pollution-related hazards on small cetaceans. during the reporting period
Relevant Resolutions: 8.9, 8.8, **8.7**, 8.4 (Rev.MOP9), 8.3, **7.4**, 7.1, 6.1, 5.7
Marine environments have been subject to a wide range of different types of pollution over the last decades. Top predators, 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 small 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 marine environment and their impacts are presently poorly understood. Monitoring can be done using body tissue from small cetaceans obtained from live animals through biopsies, or from dead animals that are generally found on the shore. Necropsies allow the sampling of

different types of tissue such as blubber, muscle, kidney or liver and these can be analyzed subsequently.

To better understand the impact of contaminants on small cetacean health, to detect new emerging hazards and to work towards a common protocol for analyzing samples, countries are asked to provide information on their programs.
Note:Includes microplastics.Macroplastics and discarded fishing gear are covered under Section C 9 Marine Debris.

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

Several pollutants have serious effects on individual small 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 extent of this monitoring and the establishment of securely funded long-term data series.
☑ Yes

Comments:
››› Tissue samples of a a selection of fifty annually necropsied harbour porpoises are analysed on PCB's and PFAS. In 2022 PFAS, PCB, PBDE and HCB were sampled in a selection of fish species that are known prey of harbour porpoise

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

Please provide the following information per instituion(s)/agencies: name of institution/agency, role in monitoring (e.g. sample collection, analyses, other), postal address, contact person, telephone, email, weblink.
››› University Utrecht collects tissue samples during necropsies, and Wageningen Marine Research conducts the contaminant analysis
Veterinair Pathologisch Diagnostisch Centrum
Afdeling Pathologie, Departement Biomolecular Health Sciences
Faculteit Diergeneeskunde, Universiteit Utrecht
L.L.IJsseldijk@uu.nl
Wageningen Marine Research
Korringaweg 7
4401 NT Yerseke
martine.vandenheuvel-greve@wur.nl

10.3. Identify the small cetacean species that were covered by your monitoring program during the reporting period.
››› Harbour porpoise

10.4. Select the source of your samples.

Respondents may select multiple options.

☑ Necropsy from stranding

10.5. Select the geographical coverage of your monitoring program

Hold 'Ctrl' to select multiple options.
☑ OII Southern North Sea

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

Hold 'Ctrl' to select multiple options.
☑ POP (e.g. PCBs)
☑ Morbillivirus
☑ Brucella
☑ Others (specify in comments)

Comments:

››› No regular screening for virusses, but based on suspision of prevalence of a virus a PCR- or IHC- test is performed. Apart from morbilivirus and brucella, samples were regularly screened for herpes, pox and influenza virusses. Avian influenza has not been found.

10.7. Does your country determine microplastics in small cetaceans?
☑ Yes

Do you have a specific protocol to monitor microplastics in small cetaceans?

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 airbine microplastic fibres.
☑ Yes

Please provide details and web link or upload document:
››› Microplastics are ad-hoc determined; stomach remains are stored and assessed irregularly, using the proposed protocol for monitoring of micro plastics that can be found in: van Franeker, J.A., Bravo Rebolledo, E.L., Hesse, E. et al. Plastic ingestion by harbour porpoises Phocoena phocoena in the Netherlands: Establishing a standardised method. Ambio 47, 387–397 (2018). https://doi.org/10.1007/s13280-017-1002-y

10.10. Have there been any instances/issues related to pollution and hazardous substances in your country during the reporting period?
☑ No

10.11. Is the perceived level of pressure from pollution and hazardous substances in your country increasing, decreasing, staying the same or unknown?
☑ Unknown

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 (Rev.MOP9), 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.
Ship strike occurrence is directly linked to the frequency of shipping activity, including such directed at cetaceans, i.e. cetacean watching. To quantify this pressure, it is important to know what kind of vessels are involved in the strike, as well as the type, size and speed of the vessel. But it is also important to have information on the small cetaceans involved, in particular if the animals were engaged in certain 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 chance of survival. 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 assess the percentage of animals in a photo-identification catalogue that bear 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 countries.

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 small 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.
If you select 'Yes', please provide details in **this table** - download and then attach it using the blue 'link' button below.
☑ No

11.2. Are there reports in your country of vessel strikes from necropsies of stranded animals for the reporting period?

If you select 'Yes', please provide details in **this table** - download and then attach it using the blue 'link' button below.
☑ Yes. Please provide details in the table.

You have attached the following documents to this answer.

Sec-II_C_11.2_0.xlsx

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?
☑ Yes

Please provide information below:

››› Necropsies to determine cause of death are conducted following a standardized protocol (IJsseldijk t al., 2019). 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. The latest report with 2022-results is published by Van Schalkwijk et al., (2023).
IJsseldijk, L.L., Brownlow, A.C., & Mazzariol, S. (eds.). (2019). Best practice on cetacean post-mortem investigation and tissue sampling. Joint ACCOBAMS and ASCOBANS document: osf.io/zh4ra.
Van Schalkwijk, L., E.T. Schotanus, M.J.L. Kik, A. Gröne & L.L. IJsseldijk (2023). Postmortaal onderzoek van bruinvissen (Phocoena phocoena) uit Nederlandse wateren, 2022. Biologische gegevens, gezondheidsstatus en doodsoorzaken. Wettelijke Onderzoekstaken Natuur & Milieu, WOt-technical report 239.

11.4. Is there evidence in your country from exisiting photo-identification catalogues of small cetaceans of any non-lethal ship strike during the reporting period?

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.
If you select 'Yes', please provide details in **this table** - download and then attach it using the blue 'link' button below.
☑ No

11.5. Do you have any other photographs or evidence of ship strikes outside of the photo identification catalogue?

☑ Yes

Please provide details:

››› As listed in table 11.2. Van Schalkwijk et al. (2023) describe a juvenile male (UT 1943) in good nutritional status. This animal had seven sharp lateral cuts on the upper side from the tail to the head, all located approximately 6 cm apart. A CT scan showed that the incisions continued into the underlying vertebrae and skull. Extensive bleeding and edema were found (macroscopically and histologically) during the dissection, which tells us that the animal was still alive at the time of the injuries. The lesions are likely caused by an open, very fast rotating propeller, such as that of a speedboat or equivalent. Besides a slightly fatty liver, this animal had no other significant organ abnormalities.

11.7. List any management/policy actions/relevant regulations/guidelines related to mitigating ship strike for small cetaceans (re-routing, tracking animals, ship speed limits) in your country and the year of implementation (current and planned).

Provide web links if available.
››› N/A

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

☑ No

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

☑ Unknown

12. Climate Change (incl. ocean acidification)

AIM: to illustrate progress on understanding, monitoring and mitigating negative effects of important and emerging climate change related impacts on small cetaceans.
Relevant Resolutions: 8.9, 8.4 (Rev.MOP9), 8.3, 7.4, 7.1, 6.1, 5.7
It is certain that climate change is altering the habitat of cetaceans. However, our understanding of how the predicted changes will impact different species and populations can be further developed by identifying issues and trends through reporting. CMS[1] highlights the importance of addressing potential issues through the engagement of (1) researchers to better understand the underlying processes, as well as (2) conservation managers and policy makers to monitor changes and to mitigate negative impacts.Focus should be given to understanding tangible climate change effects relevant to cetaceans, such as changing ocean temperatures, prey depletion / prey range shifts, ocean acidification, increased frequency and intensity of ocean storms, changes in sea ice and weakening of the North Atlantic Drift. Such occurrences require that we 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 on those actions specifically regarding cetaceans as well as the most likely impacts on their habitat and prey. Climate change possibly represents one of the most important future threat to the status of cetaceans in the ASCOBANS region. Direct effects may arise due to ocean warming, resulting in distribution shifts (generally northward) 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.
[1]CMS Resolution 12.21on Climate Change and Migratory Species.

12.1. Does your country undertake monitoring that has potential to contribute to knowledge and identification of climate impacts on small cetaceans?

Climate change will have a multitude of possible direct and indirect effects on small cetaceans. Attempting to quantify this is challenging. These questions are are attempt at providing an overview of the type of monitoring programmes that are conducted that may provide indirect evidence of climate change on small cetaceans.
☑ Yes. Continue to Question 12.2.

12.2. Which effects has your country been monitoring during the reporting period?

Hold 'Ctrl' to select multiple options.

☑ Changes in small cetacean abundance
☑ Changes in small cetacean distribution
☑ Changes in small cetacean migration or movement timing
☑ Changes in small cetacean community structure
☑ Changes in reproductive success and timing in small cetaceans
☑ Changes in prey (fish) abundance and distribution
☑ Changes in timing of prey (fish) spawning and migration
☑ Changes in fishing effort
☑ Changes in the occurrence of pathogens (from sampled individuals)
☑ Incidence of algal blooms (in comments, specify where and year)

Comments (if possible, provide contact/link to project):
››› Changes in abundance, distribution and timing of migration or movement are monitored through aerial surveys and land-based sea watching.
contact: Steve Geelhoed WMR; https://www.trektellen.nl
The Netherlands are part of the SCANS surveys which provide abundance estimates and data on distribution in the North Sea. contact: Steve Geelhoed, WMR
Changes in prey (fish) abundance and distribution, timing of fish spawning and migration and changes in fishing effort are monitored through:
Wageningen Marine Research. Information is provided to ICES. contact: Thomas Brunel (thomas.brunel@wur.nl), WMR.
Changes in reproductive success (on a small scale) and the occurrence of pathogens is investigated through post mortem examination of animals. This is conducted by the Department of Pathobiology, Faculty of Veterinary Medicine, Utrecht University. Lonneke IJsseldijk, UU.
Information on population structure of harbour porpoises as been analysed using data on stranded animals. Lonneke L. IJsseldijk & Mariel T.I. ten Doeschate (2019). Analysis of stranding data of harbour porpoises along the North Sea for a better understanding of the population structure. Rapportage UU, Departement Pathobiologie, Faculteit Diergeneeskunde, Universiteit Utrecht.
Information on Harmful algal blooms are collated on an international level in the Harmful Algal Event Database (HAEDAT). http://haedat.iode.org/ The Netherlands contribute data through for example monitoring programs of RWS of phytoplankton (https://waterinfo-extra.rws.nl/monitoring/biologie/fytoplankton/).

12.3. Relevant new research/work/collaborations which provide evidence/data about climate change, including its emerging potential issues and effects on small cetaceans in your country.

List initiatives/projects (incl. PhD, MSc); publications (reports, theses, papers in journals, books) from any study; web links to other relevant information); include the species concerned, the cliamte change effect observed, who did the work)
››› Harmful algal Events / phytoplankton:
Karlson B., Andersen P., Arneborg L., Cembella A., Eikrem W., John U., West J.J., (...), Suikkanen S. (2021) Harmful algal blooms and their effects in coastal seas of Northern Europe. Harmful Algae, 102 , art. no. 101989
- example of an analyses using the above mentioned HAEDAT database on harmful algae.
Beer, Maxine AM. The effect of climate change on the toxic microalga Alexandrium ostenfeldii (Dinophyceae) in the Dutch coastal waters. Diss. 2021

Mészáros, Lőrinc, et al. "Climate change induced trends and uncertainties in phytoplankton spring bloom dynamics." Frontiers in Marine Science 8 (2021): 669951.
Management and Monitoring NL North Sea:
Boon, Arjen R., and Jacco C. Kromkamp. "Climate change and intensifying human use call for a monitoring upgrade of the Dutch North Sea." Journal of Sea Research 182 (2022): 102185.
de Vrees, Leo. "Adaptive marine spatial planning in the Netherlands sector of the North Sea." Marine Policy 132 (2021): 103418.
Impact on prey (fish and cephalopods) species of small cetaceans:
van de Wolfshaar, K. E., L. Barbut, and Geneviève Lacroix. "From spawning to first-year recruitment: the fate of juvenile sole growth and survival under future climate conditions in the North Sea." ICES Journal of Marine Science 79.2 (2022): 495-505.
Weinert, Michael, et al. "Climate change effects on marine protected areas: Projected decline of benthic species in the North Sea." Marine Environmental Research 163 (2021): 105230.
Oesterwind, Daniel, et al. "First evidence of a new spawning stock of Illex coindetii in the North Sea (NE-Atlantic)." Fisheries Research 221 (2020): 105384.
Oesterwind, Daniel, et al. "Climate change-related changes in cephalopod biodiversity on the North East Atlantic Shelf." Biodiversity and Conservation 31.5-6 (2022): 1491-1518.
van der Veer, Henk W., et al. "Changes in functioning of the largest coastal North Sea flatfish nursery, the Wadden Sea, over the past half century." Marine Ecology Progress Series 693 (2022): 183-201.
Ecosystem changes:
Rozemeijer, Joachim, et al. "Climate variability effects on eutrophication of groundwater, lakes, rivers, and coastal waters in the Netherlands." Science of the Total Environment 771 (2021): 145366.

12.4. Have there been any instances/issues related to identified trends in small cetacean populations as a result of climate change in your country during the reporting period?

☑ No

Please provide details:

››› Analyses of a mass stranding of porpoises in Dutch waters in 2021 showed their cause of death linked to bacteria (Erysipelothrix rhusiopathiae). However, a low amount of saxitoxine (STX) was found in the porpoises: STX is a powerful biotoxin produced by algae that affects the functioning of the nervous system. It is not known if STX played a role in the death of the animals. contact: Lonneke IJsseldijk, UU

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

☑ Unknown

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 that cause physical habitat change and improving our understanding of their relative impacts will help shape any necessary mitigation action required.
Relevant Resolutions: **8.11 (Rev.MOP9)**, 8.9, 8.6, 8.4 (Rev.MOP9), 8.3, 7.1, 6.2, 6.1, 5.7
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 small cetaceans, including information provided in National Reports, taking into account the work done by other organizations.
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.

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 the reporting period.

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.
Please provide per region (Annex A): the type of information (e.g. maps, GIS, reports), whether the data is available online, and web links to data, or comment on unavailability.
››› Sand extraction
https://maps.rijkswaterstaat.nl/gwproj55/index.html?viewer=ZD_Zandwinstrategie.Webviewer
GIS-data are available on request for sand extraction, dredgiing, construction work at Servicedesk

Rijkswaterstaat https://www.rijkswaterstaat.nl/zakelijk/open-data

13.2. Does your country have any reported cases of physical habitat changes (e.g. dredging, marine construction, coastal construction) impacting small cetaceans during the reporting period?

If you select 'Yes', please also provide web links if available.
☑ No

Please provide details:
››› The impact of construction of e.g. wind parks due to acoustic emissions is adressed under B.3 Noise.
Construction of offshore windparks is changing the habitat of small cetaceans (e.g. dredging, hard substrate introduction), however, the impact is not well understood.

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

Per measure, please provide: the applicable industry, activity type, whether the measure has been effective with additional comments, and other relevant information.
››› Not to our knowledge.
Acoustic impact is mitigated (covered in section B.3 Noise)

13.4. Relevant new initiatives/projects/publications (reports, theses, papers in journals, books) in your country during the reporting period on impacts from physical habitat change on small cetaceans (incl. title, organization, lead author).

Provide web links if available.
››› Not to our knowledge

13.5. Have there been any other instances/issues in your country regarding physical habitat change during the reporting period?

☑ No

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

☑ Staying the same

E. Area-based Conservation / Marine Protected Areas

16. Protected Areas, e.g. Natura 2000 Sites

AIM: to provide information on existing and proposed marine protected areas with small cetaceans as part of the selection criteria.
Relevant Resolutions: 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, MSFD) as a tool to achieve conservation goals. Part of ASCOBANS remit is to provide expert advice on 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. This also includes advising on appropriate management measures 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 and actions in the workplan, ASCOBANS requires information (e.g. location, species, status, spatial data, management plans and monitoring) on existing and proposed marine protected areas with small 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.

16.1. Does your country have MPAs (existing or proposed) where small cetaceans are the primary reason for the (proposed) designation?

If you select 'Yes', please provide details in **this table** - download and then attach it using the blue 'link' button below.
☑ No

16.2. Does your country have MPAs (existing or proposed) with small cetaceans are forming part of the selection criteria?

If you select 'Yes', please provide details in **this table** - download and then attach it using the blue 'link' button below.
☑ Yes

How many? Please also provide more details in the table.
››› 8, see table and map (areas A, C, E, F, H, I, J , K). Table also includes (4) other MPAs, that do not have HP as a selection criteria but may still be relevant.

You have attached the following documents to this answer.

HP_protection.jpeg - Map of dutch MPAs i.r.t. harbour porpoise
Sec-II_E_16.2_0_NL.xlsx - Dutch MPAs North Sea and adjacent waters

16.3. Provide information on management measures, including regulations/guidelines, particularly relevant to small cetaceans in MPAs listed above. Including any temporal/spatial restriction of activities (i.e. seasonal fishery closures).

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.
Please provide per site name, the pressure, and the measure per pressure.
››› Here are the key measures that are of relevance for the protection of harbour porpoises (although most of them were not installed specifically for harbour porpoise) (refer to the attached map):
- Establishment of (small) seasonal or year-round closed areas in coastal MPAs (Wadden Sea, Noordzeekustzone, Oosterschelde, Westerschelde & Saefthinge, Voordelta, Vlakte van de Raan) for specific fisheries or all activities.
- Imposition of restrictions on (commercial) gillnet fisheries, including limitations on net length, mandatory use of pingers during specific seasons, area closures within MPAs, participation in REM projects, and adherence to technical specifications. (Wadden Sea, Noordzeekustzone, Oosterschelde, Westerschelde & Saefthinge, Voordelta, Vlakte van de Raan)
- Implementation of seasonal limitations on gill nets in the Frisian Front Birds Directive area.
- Designation of closed areas within offshore MPAs for all mobile bottom impacting fishing gear (Cleaverbank, Central Osterground MSFD area, Frisian Front MSFD area).
- Requirement of individual licensing and review for most (new) activities in N2000 areas, with exemptions and conditional allowances for existing activities at the time of designation.

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

››› According to HD regulations, HD species and N2000 areas undergo assessments.
Every six years, a review and assessment of all HD species and habitats is conducted to determine their conservation status, based on population status, habitat range, habitat quality, future prospects and trends. The most recent assessment was performed in 2019, covering the period from 2013 to 2019. The conservation status of the harbour porpoise was determined to be 'favourable'.
As for N2000 areas, management plans are renewed every six years. During this process, an evaluation is conducted to determine if the conservation goals have been achieved or are likely to be achieved. If necessary, additional measures are considered. The existing management plans for current MPAs have recently been extended for another six years (or until a new plan is available), typically covering the period from 2015 to 2021 or 2016 to 2022. For newly designated MPAs, the development of management plans is currently underway.

16.5. Relevant new research/work/collaboration relating to MPAs in your country.

In order to plan future approaches to MPA management and monitoring, we need to be aware of current gaps and emerging issues.
List initiatives/projects (incl. PhD, MSc); publications (reports, theses, papers in journals, books) from any study; web links to other relevant information; include the species concerned, who did the work)
››› - Study envisioned within 'MONS research and monitoring programme' (see section "other matters" for more information on MONS) into the behaviour of cetaceans within closed areas.

IV. Use of Strandings Records

A. Stranding Network and Strandings

AIM: to provide information on stranding events and demonstrate progress of stranding networks in understanding, monitoring and mitigating strandings of small cetaceans.
Relevant Resolutions: **8.10 (Rev.MOP9)**, 8.7, 8.4 (Rev.MOP9), 8.3, 7.4, 7.3, 7.1, 6.1, 5.7
Stranding of cetaceans is an ever-present occurrence and analysis through necropsy and sampling can provide indications of reason for injury and death. Stranding numbers also provide information on population status, abundance and distribution. Effective response to strandings contributes to the maintenance of favourable conservation status of small cetaceans and also has implications for animal welfare. Comprehensive stranding networks are a critical asset in managing small cetacean strandings and have resulted in large numbers of animals rescued and returned to sea. These networks also have the capacity to guide the public on animal welfare, human health and safety considerations during stranding events.
In the effort to mitigate the anthropogenic causes of these occurrences, Parties have agreed to measures through a number of resolutions. Continued monitoring of stranding causation and further developing guidance for best practices in stranding response and necropsies was identified by Parties as important tasks to pursue, as was setting up stranding response networks. This information is to align with appropriate sampling practices and countries should ensure that the data is available for researchers. Additionally, development and support of international strandings databases and regular reporting is conducted through relevant research institutes and stranding schemes. ASCOBANS Secretariat encourages the ongoing funding and support of engagement with organizations for further development of guidelines, best practices and maintaining dataflow for capacity building across stranding networks.
To better understand the extent to which stranding events occur and how these events are managed, it is the interest of ASCOBANS for countries to provide the relevant information on these occurrences within the Agreement Area, procedures undertaken in response to stranding events, necropsies and information on stranding networks.

1.1. Is there a national stranding network in place?

☑ Yes

1.2. Does the national stranding network cover the whole, or part of the reporting country's coastline?

☑ Whole coastline

1.3. Are necropsies carried out to determine cause of death?

☑ Yes

VI. Information and Education

A. Education and Outreach

A. Education and Outreach

AIM: to determine if there are gaps in the outreach and education activities and if additional material should be produced in your country or by the Secretariat (e.g. on certain themes, species, regions, languages, for certain target audiences).
Relevant Resolutions:8.13,8.3, 8.2, 5.8
The revised ASCOBANS Communication, Education and Public Awareness (CEPA) Plan (see ASCOBANS/MOP9/Doc.5.3 Annex 1) was endorsed by the 9th Meeting of the Parties (2020). The purpose of the CEPA Plan is to identify realistic activities relevant to ASCOBANSand mandated by Parties, to be undertaken by the Secretariat, Parties, and relevant partners.It seeks a clearer focus amongst Secretariat, Parties, Partners, and stakeholders regardingobjectives. (The previous CEPA Plan is available at AC17/Report/Annex10.) The purpose of this section is to highlight successes and to identify potential gaps in outreach and education activities and related materials.

1.1. List education/outreach activities in the reporting period in your country, which are of relevance to conservation of small cetaceans in the ASCOBANS Area.

E.g. activities during the International Day of the Baltic Harbour Propoise in May.
Per activity, please identify: the organizer, name of activity (incl. translation to English, where applicable), date(s), location, target audience (general public, scientists, children, fisheres; others - please state), and links for further information.
››› April 2022: New rehabilitation centre opened by SOS Dolfijn, including educational area (https://www.sosdolfijn.nl/opvangcentrum).
14 May 2022: Dag van de vrijwilliger: day for stranding network volunteers; Presentations on various harbour porpoise related topics, plus worskhops on necropcies, dioet analysis and first aid for beached cetaceans. At University Utrecht premisses, Organized by Ministry of Agriculture, Nature and Food Quality, University Utrecht Department Biomolecular Health Sciences - Pathology and Wageningen Marine Research
Summer: skeleton of bottlenose dolphin Zafar added to permanent exhibtion in Ecomare Texel
July Summerschool Junior by SOS Dolfijn
Target audience: children (8-13 years old)
In short: During Junior Summer School, children of primary school come to Utrecht University to discover how fun and fascinating science is! One of the programmes for the Summer school Junior was focused on harbour porpoises. The participants learned how to act in the event of a stranded porpoise on the beach and how SOS Dolfijn can rehabilitate these diseased animals. In addition, the kids performed CSI, with footage of the necropsy at Utrecht University. What could have been the cause of death of the beached porpoise? With different clues of scars, and DNA results, they were able to pinpoint the killer: the great seal!
https://www.youtube.com/watch?v=WJ28Bjq0cg8
1-15 August 2022: (Yearly) Beach Clean-up tour by Stichting De Noordzee. Participants clean up sections of the entire Dutch North Sea coast. https://www.beachcleanuptour.nl/
October till present: Setting up an educational kids club: “Bruinvis Buddys (Porpoise Buddies) for children (7-12 years old)
Year round: Primary school visits by SOS Dolfijn. Target audience: children (4-12 years old). The SOS Dolfijn educational team provided several guest lessons in primary schools.

1.2. List current information/outreach materials produced in your country, which are of relevance to the ASCOBANS Area and species.

Per publication, please provide: the name of the publication (inc. translation into English, where applicable), author(s), publisher, year, links (to download publication), and identify whether ASCOBANS may distribute the link to publication for outreach purposes.
››› Online lesson package: “De Walviswereld Dichtbij” (The world of the whale closer) Target audience: primary school students and teachers. Made by SOS Dolfijn https://www.dewalviswerelddichtbij.nl/
Utrecht University (2021): one-time magazine 'De Bruinvis' ('The harbour porpoise'), about the species, strandings and the pathological research.
https://www.uu.nl/sites/default/files/De%20bruinvis%202021_web_def.pdf
Stichting De Noordzee: toolkit for beach clean-up https://www.noordzee.nl/strandopruimen/

1.3. List other organizations engaged in outreach relevant to the ASCOBANS Area.

Please include web links where applicable.
››› Stichting Rugvin
Jeruzalem 31 a
6881 JL Velp

www.rugvin.nl
Stichting SOS Dolfijn
Van Ewijckskade 1
1761 JA Anna Paulowna
www.sosdolfijn.nl
Ecomare
Ruijslaan 92
1796 AZ De Koog
www.ecomare.nl
Stichting De Noordzee
Arthur van Schendelstraat 600
3511 MJ Utrecht
https://www.noordzee.nl/

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

☑ No

VII. Other Matters

A. Other information or comments important for the Agreement.

Opportunity to include other information relevant to the topics covered in this form but which are missing.
››› The Netherlands initiated a four-year tagging pilot project for harbour porpoises in the southern North Sea. Within this project the feasibility of tagging harbour porpoises in the Dutch North Sea will be explored, with the aim of developing a method for and gaining experience with catching, tagging and releasing harbour porpoises in their natural environment. Collaboration with (a.o. Danish) experts and regular evaluations will guide the project's progress.
A new research program was initiated: 'Monitoring en Onderzoek Natuurversterking en Soortenbescherming' (MONS). (Monitoring and research for nature reinforcement and species protection). The main question is: how does anthropogenic use fit within the carrying capacity of the North Sea? The program includes a multitude of studies, including into cetaceans. https://www.noordzeeoverleg.nl/noordzeeoverleg/mons-programma/default.aspx#
The CIBBRiNA project was granted (EU LIFE). Goal of project is to achieve EU cross-border cooperation and fisheries engagement by optimising, developing and evaluating proven and promising mitigation methods as well as support tools and processes, such as monitoring and assessment, and working to ensure their long-term implementation to minimise, and where possible eliminate the incidental bycatch of marine mammals, birds, turtles and non-commercial fish.

B. Difficulties in implementing the Agreement.

››› - Data sharing barriers
- Long term funding for e.g. SCANS
- Not having the right organisations at the table, e.g. navies, fishers
- Too many technical outputs and too few communicable key messages for policy makers