Agenda Item 4.3 — Reports

National Reports of ASCOBANS Parties

National Report 8 — **2016 – 2019 National Report:**

Sweden

Action Requested — Take note

Submitted by — Sweden

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

Agenda Item 4.3 — Reports

National Reports of ASCOBANS Parties

National Report 8 — **2016 – 2019 National Report:**

Sweden

Action Requested — Take note

Submitted by — Sweden

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

ASCOBANS National Reporting Form

1 January 2016 – 31 December 2019

As outlined in ASCOBANS Resolution 8.1 on National Reporting, this form will cover the years 2016, 2017, 2018 and 2019, and all Sections of the Annex to the Resolution:

- Section I: General Information
- Section II: Habitat Conservation and Management (threats and pressures on cetaceans)
- Section III: Surveys and Research
- Section IV: Use of Bycatches and Strandings
- Section V: Legislation
- Section VI: Information and Education
- Section VII: Other Matters

The national reports submitted will inform discussions at the 9th Meeting of the Parties to ASCOBANS (8-10 September 2020).

- All questions apply to the reporting period 2016-2019.
- 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 drop-down list provided, based on ASCOBANS species list, see Annex B.
- Throughout the form, please include relevant web links and add rows 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.

High-level Summary of Key Messages

In your country, for the reporting period from 2016 to 2019, what does this report reveal about:

1. **The most successful aspects of implementation of the Agreement?** (list up to five items)
   - We have a growing porpoise monitoring network that began in 2017, and is still expanding regionally.
   - We have new Marine Protected Areas appointed in south and east of Sweden

2. **The greatest challenges in implementing the Agreement?** (list up to five items)
   - Difficulties in determining changes in abundance/distribution without population-wide internationally collaborative data
   - Bycatch

3. **The main priorities for future implementation of the Agreement?** (list up to five items)
   - Implement management plans and measures in the new Marine Protected Areas

Section I: General Information

A. Country Information

1. **Name of Party / Non-Party Range State:** Sweden

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)**

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

A. Fisheries-related Threats

1. Bycatch

AIM: to illustrate progress on understanding, monitoring and mitigating bycatch of small cetaceans.
Relevant Resolutions: **8.5**, 8.4, 8.3, 7.3, 7.1, 6.1, 5.8, 5.7, **5.5**, **3.3**

Bycatch, the entanglement of an animal in fishing gear, is identified as a major cause of mortality in small cetaceans. Every effort should be made to reduce bycatch towards zero as quickly as possible. Parties to ASCOBANS have agreed on a number of resolutions that highlight the importance of mitigating bycatch of small cetaceans in the Agreement Area, as available data indicates that levels of bycatch pose a considerable threat to their conservation status. Parties have agreed that modifications of fishing gear and relevant practices shall be applied in order to reduce negative impacts where data indicates unacceptable interaction. The Agreement Area requires improved monitoring, collation of data, and consideration of appropriate mitigation measures, while also taking into account similar work in other areas.

To better understand the extent of the impact of bycatch on small cetaceans, monitoring and mitigation measures in place, and ongoing work in the Agreement Area, countries are requested to provide relevant information.

Note: This section includes bycatch in recreational fisheries.

Questions:

1.1. How is bycatch assessed/monitored in your country?

Year	Method	Used	Percentage (% by monitoring method, of total bycaught animals, by gear type if applicable)
2016	Dedicated observser schemes	☐	
	Fisheries observes	☒	
	Remote Electronic Monitoring	☐	
	Self-reporting by fisherman	☐	
	Pathological investigation	☒	
	Assessment at stranding site	☐	
2017	Dedicated observser schemes	☒	
	Fisheries observes	☒	
	Remote Electronic Monitoring	☐	
	Self-reporting by fisherman	☐	
	Pathological investigation	☒	
	Assessment at stranding site	☐	
2018	Dedicated observser schemes	☒	
	Fisheries observes	☒	
	Remote Electronic Monitoring	☐	
	Self-reporting by fisherman	☐	
	Pathological investigation	☒	

	Assessment at stranding site	☐	
2019	Dedicated observser schemes	☒	
	Fisheries observes	☒	
	Remote Electronic Monitoring	☐	
	Self-reporting by fisherman	☐	
	Pathological investigation	☒	
	Assessment at stranding site	☐	

Comments:

1.2. Which species of small cetaceans were recorded as bycatch by commercial fishing in the reporting period?

Overview of bycaught small cetaceans per region. Provide information where available.

Species	Number of bycaught animals observed	Year (incl. season if available)	Gear type	Area (Here refers to the area where the porpoise was caught)	Overall sampling effort (Referers to all sampled areas)	Monitoring method used
HP Harbour porpoise	**2**	**2017**	**GNS/GTR**	**27.3.b.23**	**23 trips**	**Observer**
HP Harbour porpoise	**2**	**2018**	**GNS/GTR**	**27.3.b.23**	**32**	**Observer**
HP Harbour porpoise	**12**	**2019**	**GNS/GTR**	**27.3.b.21 and 27.3.b.23**	**31**	**Observer**
Species	**Number of bycaught animals observed**	**Year** (incl. season if available)	**Gear type**	**Area**	**Overall sampling effort**	**Monitoring method used**

1.3. Which species of small cetaceans were recorded as bycatch by recreational fishing in the reporting period?

Overview of bycaught small cetaceans per region. Provide information where available.

Species	Number of bycaught animals observed	Year (incl. season if available)	Gear type	Area	Overall sampling effort	Monitoring method used
Choose an item.				Choose an item.		
Choose an item.				Choose an item.		

1.4. Has there been any notable incidents/issues related to bycatch during the reporting period in your country?

☒ **No.**

☐ **Yes.** Please provide details:

(mass bycatch incidents, unusual species bycatch etc.)

1.5. Are there any mitigation measures in place?

☐ **No.**

☐ **Yes.** Please provide details: What mitigation measures (including alternative gear) are being used and where? (acoustic deterrent devices, seasonal closures, gear modifications etc.)

Mitigation approach	Region	Year implemented	Has the mitigation measure been effective?
Alternative fishing gear (pots)	H Western Gotland Basin	2017-2019	☐ No ☒ Yes. Comments:
Alternative fishing gear (trapnets)	H Western Gotland Basin	2017-2019	☐ No ☒ Yes. Comments:
Pingers	Kattegatt, Skagerakk, The	2017-2019	☐ No ☒ Yes. Comments:

	sound, South Baltic Sea		
Alternative fishing gear (Seine)	H Eastern Gotland Basin	2017-2019	☐ No ☒ Yes. Comments:

1.6. Have there been changes in fishing effort (for fisheries known to have an impact) in the reporting period?

☐ **No.**

☐ **Unknown/not applicable.** Comments:

☒ **Yes.** Please provide details:

The fishing effort in Swedish waters is mainly distributed along the coast in southern Swedish waters. Since August 2019 there has been a ban on fishing for cod in Baltic waters, leading to a decline in fishing effort (EU 2019/1838). No gillnet fisheries for cod are allowed in Subdivision 25, 25 and 26. In Area 24, fishing for cod is allowed but only in waters shallower than 20 metres. Thereby the fishing effort in this area has significantly declined since august 2019 (WKEMBYC 2020).
Overall in swedish waters, gillnet fisheries targeting cod, which is the dominant fisheries, in the southern and central Baltic have decreased by 80 % since 2006 until 2018 (Königson et al., 2020).
In south baltic waters (including Poland, Germany and Denmark) gillnet fishing effort has decreased by 44% over the past 10 years (WKEMBYC 2020).
Along the westcoast analysis show that from 2001 and 2015 the fishing effort in Kattegatt and Skagerakk has declined by 18%. 66% of the decline occurred in the fisheries after cod and trout. Since the 1990ties there has been an even dramatic decline in gillnet fisheries due to the decline of the cod population (Åtgärdsprogram för tumlare 2017).

Königson, S., Nilsson, A., Ljungbergs, P and Lunneryd, S-G. 2019. Visual and hidden losses in the cod gillnet fishery in the south central Baltic. *Submission in November 2019 to ICES journal of Marine Science.*

ICES 2020. MEASURES TO MINIMIZE BYCATCH OF SHORT-BEAKED COMMON DOLPHINS IN THE BAY OF BISCAY AND HARBOUR PORPOISE IN THE BALTIC SEA (WKEMBYC)–DRAFT REPORT VOLUME 2 | ISSUE 43

Hav och vattenmyndigheten. 2017. Åtgärdsprogram för tumlare. Conservation plan for harbour porpoise. To be published.

1.7. Relevant new research/work/collaboration on bycatch 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)

- Niu J (2019) Factors affecting harbour porpoise bycatch occurrence in the Swedish Skagerrak and Kattegat Seas. Master's Thesis, Uppsala University.
- Neimane A, Stavenow J, Ågren E, Wickström E, Roos A (2020) Hälso- och sjudomsövervakning av marina däggdjur. Del 2. Hälsa, sjukdomar och dödsorsaker hos tumlare (*Phocoena phocoena*) i Sverige de senaste 10 åren. SVA Rapportserie: ISSN 1654-7098 NR 59.
- Sweden too the lead in the submission of the concept note for the SAMBAH II LIFE project in 2019, and continues to work on the application. The project that aims to produce indicative by-catch risk maps for the entire range of the Baltic Proper harbour porpoise population, and to host a workshop that will bring together fisheries and porpoise scientists to review the current state-of-the-art of bycatch reduction methods.
- Garcia, A. 2017. "Dinner-bell" effect and audibility of different pinger sounds in grey seals (*Halichoerus grypus*). Master thesis Linköping University and Swedish University of Agricultural Science.
- Pettersson, A. 2017. Pingers can deter Harbour porpoises without acting as a "dinner-bell" for Grey seals. Master thesis Linköping University and Swedish University of Agricultural Science.
- Friis, C. 2017. Testing the deterrent effect of a "Seal-safe" pinger on harbor porpoises (*Phocoena phocoena*). Master thesis Linköping University and Swedish University of Agricultural Science.
- Persson, L. 2017. The effect of "seal-safe" pinger sounds on wild Harbour porpoises *(Phocoena phocoena). Master thesis* Linköping University and Swedish University of Agricultural Science

- Mattsson, E. 2017. *Spatial och temporal förändring i närvaro av vanlig tumlare (Phocoena phocoena) vid fiske med pingers i Skälderviken och Kullaberg.* Bachelor thesis at the Department of Aquatic Resources, Slu. https://stud.epsilon.slu.se/10223/1/Mattsson_E_170608.pdf
- Simon Aksoy Björklund. Evaluating a seal-safe Harbour porpoise deterrent in a bycatch in gillnet fisheries. *Master thesis* Linköping University and Swedish University of Agricultural Science.
- Sara Gustafsson. Behaviour of harbor porpoises around gillnets modified with acoustic reflective pearls. Master thesis at the Department of Aquatic Resources, Slu
- Königson, S., Hedgärde, M., Naddaffi, R., Pettersson, A., and Amundin, M. Can a pinger not audible affect the presence of harbor porpoises nearby? *Accepted in Marine Mamma Science.*
- Königson, S., Mac Leod, K., Hedgärde, M., Krauffelin, P., Östman, Ö and Amundin, M. Do the use of pingers in a commercial fishery affect harbour porpoise behavior over a long time? *Submission in December 2020*

Alternative gear research:

- Hedgärde, M., Willestofte Berg, C., Kindt-Larsen, L., Lunneryd, S-G., Königson, S (2017) Explaining the catch efficiency of different cod pots using underwater video to observe cod entry and exit behaviour. Journal of Ocean Techknowodgy Vol. 11 No 4.
- Ljungberg, P., Lunneryd, S-G., Lövgren, J. and Königson, S. (2017) Including cod (Gadus Morhua) behavioral analysis to evaluate entrance behavioural analysis to evaluate entrance type dependent pot catches in the Baltic Sea. Journal of Ocean Techknowodgy Vol. 11 No 4.
-

1.8. Is the perceived level of pressure from bycatch in your country increasing, decreasing, staying the same or unknown?

To be done per species where applicable.

Species	Increasing	Decreasing	Staying the same	Unknown	Nature of the evidence (e.g. strandings, observer schemes)
HP Harbour porpoise	☐	☒	☐	☐	Decrease of fishing effort in the baltic
Choose an item.	☐	☒	☐	☐	Decrease of fishing effort in Kattegatt Skagerakk
Choose an item.	☐	☐	☐	☐	

☐ **Not applicable.** Comments:

A. Fisheries-related Threats

2. Resource Depletion

AIM: to determine areas where, and to what extent, depletion of fish stocks have occurred during the reporting period. In addition; identify ongoing mitigation efforts regarding detrimental implications for small cetaceans.

Relevant Resolutions: 8.9, 8.3, 7.1, 6.1

Depletion in fish stocks due to overfishing and other factors generates pressure on the favourable conservation status of small cetaceans (through possible food shortage). More integrated management and reductions in fishing effort (also prompted by concern about fish stock depletion or other ecosystem considerations) have been encouraged, especially in areas of known risk. Further research, effective fishery regulations and innovation within certain fishing methods are considered to be helpful steps towards mitigating this pressure.

Parties to ASCOBANS have agreed on a number of resolutions that (1) determine the impact of the depletion of fish stocks on small cetaceans, (2) encourage fishing effort reductions and (3) review new information on these depletions to make recommendations. Resource depletion in the Agreement Area requires improved monitoring, collation of data, and consideration of appropriate mitigation measures, while also taking into account similar work in other areas.

It is of particular interest to ASCOBANS to understand the extent of prey depletions, any related ongoing work, monitoring and mitigation measures in the Agreement Area. Countries are requested to provide relevant information.

Questions:

2.1. Based on the latest stock assessments, are there any notable depletions of fish species which would be a concern for small cetaceans?

☐ **No.**

☐ **Yes.** Please provide details.

Depletions of Cod stocks in Kattegatt, Skagerak and the Baltic, status are in a bad state and emergency actions has been implemented.

2.2. Where are these depletions in national waters occurring?

Sub-areas/regions as defined by ICES/OSPAR & HELCOM.

Area	Region
Kattegatt, Skagerak and the Baltic	Choose an item.
Choose an item.	Choose an item.
Choose an item.	Choose an item.

2.3. What measures are being taken to manage pressures on depleted fish stocks, including relevant regulations/guidelines (current / planned / year of implementation)?

Measure	Timeframe information	Relevant driver
Fishing for cod is banned in area 24-32)	Until 2020	(EU-regulation 2019/1838)
All fishing is banned during certain time periods in area 23-26	Until 2020	(EU-regulation 2019/1838)

2.4. Is there any evidence within your country's national waters that resource depletion may be impacting small cetaceans (e.g. evidence of starvation)?

☐ **No.**

☐ **Yes.** Please provide details.

2.5. Are there any national efforts to (e.g. surveys) evaluate cetacean body condition at sea?

☒ **No.**

☐ **Yes.** Please provide details.

2.6. Relevant new research/work/collaboration on resource depletion 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)

- Sweden led the submission of the concept note for the SAMBAH II LIFE project application in 2019 and continues to work on the application.The project aims to consider how prey availability and quality impacts on the distribution of the Baltic Proper harbour porpoise.

2.7. Is the perceived level of pressure from resource depletion in your country increasing, decreasing, staying the same or unknown?

To be done per species where applicable.

Species	Increasing	Decreasing	Staying the same	Unknown	Nature of the evidence
HP Harbour porpoise	☐	☐	☐	☐	
Choose an item.	☐	☐	☐	☐	
Choose an item.	☐	☐	☐	☐	

☐ **Not applicable.** Comments:

B. Disturbance (incl. potential physical impacts)

3. Noise (impulsive i.e. piling and continuous/ambient i.e. shipping)

AIM: to illustrate progress on understanding, monitoring and mitigating negative effects on small cetaceans from underwater noise during the reporting period.
Relevant Resolutions: **8.11,** 8.9, 8.6, 8.4, 8.3, 7.1, **6.2,** 6.1

Small cetaceans are especially susceptible to underwater noise due to their high responsiveness to sound and wide hearing range. Good environmental status, as defined by the European Union, suggests that the introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment. Anthropogenic noise pollution has generally increased in recent times and generates a broad range of frequencies due to a wide variety of human activities. Impulsive and continuous noise present different impacts on small cetaceans, which include communicative masking, behavioural response and physiological injury. Noise in marine environments potentially impedes communication, affects distribution and hence feeding and reproduction of small cetaceans. Studies show that not only cetaceans but also fish and other marine life may be negatively impacted by anthropogenic noise.

Parties to ASCOBANS have agreed on implementation of measures through a number of resolutions that (1) highlight the potential impact that noise pollution may have on small cetaceans in the Agreement Area and (2) commit to reduce the pressure presented by underwater noise. The Agreement Area requires improved monitoring, collation of data, and consideration of appropriate mitigation measures.

To better understand the extent to which noise negatively impacts the health of small cetaceans, and to learn about new work relevant to the topic, countries are requested to provide related information.

Questions:

3.1. To which noise registers/databases has your country contributed to date?

ICES Impulsive Noise Register (for HELCOM and OSPAR Parties)	National registry	Other
☒ **Yes** ☐ **No** ☐ **Not Applicable**	☐ **Yes** ☐ **No** ☒ **Not Applicable** Specify (e.g. JNCC noise registry): No national registry exists	☐ **Yes** ☐ **No** Specify:

3.2. Any instances/issues in the reporting period including information on planned or completed significant developments/activities, including the details of monitoring in place before, during and after the project:

Development/ Individual Activity of impulsive noise (e.g. construction, seismic, sonar)	Status	Environmental Impact Assessment (EIA)	Strategic Environmental Assessment (SEA)	Information on noise management and monitoring			Region
				Regulations/ guidelines exist	Monitoring conducted	Mitigation in place	
Piledriving	Choose an item.	☐ **No.** ☒ **Yes.** Weblinks:	☒ **No.** ☐ **Yes.** Weblinks:	**Yes**	**Yes**	**Not Required**	Choose an item.
Seismic	Choose an item.	☐ **No.** ☐ **Yes.** Weblinks:	☐ **No.** ☐ **Yes.** Weblinks:	**Yes**	**Yes**	**Not Required**	Choose an item.
Sonar	Choose an item.	☐ **No.** ☐ **Yes.** Weblinks:	☐ **No.** ☐ **Yes.** Weblinks:	**Yes**	**No**	**Not Required**	Choose an item.

3.3. Relevant new research/work/collaboration on underwater noise 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)

- The TANGO project (funded by Nordic Council and Swedish Transport Administration): This project is investigating the impact of a change in the location of a major shipping lane in the Kattegat to see what impact this has on the detection of harbour porpoises. Data collection (passive acoustic monitoring) began in 2019 and is ongoing in the "pre" stage, with the change in shipping route scheduled to occur on the 1st of July 2020.
- An additional project (funded by WWF) is investigating the impact of underwater noise on harbour porpoise detections in Swedish waters. It also aims to model the impact of wind farm construction on harbour porpoises.

3.4. Report on noise management for cumulative impacts, including relevant regulations and guidelines, seismic shot point densities and level of impact deemed acceptable.

No regulations presently, but guidelines are being developed within HELCOM/OSPAR. Guidelines for piledriving in Sweden exists. Other activities have restrictions set case-by-case, taking into account effects on wildlife to some degree. Limited ad-hoc monitoring exists during the activity.

3.5. Is the perceived level of pressure from underwater noise in your country increasing, decreasing, staying the same or unknown?

To be done per species basis where applicable.

Species	Increasing	Decreasing	Staying the same	Unknown	Nature of the evidence
HP Harbour porpoise	☒	☐	☐	☐	Interest in offshore construction is increasing, shipping is increasing, human population size National (recreational activities) increasing

Choose an item.	☐	☐	☐	☐	
Choose an item.	☐	☐	☐	☐	

☐ **Not applicable.** Comments:

B. Disturbance (incl. potential physical impacts)

4. Ocean Energy

AIM: to understand the extent and development of current and planned ocean energy projects, and progress in monitoring and mitigation of their negative effects on small cetaceans during the reporting period.
Relevant Resolutions: 8.11, 8.9, **8.6**, 8.3, 6.2

Renewable energy is a necessary component of the efforts to supply the energy needs of human populations while combatting climate change. Efforts to harness renewable energy sources, however, should be conducted in a way that does not have a harmful impact on biological diversity and the marine environment. There are potential adverse effects of ocean energy on small cetaceans from such energy projects. In regard to small cetaceans, this can include potential lethal interactions or injury, negative behavioural impacts from displacement and changes in fecundity, calf survival and juvenile and adult mortality. There remains uncertainty regarding quantifying the (magnitude of the) pressure from ocean energy production on small cetaceans.

Parties to ASCOBANS have agreed to introduce precautionary measures and procedures for activities surrounding the development of renewable energy in marine environments in order to minimise and mitigate possible effects on small cetaceans, by following best practices. Parties have committed to investigating such pressures and robustly monitoring and mitigating them through environmental impact assessments. Addressing all aspects relevant to the conservation of protected species in regard to ocean energy and collaboration with other organizations working on or potentially interested in the issue is to the benefit of small cetaceans in the Agreement Area.

It is of particular interest to ASCOBANS to understand current and ongoing renewable energy projects in the Agreement Area, mitigation measures and procedures in use and other work relevant to the topic. Countries are requested to provide information relevant to their activities.

Questions:

4.1. Please enter wind energy farm data into the table below.

Name of wind farm	Operational date (or foreseen grid connection date)	Area	Output (megawatts per turbine)	Number of turbines	How were the individual wind turbines installed in the seabed?	Was scour protection used?	Noise mitigation during construction used? (multiple ticks possible)	If the wind farm is floating, how was it anchored?	Other mitigation used in pre-/post-construction	Additional information
	dd/mm/yy	Choose an item.			Choose an item.	Choose an item.	☐ Single bubble curtains ☐ Double bubble curtains ☐ Acoustic deterrent devices ☐ Time/area closures ☐ Other, please specify:			
	dd/mm/yy	Choose an item.			Choose an item.	Choose an item.	☐ Single bubble curtains ☐ Double bubble curtains ☐ Acoustic deterrent devices ☐ Time/area closures ☐ Other, please specify:			

4.2. Please enter wave power installation data into the table below.

Name of installation	Operational date (or foreseen grid connection date)	Area	Output (megawatts per turbine)	Number of turbines	How is the installation anchored?	Was scour protection used?	Mitigation used in pre-/during/post-construction	Additional information
	dd/mm/yy	Choose an item.				Choose an item.		
	dd/mm/yy	Choose an item.				Choose an item.		

4.3. Please enter tidal energy installation data into the table below.

Name of installation	Operational date (or foreseen grid connection date)	Area	Output (megawatts per turbine)	Number of turbines	Type	Collision mitigation	Other mitigation used in pre-/during/post-construction	Additional information
	dd/mm/yy	Choose an item.			Choose an item.	Choose an item.		
	dd/mm/yy	Choose an item.			Choose an item.	Choose an item.		

4.4. Please enter tidal lagoon/barrage installation data into the table below.

Name of installation	Operational date (or foreseen grid connection date)	Area	Output (megawatts per turbine)	Number of turbines	Type	Collision mitigation	Other mitigation used in pre-/during/post-construction	Additional information
	dd/mm/yy	Choose an item.			Choose an item.	Choose an item.		
	dd/mm/yy	Choose an item.			Choose an item.	Choose an item.		

4.5. Has there been any other instances/issues related to ocean energy during the reporting period in your country?

☒ **No.**

☐ **Yes.** Please provide details:

4.6. How is the pressure managed, incl. relevant regulations / guidelines and the year of implementation (current and planned)?

4.7. Relevant new research/work/collaboration on ocean energy 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)

4.8. Mark the perceived level of pressure from ocean energy in your country to the table below.

For example, active construction of new developments could increase the pressure, while decommissioning or addition of mitigation measures to pre-existing projects could decrease the pressure.

Energy type	Status 2019 relative to previous years	Nature of the evidence
Wind energy	**Increasing**	Increased number of applications for offshore windfarms
Wave power	Choose an item.	N/A
Tidal energy	Choose an item.	N/A
Tidal lagoon/barrage	Choose an item.	N/A

Comments:

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 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 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.

Questions:

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

☐ **No.** Go to **Question 5.3.**

☒ **Yes.**

5.2. In the table below, provide the sub-regions 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.

Overview of commercial small cetacean watching activities per sub-region. If necessary, add rows.

Region	Small cetacean watching			Link to website or contact details (include information on ports and operators if available)
	Primary focus / target species		Secondary focus	
H Kattegat	☒	HP Harbour porpoise	☒	Website: https://www.kullabergsguiderna.se/en/whale-safari/ Port: Paradise Harbour at the tip of Kullaberg Dates: May- September

5.3. Does your country have a definition of the term 'harassment' in general and/or as it relates to the Cetacean Watching Industry? [1]

☒ **No.**

☐ **Yes.** Provide definition below:

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.**

☐ **Yes.** Provide information on table below. If necessary, copy table.

Date dd/mm/yy	**Context of incidence**	**Outcome for (a) the animal or (b) human** (e.g. behavioural response, injury, death)
Legal procedures / court proceedings / convictions that took place		**Responsible authority for such reports**
Link to websites or documentation of this report		

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**. Go to **Question 5.9**.

☐ **Yes**. Provide information in the table below.

Location	Species	Operator	Any reported incidents between small cetaceans or swimmers.
	Choose an item.	(include link to website)	☐ No ☐ Yes, please describe:
	Choose an item.	(include link to website)	☐ No ☐ Yes, please describe:
	Choose an item.	(include link to website)	☐ No ☐ Yes, please describe:

5.6. List any incidents of harassment to small cetaceans during the reporting period 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	Context of incidence	Outcome for (a) the animal or (b) human (e.g. behavioural response, injury, death)	Legal procedures/ court proceedings/ convictions that took place	Responsible authority for such reports	Link to websites or documentation of this report
dd/mm/yy					
dd/mm/yy					
dd/mm/yy					

[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.

5.7. 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.

☐ **No**. Go to **Question 5.12**.

☐ **Yes**. Provide information in the table below.

Region	Date	Species	Link to websites	Reported incidents between small cetaceans and swimmers
Choose an item.	dd/mm/yy	Choose an item.		
Choose an item.	dd/mm/yy	Choose an item.		

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?

☐ **No.**

☐ **Yes.** Please add below the type of measures and relevant information:

Measure: (may include regional measures)		
Date of implementation:		**Region:** Choose an item.
Has the measure been effective?	☐ **No** ☐ **Yes.** Comments:	
Other information:		

Copy table if needed.

5.9. List any incidents of harassments 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).

Date	Context of incidence	Outcome for (a) the animal or (b) human (e.g. behavioural response, injury, death)	Legal procedures/ court proceedings/ convictions that took place	Responsible authority for such reports	Link to websites or documentation of this report
dd/mm/yy					
dd/mm/yy					

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)

5.11. Have there been any other instances/issues related to cetacean watching industry during the reporting period in your country?

☐ **No.**

☐ **Yes.** Please provide details:

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

To be done per species where applicable.

Species	Increasing	Decreasing	Staying the same	Unknown	Nature of the evidence
HP Harbour porpoise	☐	☐	☒	☐	**No increase in commercial tour operators**
Choose an item.	☐	☐	☐	☐	
Choose an item.	☐	☐	☐	☐	

☐ **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, 8.3, 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.

Questions:

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

☐ **No.** Go to **Question 6.3.**

☐ **Yes.** Provide information in the table below:

Type of information: (e.g. number of licenced recreational vessels per region, tourist number per region, other) **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.

☐ **No.**

☐ **Not applicable.** Comments:

☐ **Yes.** Provide information in the table below.

Region	Type of information	Is the data available online?	Provide link to data, or comment on unavailability
Choose an item.	(e.g. maps, GIS, reports)	☐ No ☐ Yes	(weblinks)
Choose an item.	(e.g. maps, GIS, reports)	☐ No ☐ Yes	(weblinks)
Choose an item.	(e.g. maps, GIS, reports)	☐ No ☐ Yes	(weblinks)

6.3. Were there any incidents of disturbance or harassment to small cetaceans in relation to recreational sea use in your country?

☐ **No.**

☐ **Unknown.**

☐ **Yes.** Provide information in the table below.

Date	Area	Context of incidence	Outcome for (a) the animal or (b) human	Legal procedures/ court proceedings/ convictions	Link to websites or documentation of the incident
dd/mm/yy	Choose an item.	(e.g. what kind of recreational activity)	(e.g. behavioural response, injury, death)		
dd/mm/yy	Choose an item.	(e.g. what kind of recreational activity)	(e.g. behavioural response, injury, death)		
dd/mm/yy	Choose an item.	(e.g. what kind of recreational activity)	(e.g. behavioural response, injury, death)		

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 small cetaceans through recreational sea use?

☐ **No.**

☐ **Yes.** Provide information in table below:

Measure:		
Date of implementation:		**Region:** Choose an item.
Has the measure been effective?	☐ **No.** ☐ **Yes.** Comments:	
Other information:		

Copy table if needed.

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)

Ren, E., 2017. Effects from recreational boating on harbour porpoises in the protected area Kullaberg. BSc theis. Dept Mar Sci, Gothenburg University.

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

☐ **No.**

☐ **Yes.** Please provide details:

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

To be done per species where applicable.

Species	Increasing	Decreasing	Staying the same	Unknown	Nature of the evidence
Choose an item.	☒	☐	☐	☐	**Human population is growing**
Choose an item.	☐	☐	☐	☐	
Choose an item.	☐	☐	☐	☐	

☐ **Not applicable.** Comments:

B. Disturbance (incl. potential physical impacts)

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?

☐ **No.**

☐ **Unknown.**

☐ **Yes.** Please provide information in the table below.

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

Description of event:		**Date:** dd/mm/yy	**Area:** Choose an item.
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.)		

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) from any study; web links to other relevant information)

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

8. Unexploded Ordnance

AIM: to provide information on the mitigation, management and potential negative impacts of unexploded ordnance on small cetaceans during the reporting period.
Relevant Resolutions: 8.11, 8.9, **8.8**, 8.3

Unexploded chemical and conventional munitions present a threat to small cetaceans. Hazards exist from unexploded munitions, which release chronic contaminants, and upon detonation, which is physically hazardous from extreme underwater noise and a sudden release of toxic substances. Unexploded ordnance is a notable threat in many areas, such as the Baltic Sea, where the quantity is unknown, though estimates are high. Information on disposal, state of corrosion and quantities of dumped munition is limited, as are meaningful data on the measured environmental impacts. The significance of this pressure's impact on small cetaceans requires further quantification. However, it is clear that mitigation measures are necessary to support alternatives to detonations, and when no alternative is feasible, to reduce negative impacts on small cetaceans.

In the ASCOBANS Area, millions of tons of unexploded ordnance are present in the marine environment and thousands of sea users, such as fishermen, encounter such munitions every year. Parties have agreed on resolutions to support (1) research investigating the pressure on marine animals and habitat and (2) mitigation measures regarding effects of disintegrating submerged munitions on the marine environment. Parties are to strive towards providing relevant information to required bodies and supporting efforts to address the negative implications from this pressure in other regional and international organizations and waters.

Questions:

8.1. To which registers/databases covering conventional and chemical munitions has your country contributed to date?

☐ **OSPAR**	☐ **None**	☐ **Unknown**
☐ **HELCOM**	☐ **Other, please state:**	

8.2. Please fill in Table 8.2 below on unexploded ordnance. For explanation of terms, see AC22/Inf.4.6.c.

8.3. Have there been any instances/issues (not listed in Table 8.2) related to the issue of unexploded ordnance during the reporting period in your country?

☐ **No.**

☐ **Yes.** Please provide details:

8.4. How is the issue of unexploded ordnances being managed?

(incl. mitigation measures, relevant regulations/guidelines, year of implementation; may include planned management)

8.5. Relevant new research/work/collaboration on the issue of unexploded ordnance 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)

8.6. Is the perceived level of pressure from unexploded ordnance in your country:

☐ **Increasing**	☐ **Decreasing**	☐ **Staying the same**	☐ **Unknown**
Nature of evidence:			

☐ **Not applicable.** Comments:

Table 8.2 on Unexploded Ordnance (adapted from the OSPAR reporting format)

OSPAR Ref. No	First located (Area)	Nature of encounter	Date	Type of munition	Action taken	State of munition (corrosion)	Release, Destruction (Area)	Remarks	Depth of Explosion	Estimated net weight of explosive material of demolished UXO	Demolition charge: net weight of explosive material added	Observations during explosion
If available, otherwise leave blank	Please select	Please select	dd/mm/yy	Please select	Please select	Please select	Please select	(incl. mitigation measures taken, if any)	Meters on seafloor / raised	TNT equivalent in kg	TNT equivalent in kg	Please select
	Choose an item.	Choose an item.		Choose an item.	Choose an item.	Choose an item.	Choose an item.					Choose an item.
	Choose an item.	Choose an item.		Choose an item.	Choose an item.	Choose an item.	Choose an item.					Choose an item.
	Choose an item.	Choose an item.		Choose an item.	Choose an item.	Choose an item.	Choose an item.					Choose an item.
	Choose an item.	Choose an item.		Choose an item.	Choose an item.	Choose an item.	Choose an item.					Choose an item.
	Choose an item.	Choose an item.		Choose an item.	Choose an item.	Choose an item.	Choose an item.					Choose an item.

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

9. Marine Debris (ingestion and entanglement)

AIM: to illustrate progress, during the reporting period, on understanding, monitoring and mitigating impacts of marine debris on small cetaceans.
Relevant Resolutions: 8.8, 8.3, 6.1

Marine debris, such as macroplastics and discarded fishing gear, poses a threat to small cetaceans due to the potential for these materials to be ingested or to cause entanglement. Commercial fishing operations, recreational fishing and cargo shipping are notable sources of this material, of which the majority is plastic and ghost nets. However, it is assumed that most of the marine litter worldwide comes from land, although this differs per region. Even small amounts of macroplastics that have been ingested may present serious effects on small cetaceans, such as detrimental influence on the gastrointestinal tract or leaching pollutants into the body, potentially leading to mortality or reduced body condition. Entanglement is well-established as a threat to small cetaceans as plastic debris continues to accumulate in aquatic environments, and may cause physical injuries, reduced survival or drowning.

To better understand the impact of marine debris on small cetaceans and measures in place to mitigate these effects, countries are requested to provide relevant information.

Note: Includes macroplastics and discarded fishing gear. Microplastics are covered under Section C 10 Pollution and Hazardous Substances.

Questions:

9.1. Does your country have monitoring in place to assess levels of marine debris?

☐ **No.** Go to **Question 9.3.**

☒ **Yes.** Provide information in the table below:

(e.g. type of litter (size, shape, material), amount, impacts on species, geographical location, etc.; include parameters provided through monitoring)

Number and weight per 100 m beach, type. 8 beaches on the west coast, 8 beaches in the Baltic Sea. 4 times/year/beach (not winter).

https://www.havochvatten.se/hav/samordning--fakta/miljoovervakning/marin-miljoovervakning/skrap-pa-strander.html

Number and weight/trawled km2. 2/year offshore North Sea (48 stations) and Baltic (50 stations). Yearly coastal North Sea (32 stations).

https://www.havochvatten.se/hav/samordning--fakta/miljoovervakning/marin-miljoovervakning/skrap-pa-havsbotten.html

9.2. Are these data publicly available?

☐ **No.**

☒ **Yes.** Please provide a link:

Beach litter at Keep Sweden Tidy Foundation

https://hsr.se/rapporter-och-resultat

Offshore at ICES

https://datras.ices.dk/Data_products/Download/Download_Data_public.aspx

9.3. What species of small cetaceans were found to have been impacted by marine debris?

Species	# of impacted individuals	Year	Region	Description of the impact
Choose an item.			Choose an item.	
Choose an item.			Choose an item.	
Choose an item.			Choose an item.	

9.4. Are there any mitigation measures in place?

☐ **No.**

☒ **Yes.** Provide information in the table below.

(Mitigation measures might include e.g. changes in gear to prevent loss, entanglement response, adoption of measures to reduce land-based/boat-based sources of marine debris)

Measure:		
Date of implementation:		**Region:** Choose an item.
Has the measure been effective?	☐ **No.** ☐ **Yes.** Comments:	
Other information:		

Copy table if needed.

9.5. How is marine debris managed? (incl. relevant regulations / guidelines and the year of implementation, current and planned)

9.6. Relevant new research/work/collaboration on marine debris 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 e.g. link to OSPAR reports)

9.7. Is the perceived level of pressure from marine debris in your country increasing, decreasing, staying the same or unknown?

To be done per species where applicable.

Species	Increasing	Decreasing	Staying the same	Unknown	Nature of the evidence
HP Harbour porpoise	☒	☐	☐	☐	**Increased shipping, increased human population; however, limited evidence/studies on the impact this has on harbour porpoises**
Choose an item.	☐	☐	☐	☐	
Choose an item.	☐	☐	☐	☐	

☐ **Not applicable.** Comments:

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, 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.

Questions:

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 extend of this monitoring and the establishment of securely funded long-term data series.

☐ **No.** Go to **Question 10.7.**

☒ **Yes.**

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:
Role in monitoring: (e.g. sample collection, analyses, other)
Postal Address:
Contact Person:
Telephone:
Email:
Weblink:

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

2016	2017	2018	2019	Species	2016	2017	2018	2019	Species
X	X	X	X	HP Harbour porpoise					Choose a species
				SBW Sowerby's beaked whale					Choose a species
				Choose a species					Choose a species

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)

Comments:

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

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

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

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

☐ POPs (e.g. PCBs)	☐ Radionuclides	☐ Brucella	☐ Others:
☐ Oil (e.g. PAHs)	☐ Toxic elements	☐ Microplastics	☐ Others:
☐ HAB toxins	☐ TBT	☐ Nanoplastics	☐ Others:
☐ Sewage	☐ Morbillivirus	☐ Others:	☐ Others:

Comments:

10.7. Does your country determine microplastics in small 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** ☐ **Yes** (If yes, please provide details and weblinks or upload document.)

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. Relevant new research/work/collaboration on impact of pollution and hazardous substances (incl. microplastics) on small cetaceans in your country.

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 small 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.

(List initiatives/ projects (incl. PhD, MSc); publications (reports, theses, papers in journals, books) from any study; web links to other relevant information)

10.9. 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).

10.10. Have there been any instances/issues related to pollution and hazardous substances in your country during the reporting period?

☒ **No.**

☐ **Yes.** Please provide details:

Not related to small Cetaceans that we are aware of

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

To be done per species where applicable.

Species	Increasing	Decreasing	Staying the same	Unknown	Nature of the evidence
HP Harbour porpoise	☐	☐	☐	☒	**New chemicals (and microplastics) are increasing, but are lower than levels of old chemicals. Old chemicals have decreased a lot, but porpoises are very sensitive to them. Cocktail effect unknown.**
Choose an item.	☐	☐	☐	☐	
Choose an item.	☐	☐	☐	☐	

☐ **Not applicable.** Comments:

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.

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.

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 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.

☒ **No.**

☐ **Yes.** Please provide information from the reporting period in the table below.

Has the ship strike been submitted to the IWC Ship Strike Database?	**Region**	**Species** (if known)	**Date of incident** (dd/mm/yy)	**Contact** (if available contact details of the observer)	**Description of the observed incidence** (Group size if other cetaceans present, dead/alive after collision, animal retrieval, animal being dead before collision, other information, vessel type/name, speed, damage to vessel or injuries to people)	**Is there a necropsy report?**	**Websites, other information, photographs or publications:** (provide links)
Choose an item.	Choose an item.	Choose an item.				Choose an item. Link:	
Choose an item.	Choose an item.	Choose an item.				Choose an item. Link:	
Choose an item.	Choose an item.	Choose an item.				Choose an item. Link:	

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

☒ **No.**

☐ **Yes**. Please provide information in the table below.

General Information			**Necropsied animals**		**Comments**
Year	**Region**	**Species**	**Number of animals with cause of death ship strike** (e.g. animals showing ship strike markings[2])		
			possible	**certain**	
	Choose an item.	Choose a species			
	Choose an item.	Choose a species			
	Choose an item.	Choose a species			
Provide source of information and database link if applicable:					

[2] 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).

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?

☒ **No.**

☐ **Yes.** Please provide information below:

Full necropsies are performed on all cetaceans received for necropsy examination and human interaction is assessed, but no specific protocol to rule out ship strikes is followed.

11.4. Is there evidence in your country from existing 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.

☒ **No.**

☐ **Yes.** Please provide information in the table below.

Overview of ship strike evidence in photo-identification catalogues

General Information			**Photo-identified animals in the catalogue**			
Year	Region	Species	# individual animals in the photo-identification catalogue	# animals showing ship strike markings (e.g. scars)		
				possible	certain	Unknown
	Choose an item.	Choose a species				
	Choose an item.	Choose a species				
	Choose an item.	Choose a species				

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

☒ **No.**

☐ **Yes.** Please provide details:

11.6. Relevant new research/work/collaboration on ship strike and its 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)

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.

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

☐ **No.**

☐ **Yes.** Please provide details:

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

To be done per species where applicable.

Species	Increasing	Decreasing	Staying the same	Unknown	Nature of the evidence
HP Harbour porpoise	☐	☐	☐	☒	**Shipping and recreational use increasing, but limited evidence of harbour porpoises being impacted by ship strike.**
Choose an item.	☐	☐	☐	☐	
Choose an item.	☐	☐	☐	☐	

☐ **Not applicable.** Comments:

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 of important and emerging climate change related impacts on small cetaceans.
Relevant Resolutions: 8.9, 8.4, 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[3] 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.

Questions:

12.1. Does your country undertake monitoring that has potential to contribute to knowledge and identification of climate impacts on small cetaceans?[4]

Climate change will have a multiplicity of possible direct and indirect effects on small 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 small cetaceans.

☐ **No.** Go to **Question 12.3**.
☒ **Yes.** Continue to **Question 12.2**.

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

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 contact / link to project)
☒ **Changes in small cetacean abundance**	Julia Carlström/Kylie Owen (see contributor list): Swedish Museum of Natural History
☒ **Changes in small cetacean distribution**	Julia Carlström/Kylie Owen (see contributor list): Swedish Museum of Natural History
☐ **Changes in small cetacean migration or movement range**	

[3] CMS Resolution 12.21 on Climate Change and Migratory Species.
[4] This refers to direct and indirect effects.

Monitoring activity	Comments (if possible, provide contact / link to project)
☐ **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)	
☐ **Incidences of algal blooms** (if yes, where; specify year)	
☒ **Other (specify):**	SMHI is monitoring weather and ocean conditions

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 climate change effect observed, who did the work)

- Sweden took the led for the submission of the concept note for the SAMBAH II LIFE project application in 2019. The project aims to provide an updated abundance estimate and distribution maps for the Baltic Proper harbour porpoise population.
- Sweden has established both National and Regional monitoring programs in both the Baltic Sea and the Kattegat that monitor the relative detection frequencies of porpoises in these regions. In the Batlic Sea, 11 of the stations used in the SAMBAH LIFE project that provided an initial assessment of the population size of the Baltic Proper harbor porpoise population, are currently used as monitoring sites. It is hoped that this will enable changes in detection frequency to be investigated from 2011, when the SAMBAH LIFE project started collecting data at these sites.

12.6. 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.**

☐ **Yes.** Please provide details:

- We have not made any attempts to look at trends with climate change as data have only been collected for short periods of time, making it difficult to link any changes to climate based effects.

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

To be done per species. basis where applicable.

Species	Increasing	Decreasing	Staying the same	Unknown	Nature of the evidence
HP Harbour porpoise	☒	☐	☐	☐	**Climate is still warming, impacts lower down in the ecosystem likely already occurring causing cumulative impacts.**
Choose an item.	☐	☐	☐	☐	
Choose an item.	☐	☐	☐	☐	

☐ **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 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, 8.9, 8.6, 8.4, 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.

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 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.

Region	Type of information (e.g. maps, GIS, reports)	Is the data available online?	Provide web link to data, or comment on unavailability
Choose an item.		☐ No ☐ Yes	
Choose an item.		☐ No ☐ Yes	
Choose an item.		☐ No ☐ Yes	

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

☐ **No.**

☐ **Yes.** Please provide details:

Provide web links if available.

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)?

☐ **No.**

☐ **Yes.** Please provide details below:

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

Measure:	
Industry:	
Activity type:	
Has the measure been effective?	☐ **No.** ☐ **Yes.** Comments:
Other information:	

Copy table if needed.

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.

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

☐ **No.**

☐ **Yes.** Please provide details:

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

To be done per species basis where applicable.

Species	Increasing	Decreasing	Staying the same	Unknown	Nature of the evidence
HP Harbour porpoise	☐	☐	☐	☐	
Choose an item.	☐	☐	☐	☐	
Choose an item.	☐	☐	☐	☐	

☐ **Not applicable.** Comments:

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

14. Other issues

14.1. List any other issues related to habitat change and degradation not mentioned above.

D. Management of Cumulative Impacts

15. Marine Spatial Planning

AIM: to provide information on existing and proposed marine spatial plans and processes during the reporting period that may impact small cetaceans.
Relevant Resolutions 8.9, 8.6, 8.3

A growing demand for use of maritime space increases pressure on ecosystems and marine resources. Marine ecosystems with good environmental status provide notable benefits to a number of economic outputs. Implementation of an integrated spatial planning and management approach can better mitigate negative impacts from maritime activities on marine environments. Spatial planning can support sustainable marine development through coordinated, coherent and transparent decision-making and the encouragement and identification of multi-purpose uses in relevant projects. Marine spatial planning is essential when selecting the most appropriate siting for marine-based projects. Particular attention should be given to critical habitat and relevant species, such as small cetaceans, in order to achieve good environmental status.

ASCOBANS Parties have agreed on a number of resolutions that support the integration of marine spatial planning into development processes. Small cetaceans benefit from good marine spatial planning and this is highlighted in the resolutions. Countries are requested to provide information relevant to their country in this regard.

Questions:

15.1. Please provide information in regard to current and foreseen marine spatial planning.

National plans(s) and processes in force:	**No**
National plan(s) and processes in preparation:	**Yes, in preparation by Government**
Further information, including links to online resources and maps where available:	https://www.havochvatten.se/en/swam/eu--international/marine-spatial-planning.html

Transboundary plans(s) and processes in force:	**No, but Pan Baltic MSP cooperation**
Transboundary plan(s) and processes in preparation:	**No**
Further information, including links to online resources and maps where available:	

15.2. Have there been any other instances/issues in your country regarding marine spatial planning during the reporting period?

☒ **No.**

☐ **Yes.** Please provide details:

15.3. Relevant new research/work/collaboration on marine spatial planning in your country.

- Swedish cumulative impact assessment method Symphony: https://www.havochvatten.se/en/swam/eu--international/marine-spatial-planning/symphony---a-tool-for-ecosystem-based-marine-spatial-planning.html
- EU-project MSP-project: http://www.panbalticscope.eu/ eg project on marine green infrastructure: http://www.panbalticscope.eu/wp-content/uploads/2019/12/Green-Infrastructure-brochure-print-FINAL.pdf

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.

Questions:

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

☐ **No.**

☒ **Yes.** Please provide details/updates in table below:

Name (full name of MPA)	**ASCOBANS Action Plan**	**Region**	**Size** (km^2)	**Species**	**MPA status**	**Date of designation** (if applicable)	**Legislation/ directive** (e.g. Habitats Directive)	**Is there a site-specific management plan in place?**	**Link to shapefile and/or online map**	**Link to any other online information**
	☐ Jastarnia Plan ☐ North Sea Plan ☐ WBBK Plan ☐ Common Dolphin SAP ☐ Not Applicable	Choose an item.		HP Harbour porpoise (Copy drop-down to add more species)	☒ Designated ☐ Submitted ☐ Under consultation ☐ Recommended ☐ Not Applicable	12/12/17 and more		☒ No. ☐ Yes. Link:		
	☐ Jastarnia Plan ☐ North Sea Plan ☐ WBBK Plan ☐ Common Dolphin SAP☐ Not Applicable	Choose an item.		Choose an item. (Copy drop-down to add more species)	☐ Designated ☐ Submitted ☐ Under consultation ☐ Recommended ☐ Not Applicable	dd/mm/yy		☐ No. ☐ Yes. Link:		

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

☐ **No.**

☒ **Yes.** Please provide details/updates in table below:

Name (full name of MPA)	**ASCOBANS Action Plan**	**Region**	**Size** (km^2)	**Species forming part of selection criteria**	**MPA status**	**Date of designation** (if applicable)	**Legislation/ directive** (e.g. Habitats Directive)	**Is there a site-specific management plan in place?**	**Link to shapefile and/or online map**	**Link to any other online information**
	☐ Jastarnia Plan ☒ North Sea Plan ☐ WBBK Plan ☐ Common Dolphin SAP ☐ Not Applicable	Choose an item.		Choose an item. (Copy drop-down to add more species)	☒ Designated ☐ Submitted ☐ Under consultation ☐ Recommended ☐ Not Applicable	01/01/2005 and more		☐ No. ☐ Yes. Link:		
	☐ Jastarnia Plan ☐ North Sea Plan ☐ WBBK Plan ☐ Common Dolphin SAP☐ Not Applicable	Choose an item.		Choose an item. (Copy drop-down to add more species)	☐ Designated ☐ Submitted ☐ Under consultation ☐ Recommended ☐ Not Applicable	dd/mm/yy		☐ No. ☐ Yes. Link:		

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.

Site Name	Pressure (add pressures per site as applicable)	Measure (add measures per pressure per site as applicable)
Nordvästra Skånes havsområde		ongoing
Havet kring Ven		ongoing
Sydvästskånes utsjövatten		ongoing
Stora Middelgrund och Röde bank		ongoing
Vrångöskärgården		
Hoburgs bank och Midsjöbankarna		ongoing
Lilla Middelgrund		ongoing
Fladen		ongoing
Kosterfjorden-Väderöfjorden		

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

- In May 2019, 14 acoustic monitoring stations were established through five Natura 2000 sites in the Kattegat, in order to monitor changes in the detection frequency of harbour porpoises.
- Since 2017, acoustic monitoring has been occurring across 11 stations in one Natura 2000 site in the Baltic Sea
- While no studies have been completed on the effectiveness of these sites, data are available for possible future analyses.

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

In order to plan future approaches for 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)

- Sweden led the submission of the concept note for the SAMBAH II LIFE project application in 2019, which includes a harbour porpoise HOLAS, designed to investigate how well Natura 2000 sites overlap with risk areas for harbour porpoises.

Section III: Surveys and Research

A. Biological Information (per species)

1. Abundance estimates

AIM: to provide new information on abundance and life history parameters of small cetaceans during the reporting period.
Relevant Resolutions: 8.5, 8.4, 8.3, 7.1, 6.1, 5.7, 5.5, **4.7**, **3.5**, 3.3

Abundance estimates and information on life history are of critical importance for the determination of broader species attributes such as populations levels, health and overall status. These parameters can contribute towards determination of GES and provide a reference for mortality events. Abundance and life history parameters are typically assessed from monitoring programmes. Fluctuations in these parameters can provide insight into trends in populations. Information on abundance and life history parameters can inform the need for mitigation measures, and regional assessment of these parameters allows for a more spatially targeted and concentrated response to support national assessments.

In the ASCOBANS Area, small cetacean abundance and life history should be monitored in response to a number of ASCOBANS resolutions. Continued monitoring of these parameters is essential to understanding current status and trends.

Questions:

1.1. Please submit the relevant information on national dedicated surveys on abundance and distribution during the reporting period into the table below.

If additional space if required, please submit the information in an excel table. Attach maps separately, clearly marking which survey they apply to. **Note:** Information relevant to SCANS-III is to be provided in question 1.2.

Location	Project	Time period	Method	Species	Animal abundance (including confidence limits or CV)	Link to project/ report/ publication
Bornholm Belt and Easter Gotland Basin (Baltic Proper population)	National monitoring program	2017 - present	Static acoustic monitoring- 11 stations	HP Harbour porpoise	None available- project ongoing	None available- project ongoing
Kattegat (Belt sea population)	National monitoring program	2019- present	Static acoustic monitoring- 14 stations	HP Harbour porpoise	None available- project ongoing	None available- project ongoing
Bornholm Belt (Baltic Proper population)	Regional Monitoring program	2016- present	Static acoustic monitoring- 12 stations	HP Harbour porpoise	None available- project ongoing	None available- project ongoing

Relevant information on distribution during the reporting period:

(Include species, method, time period, weblinks, and other relevant information)

1.2. Other relevant new research/work/collaboration on abundance estimates in regard to small cetaceans in your country during the reporting period.

(List initiatives/ projects (incl. PhD, MSc); publications (reports, theses, papers in journals, books) from any study and information relevant to SCANS-III; web links to other relevant information)

- Sweden was involved in SCANS III
- Sweden led the submission of the SAMBAH II LIFE concept note in 2019 and continues to work on this application. This project aims to provide an updated abundance estimate for the Baltic Proper harbour porpoise.

1.3. Is the abundance of species in your country increasing, decreasing, staying the same or unknown? To be done per species basis where applicable.

Species	Increasing	Decreasing	Staying the same	Unknown	Nature of the evidence
HP Harbour porpoise	☐	☐	☐	☒	**Unknown for the Baltic Proper population.**
HP Harbour porpoise	☐	☐	☒	☐	**SCANs III in 2016 found no significant trend in Belt Sea and North Sea populations, (Hammond et al. 2017 SCANS III report).**
Choose an item.	☐	☐	☐	☐	

☐ **Not applicable.** Comments:

A. Biological Information (per species)

2. New information on life history parameters

2.1. Is there new information on the following life history parameters in the reporting period?

Age of sexual and physical maturity	☐ **No** ☐ **Yes** Please describe: Species: HP Harbour porpoise

Inter-birth intervals	☐ **No** ☐ **Yes** Please describe: Species: Choose an item.
Calf and adult mortality rates	☐ **No** ☐ **Yes** Please describe: Species: Choose an item.
Potential reproductive span/capacity	☐ **No** ☐ **Yes** Please describe: Species: Choose an item.
Longevity	☐ **No** ☐ **Yes** Please describe: Species: Choose an item.
Diet	☐ **No** ☐ **Yes** Please describe: Species: Choose an item.
Age and sex structure	☐ **No** ☐ **Yes** Please describe: Species: Choose an item.
Other relevant factors	☐ **No** ☐ **Yes** Please describe: Species: Choose an item.

For each life history parameter, provide web links and details where applicable and add more species if necessary.

B. Monitoring Programmes

3. Overview of current monitoring and survey schemes

AIM: to provide information on the progress of monitoring programmes, relevant methodologies and aims thereof, and status of small cetaceans during the reporting period.
Relevant Resolutions: 8.11, 8.9, 8.8, 8.5, 8.4, 8.3, 7.3, 7.1, 6.1, 5.7

Monitoring programmes provide important data on biological and environmental attributes, such as population status, abundance and spatial-temporal distribution. They create opportunities for new research and development, including potential improvements to methodology for monitoring in terms of accuracy, practicality and cost efficiency.

In the ASCOBANS Area, application of coherent monitoring programmes focused on small cetaceans, which collect and provide objective, robust and comparable data, is a key component in understanding and improving the conservation status of small cetaceans through appropriate management. Parties have agreed to design, implement and support relevant monitoring programmes through a number of resolutions. Such efforts are also supported by legislation from a number of bodies which identify monitoring as a requirement in management systems. Additionally, Parties have been encouraged to coordinate their monitoring programmes, which promotes international cooperation and synergies. Parties have also been encouraged to review such monitoring programmes and propose improvements for the betterment of conservation efforts.

It is the interest of ASCOBANS to understand the current monitoring programmes utilised, their outputs, and future activities in the Agreement Area. Countries are requested to provide information relevant to their activities as well as potential improvements to such programmes and efforts.

Questions:

3.1. Are there national monitoring programmes that enable assessment of the Conservation Status of small cetaceans in your waters (i.e. provides abundance estimates and/or life history parameters and information on pressures)?

☐ **No.**

☒ **Yes.** Please provide an overview in the table below.

Within MPAs	**Approach:** ☐ Line transect surveys ☐ Photo-ID ☐ Strandings ☒ Passive Acoustic Monitoring ☐ Other, please specify:

	Target Species: (Copy drop-down to add more species) HP Harbour porpoise
	Instiution(s): (Name, website, etc) Swedish Museum of Natural History (https://www.nrm.se/index.html)
Wider Seas	**Approach:** ☐ Line transect surveys ☐ Photo-ID ☐ Strandings ☒ Passive Acoustic Monitoring ☐ Other, please specify:
	Target Species: (Copy drop-down to add more species) HP Harbour porpoise
	Instiution(s): (Name, website, etc) Swedish Museum of Natural History (https://www.nrm.se/index.html) National Veterinary Institute (https://www.sva.se/)

3.2. Please provide the relevant information with regards to aerial surveying activities.

Number of surveys	Area covered	Species	Timeframe of survey
0		Choose an item.	
		Choose an item.	
		Choose an item.	

3.3. Please provide the relevant information with regards to Passive Acoustic Monitoring (PAM).

Location of moored instruments	Timeframe of survey	Species	Make and model of instruments used
25	**April 2017 - present**	HP Harbour porpoise	**CPOD**
		Choose an item.	
		Choose an item.	

3.4. Are any of these programmes carried out in collaboration with other countries?

☐ **No.**

☒ **Yes.** Describe below:

Programme	Collaborators	Links
General open collaboration using SAMBAH station positions and methods in the Baltic Sea	All neighbouring countries	
General open collaboration, using the same grid in the Kattegat	Denmark	

3.5. Please provide details on any planned activities relevant to monitoring programmes.

Provide web links if available.

- Sweden also has a Regional Monitoring Program, with one county completing harbour porpoise monitoring since 2016. More regional counties have expressed an interest in beginning programs, with a second country beginning in April 2020.
- Sweden took the lead on the submission of the concept note for the SAMBAH II LIFE application in 2019, and continues to work on the application. This project aims to conduct the second population-wide assessment of the Baltic proper population distribution and abundance, as well as assess the impact of threats on the population. In addition this project aims to determine GES/FRV values for both the Baltic Proper and Belt Sea population of harbour porpoises.

3.6. Relevant outputs/findings from monitoring programmes to note.

Species	Relevant outputs
Choose an item.	(Provide web links if available)
Choose an item.	(Provide web links if available)
Choose an item.	(Provide web links if available)

B. Monitoring Programmes

4. Other research (not mentioned elsewhere in Section II, III or IV)

4.1. Please provide relevant information in regard to other research (not mentioned elsewhere in Sections II, III, IV).

Project name	Institution	Duration	Aim(s)/Objective(s)	Method

Section 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**, 8.7, 8.4, 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.

Questions:

1.1. Is there a national stranding network in place?

☐ **No.** Go to **Question 1.4.**

☒ **Yes.** Please provide details:

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

☒ **Whole coastline.**

☐ **Part of the coastline.** Please provide details:

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

☐ **No.**
☒ **Yes.** Please provide details:

1.4. Is there a database of strandings?

☐ **No.** Go to question 1.6.
☒ **Yes.** Continue to question 1.5.

1.5. Is the data available online or downloadable on request?

☐ **No.**
☐ **Yes.** Please provide details:

1.6. Provide details for the institution(s) responsible for a stranding database, responding to live-strandings, collection of carcasses, and for conducting necropsies.

Responsible Institution	Responsibility	Phone number	Email	Website
	☐ Responding to live-strandings ☐ Collection of carcasses ☐ Necropsies ☐ Stranding database			
	☐ Responding to live-strandings ☐ Collection of carcasses ☐ Necropsies ☐ Stranding database			
	☐ Responding to live-strandings ☐ Collection of carcasses ☐ Necropsies ☐ Stranding database			

1.7. Are any cases photographed, measured or sampled even if not collected for necropsy?

☐ **No.**
☐ **Yes.** Please provide details:

1.8. Provide details relevant for recorded stranding events during the reporting period.

Reporting year	Species	Region	Total animals stranded	Number of dead animals	Number of animals stranding alive	Response to live stranding (describe # of successful cases and methods used)
	Choose an item.	Choose an item.				
	Choose an item.	Choose an item.				
	Choose an item.	Choose an item.				

1.9. Provide details relevant to necropsies.

Protocol used for dissection methodologies, collection of samples etc.	Number of carcasses necropsied	What causes of death were identified? (add percentage if available)	Comment

1.10. Other relevant new research/work/collaboration on strandings and stranding networks 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)

Section V: Legislation

A. Overview of Legislative Framework

AIM: to provide information on national, regional and international legislation and guidelines relevant to small cetaceans during the reporting period.
Relevant Resolutions: 8.10, 8.9, 8.8, 8.6, 8.5, 8.4, 8.3, 7.1, 6.2, 6.1, 5.7, 5.4

Legislation and guidelines are a key component of efforts to support favourable conservation status of small cetaceans in the ASCOBANS Area. A number of existing legislation and guidelines bear relevance to conservation efforts for small cetaceans on national, regional and international scales. Regular updating and adaptation of guidelines and legislation (where applicable) can ensure ongoing prevention, minimization and reduction of negative impacts of marine activities on small cetaceans. In addition, these actions support transparent and reliable management.

Parties to ASCBOANS have agreed to support the requisition, development and the implementation of legislation and guidelines to assess, minimize and mitigate pressures on favourable conservation status of small cetaceans in the Agreement Area. Parties have committed to these actions through a number of resolutions regarding pressures known to be detrimental to small cetaceans. It is in the interest of ASCOBANS for countries to provide information on current and foreseen national, regional and international legislation and guidelines relevant to small cetaceans in the Agreement Area.

Questions:

1.1. Please provide the applicable information regarding legislation and guidelines relevant to small cetaceans in the table below.

Are national guidelines relevant for small cetaceans currently in place in your country?	☐ **No.** ☒ **Yes.** Please identify the guidelines concerned:
Is national legislation relevant for small cetaceans currently in place in your country?	☐ **No.** ☒ **Yes.** Please identify the legal statues concerned:
Are regional and/or international guidelines relevant for small cetaceans currently in place in your country?	☐ **No.** ☐ **Yes.** Please identify the guidelines concerned:
Is regional and/or international legislation relevant for small cetaceans currently in place in your country?	☐ **No.** ☐ **Yes.** Please identify the legal statues concerned:

1.2. Have there been any instances/issues related to national, regional and/or international legislation during the reporting period in your country?

☒ **No.**

☐ **Yes.** Please provide details:

Section VI: Information and Education

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,

ASCOBANS Communication, Education and Public Awareness (CEPA) Plan[5] 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:

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 Porpoise in May)

Organizer	**Name of activity** (incl. translation to English, where applicable)	**Date(s)**	**Location**	**Target audience** (general public, scientists, children, fishers; other – please state)	**Links (for further information)**
Swedish Museum of Natural History	International day of the Baltic Harbour Porpoise	May 2018	Facebook	General public	https://www.facebook.com/naturhistoriskariksmuseet/videos/ 10156319203049844/
Swedish Museum of Natural History	Web based reporting form for porpoise observations (live and dead), including quality control and feedback	2017/2018/2019-ongoing	SMNH's web page	General public	www.nrm.se/tumlare
Swedish Museum of Natural History	Interviews for National TV and National and local radio	2019	e.g. TV4	General public	
Swedish Museum of Natural History	Articles/interviews/press releases for National and local newspapers and magazines	2016/2017/2018/2019	E.g. Dagens Nyheter (national daily newspaper), Yrkesfiskaren (Swedish Fishermen's National Association's paper), Trossen (Swedish	General public, commercial fishermen, recreational boaters	

[5] See AC17 Report, Annex 10 (starting on page 65).

Organizer	**Name of activity** (incl. translation to English, where applicable)	**Date(s)**	**Location**	**Target audience** (general public, scientists, children, fishers; other – please state)	**Links (for further information)**
			Sea Rescue Society's magasine)		
Swedish Museum of Natural History	Letter to stakeholders requesting dead porpoises	2017	Coastal	Gillnet fishermen, coastal municipalities and counties	
Swedish Museum of Natural History	Forskarfnatt (~"research crazy"), marine mammals researchers meets the museum visitors	Nov 2016	Swedish Museum of Natural History	General public with focus on school kids and youths	

1.2. List current information/outreach <u>materials</u> produced in your country, which are of relevance to ASCOBANS Area 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**
					☐ **No** ☐ **Yes**

1.3. List other organizations engaged in outreach relevant to the ASCOBANS Area, incl. web links.

1.4. List other initiatives/work/collaboration relevant to the ASCOBANS Area that are not included above.

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

- **We have several parallel reporting systems for observations of dead/live small cetaceans, makes it difficult to collate data and to communicate one message to the public.**

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

☒ **No.**

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

Section VII: Other Matters

A. Other information or comments important for the Agreement:[6]

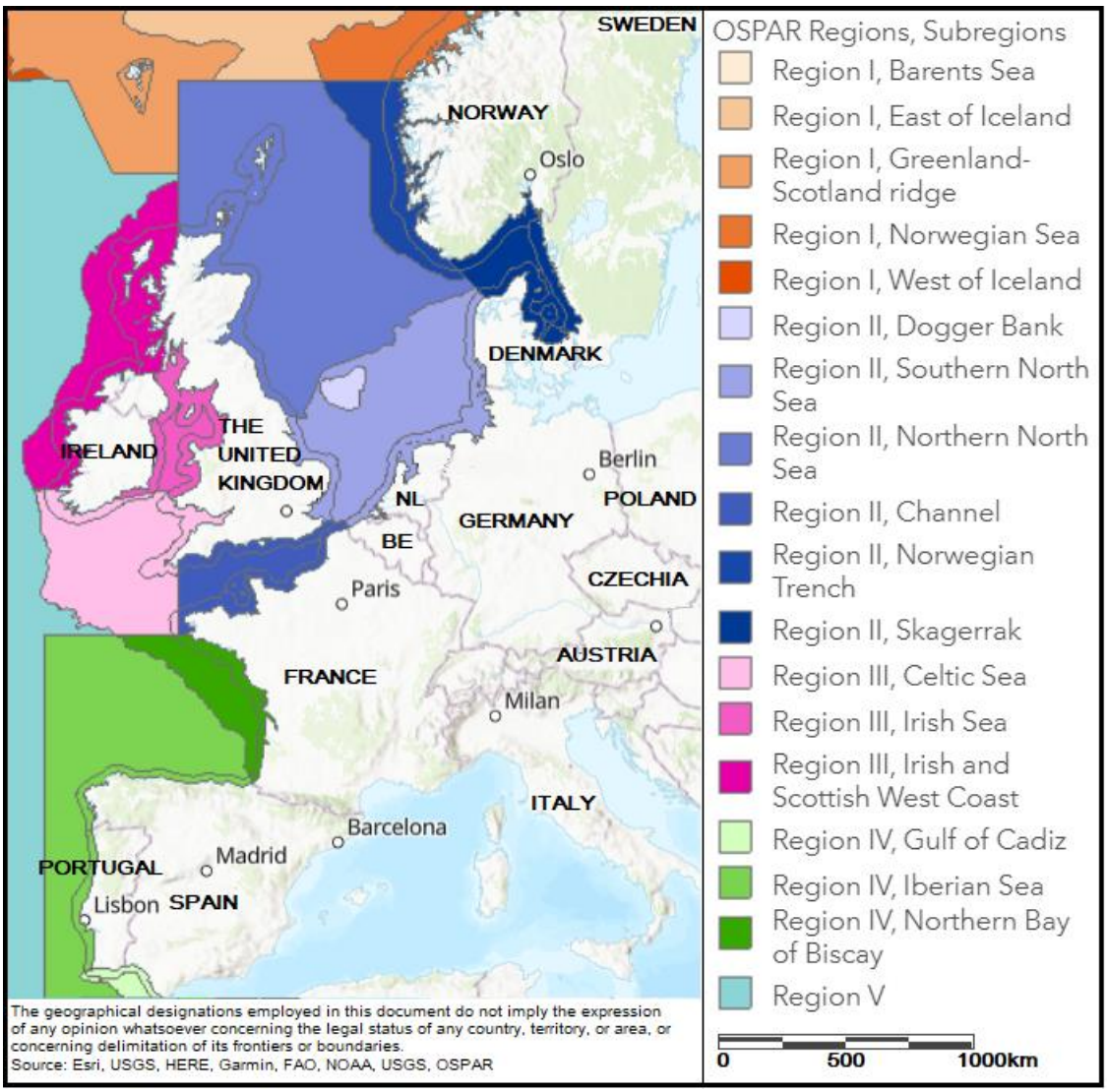
B. Difficulties in implementing the Agreement:

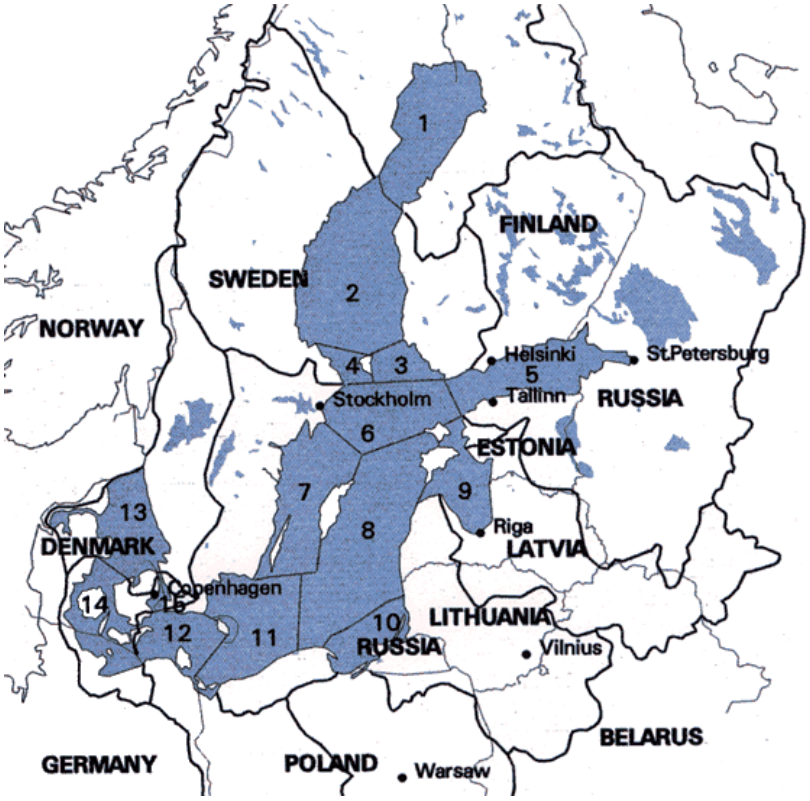
[6] Opportunity to include other information relevant to the topics covered in this form but which are missing.

Annex A: Overview of the sub-regions as defined by OSPAR and HELCOM, and areas as defined by ICES.

Drop-down menu sub-regions OSPAR and HELCOM
Choose an item.

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





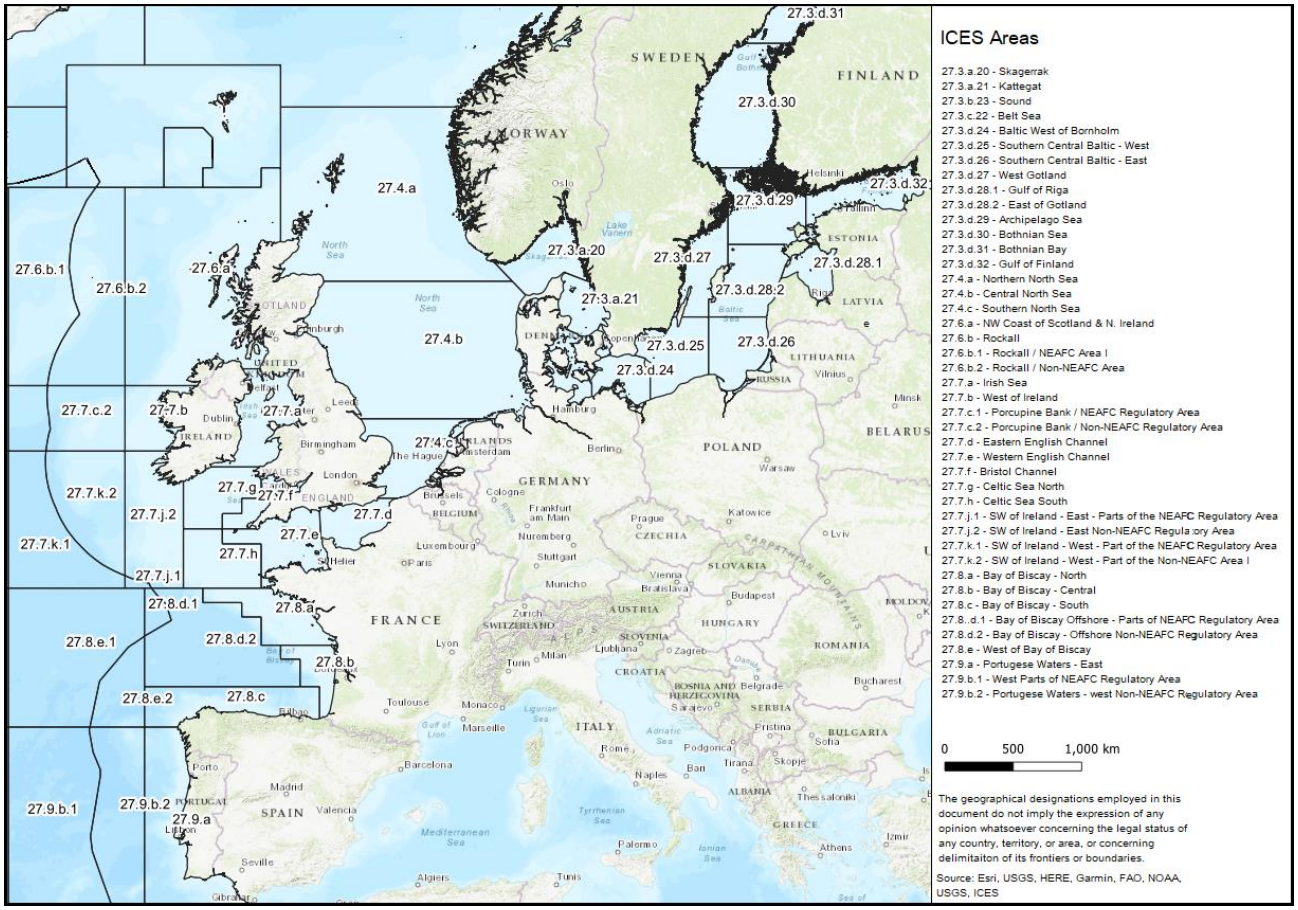
A map of the Baltic Sea drainage basins (catchment area), and marine subdivisions, including basins.
1. Bothnian Bay
2. Bothnian Sea
3. Archipelago Sea
4. Åland Sea
5. Gulf of Finland
6. Northern Baltic Proper
7. Western Gotland Basin
8. Eastern Gotland Basin
9. Gulf of Riga
10. Gdansk Basin
11. Bornholm Basin
12. Arkona Basin
13. Kattegat
14. Belt Sea
15. The Sound

Drop-down menu of ICES Areas

Choose an item.

Area	Area Description	Area	Area Description
27.3	Skagerrak, Kattegat, Sound, Belt and Baltic Seas	27.7.b	West of Ireland
27.3.a	Skagerrak and Kattegat	27.7.c	Porcupine Bank
27.3.a.20	Skagerrak	27.7.c.1	Porcupine Bank / NEAFC Reg. Area
27.3.a.21	Kattegat	27.7.c.2	Porcupine Bank / Non-NEAFC Reg. Area
27.3.b,c	Sound and Belt Sea	27.7.d	Eastern English Channel
27.3.b.23	Sound	27.7.e	Western English Channel
27.3.c.22	Belt Sea	27.7.f	Bristol Channel
27.3.d	Baltic Sea	27.7.g	Celtic North Sea
27.3.d.24	Baltic West of Bornholm	27.7.h	Celtic Sea South
27.3.d.25	Southern Central baltic – West	27.7.j	SW of Ireland – East
27.3.d.26	Southern Central Baltic – East	27.7.j.1	SW of Ireland – East – Parts of the NEAFC Reg. Area
27.3.d.27	West of Gotland	27.7.j.2	SW of Ireland – East – Non-NEAFC Reg. Area
27.3.d.28.1	Gulf of Riga	27.7.k	SW of Ireland - West
27.3.d.28.2	East of Gotland	27.7.k.1	SW of Ireland – West – Part of the NEAFC Reg. Area
27.3.d.29	Archipelago Sea	27.7.k.2	SW of Ireland – West – Part of the Non-NEAFC Area I
27.3.d.30	Bothnian Sea	27.8	Bay of Biscay
27.3.d.31	Bothnian Bay	27.8.a	Bay of Biscay North
27.3.d.32	Bay of Finland	27.8.b	Bay of Biscay Central
27.4	North Sea	27.8.c	Bay of Biscay South
27.4.a	Northern North Sea	27.8.d	Bay of Biscay Offshore
27.4.b	Central North Sea	27.8.d.1	Bay of Biscay Offshore – Part of the NEAFC Reg. Area
27.4.c	Southern North Sea	27.8.d.2	Bay of Biscay Offshore – Non-NEAFC Reg. Area
27.6	Rockall, NW Coast of Scotland and N. Ireland	27.8.e	Wet of Bay of Biscay
27.6.a	NW Coast of Scotland and N. Ireland	27.9	Portuguese Waters
27.6.b	Rockall	27.9.a	Portuguese Waters – East

27.6.b.1	Rockall / NEAFC Reg. Area I	27.9.b	Portuguese Water - West
27.6.b.2	Rockall / Non-NEAFC Reg. Area	27.9.b.1	Portuguese waters – West Part of the NEAFC Reg. Area
27.7	Irish Sea, West of Ireland, Porcupine Bank, Eastern and Western English Channel, Bristol Channel, Celtic Sea North and South, and Southwest of Ireland – East and West	27.9.b.2	Portuguese waters – Non-NEAFC Reg. Area
27.7.a	Irish Sea		



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*
TBW	**True's beaked whale**	*Mesoplodon mirus*
WBD	**White-beaked dolphin**	*Lagenorhynus albirostris*

Drop down menu small cetacean species:

Choose an item.