

Agenda Item 4.3

Reports

National Reports of ASCOBANS Parties

National Report 6/Rev.1

2016 – 2019 National Report:

Germany

Action Requested

Take note

Submitted by

Germany



Note:

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

ASCOBANS National Reporting Form

GERMANY

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?

The sound protection strategy for harbour porpoises applied in pile driving appears to be a helpful instrument for lowering the noise burden of cetaceans in German marine waters.

Research to analyze possibilities to lower bycatch by pingers / PALs is increasing even if more work on its efficiency, limits and long-term effects appears necessary.

The preparation of the new Red List of Mammals in Germany (publication foreseen in 2020) shows that the threat status of harbor porpoises has since more than 40 years not worsened (1977 “A.1.2 - Threatened by extinction” and in later red lists until nowadays “A.2 Critically endangered” – even if A.2 is still far beyond a satisfying situation.)

2. The greatest challenges in implementing the Agreement?

One of the greatest challenges in implementing the Agreement is to balance necessities of the EU Nature Protection Legislation (Habitats Directive 92/43/EEC) and the Fisheries Legislation (EU Regulation on the Common Fisheries Policy 1380/2013), especially with a view to the harbour porpoise protection measures in the Baltic Sea.

Another challenge is the need for a scientific monitoring of bycatches that would serve as a basis for reasonable protection measures.

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

The protection of the harbour porpoise population of Baltic proper and all realistic measures, which could be realized in close future for its benefit merit to have the highest priority..

Section I: General Information

A. Country Information

1. Name of Party / Non-Party Range State: Germany

2. Details of the Report Compiler

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No Yes

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 No **Yes**

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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 indicate 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	<input type="checkbox"/>	
	Fisheries observes	<input checked="" type="checkbox"/>	100 %
	Remote Electronic Monitoring	<input type="checkbox"/>	
	Self-reporting by fisherman	<input checked="" type="checkbox"/>	
	Pathological investigation	<input checked="" type="checkbox"/>	
	Assessment at stranding site	<input type="checkbox"/>	
2017	Dedicated observser schemes	<input type="checkbox"/>	
	Fisheries observes	<input checked="" type="checkbox"/>	100 %
	Remote Electronic Monitoring	<input type="checkbox"/>	
	Self-reporting by fisherman	<input checked="" type="checkbox"/>	
	Pathological investigation	<input checked="" type="checkbox"/>	
	Assessment at stranding site	<input type="checkbox"/>	
2018	Dedicated observser schemes	<input type="checkbox"/>	
	Fisheries observes	<input checked="" type="checkbox"/>	100 %
	Remote Electronic Monitoring	<input type="checkbox"/>	
	Self-reporting by fisherman	<input checked="" type="checkbox"/>	
	Pathological investigation	<input type="checkbox"/>	
	Assessment at stranding site	<input type="checkbox"/>	
2019	Dedicated observser schemes	<input type="checkbox"/>	
	Fisheries observes	<input checked="" type="checkbox"/>	100 %
	Remote Electronic Monitoring	<input type="checkbox"/>	
	Self-reporting by fisherman	<input checked="" type="checkbox"/>	
	Pathological investigation	<input type="checkbox"/>	
	Assessment at stranding site	<input type="checkbox"/>	

Comments:

Lower Saxony Waddensea National Park
 There are hardly fisheries in the National Park area other than shrimp and blue mussel fishery. Both use either beam trawls or mussel dredges. No bycatch of cetaceans has been reported. Fishes are hardly subject to fishing activities in the National Park and only to a low and decreasing extent on flatfishes (mainly plaice) in other coastal waters of Lower Saxony. The "Germany Lower Saxony mussel dredge and mussel culture" and the "North Sea Brown Shrimp" fisheries are MSC certified. For further information on MSC measures to reduce bycatch see <https://www.msc.org/de/fisch-nachhaltigkeit/beifang>. NLPV has no data on bycatch.

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	Overall sampling effort	Monitoring method used
HP Harbour porpoise	3	2017	Static net			Self reporting by fishermen

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
HP Harbour porpoise	none					

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?
Pingers obligatory in ICES SD 24; for boats >12 m Presumably	H Arkona Basin	2004	Presumably yes, no known assessment project so far
Porpoise Alert Pingers on voluntary basis in ICES SD 22	H Belt Sea	2016	Presumably yes, no known assessment project so far
Reduction of net length during summer months on voluntary basis in Schleswig Holstein coastal gillnet fisheries.	H Belt Sea		Presumably yes, no known assessment project so far
In the whale sanctuary within the National Park Schleswig-Holstein Wadden Sea all kinds of gillnet fishery	Oil Southern North Sea	2013	Presumably yes, no known assessment project so far:

<p>are prohibited within the 3 nautical mile zone (according to the „Landesverordnung zur Änderung der Landesverordnung über die Ausübung der Fischerei in den Küstengewässern vom 4. Dezember 2013“).</p> <p>Beyond the 3 nautical mile zone gillnet fishery in the whale sanctuary with nets exceeding a special height and mesh size (nets with a stretched span between bottomline and floatline higher than 1.30 m and a mesh size above 150 mm) is prohibited for German fishermen.</p>			
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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:

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)

- Research Project:** “Development of alternative management approaches and fishing gear and techniques towards minimizing conflicts in gill net fisheries and conservation objectives and subjects of protection in the EEZ of the Baltic Sea (STELLA)”. Thuenen Institute for Baltic Sea Fisheries; Funding Body: Federal Agency for Nature Conservation (BfN)

<https://www.thuenen.de/en/of/projects/fisheries-environment-baltic-sea/gill-net-fisheries-development-of-alternative-management-approaches-stella/>

<https://www.bfn.de/themen/meeresnaturschutz/belastungen-im-meer/fischerei/stella-forschungsprojekt.html>

STELLA is an Acronym for: “**STELL**netzfisherei – Lösungs - Ansätze

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

- 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.

Lower Saxony Wadden Sea National Park:
 Stock assessments of relevant prey species is carried out in a larger scale and reported to ICES. Fishing quota are subject of European CFP. Fishes are hardly subject to fishing activities in the National Park or coastal waters of Lower Saxony. There are hints that shifts in prey fish abundance in coastal waters are caused by a rise in water temperature due to global warming.

2.2. Where are these depletions in national waters occurring?

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

Area	Region
Such depletions are unknown	

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
Cf. 2.2 – therefore no measures foreseen		

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)

No publications known

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Not applicable. Comments:

So far not any indication/publication of resource depletion or related effects known.

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, as it evokes temporary or permanent raise of their hearing threshold that can reach to complete deafness. Studies show that not only cetaceans but also fish and other marine life may suffer 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
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Specify (e.g. JNCC noise registry): German Noise Registry at BSH, Available under: https://marinears.bsh.de Contact: marinears@bsh.de	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	
Construction wind farms	Complete	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Weblinks: https://www.bsh.de/SiteGlobals/Forms/Suche/Servicesuche_Formular.html?nn=1653374&resourceId=1651764&input_=1653374&pageLocale=de&templateQueryString=Environmental+Impact+Assessment+%28EIA%29&submit.x=0&submit.y=0	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Weblinks: https://www.bsh.de/SiteGlobals/Forms/Suche/Servicesuche_Formular.html?nn=1651816&resourceId=1651764&input_=1651816&pageLocale=de&templateQueryString=Strategic+Environmental+Assessment+&submit.x=0&submit.y=0	Yes	Yes	Yes	H Arkona Basin
Construction wind farms	Complete	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Weblinks: https://www.bsh.de/SiteGlobals/Forms/Suche/Servicesuche_Formular.html?nn=1653374&resourceId=1651764&input_=1653374&pageLocale=de&templateQueryString=Environmental+Impact+Assessment+%28EIA%29&submit.x=0&submit.y=0	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Weblinks: https://www.bsh.de/SiteGlobals/Forms/Suche/Servicesuche_Formular.html?nn=1651816&resourceId=1651764&input_=1651816&pageLocale=de&templateQueryString=Strategic+Environmental+Assessment+&submit.x=0&submit.y=0	Yes	Yes	Yes	Oil Southern North Sea
Pile driving for mussel seed collectors within the National Park	Complete	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Weblinks:	<input checked="" type="checkbox"/> No. <input type="checkbox"/> Yes. Weblinks:	Yes	No	Yes	Oil Southern North Sea

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)

In the reporting period R&D projects have been contacted on the assessment of underwater noise and on the effectiveness of noise mitigation measures to prevent impacts on the marine environment with a focus on the indicator species in German waters, the harbour porpoise. Two projects have delivered reports that are potentially of broad interest in the field of underwater noise mitigation:

1. Müller, A., T. Maquil, R. Eigenmann & C. Juretzek, 2020. Classification and assessment of impulsive noise with and without noise mitigation measures – Exposure Index based on a habitat approach. Technical Report, R&D “Assessment approaches for underwater sound monitoring associated with offshore approval procedures, maritime spatial planning and the marine strategy framework directive – BeMo”, Order No. 10036955, Bundesamt für Seeschifffahrt und Hydrographie (BSH).
Available in English under:
https://www.bsh.de/DE/THEMEN/Offshore/Umweltpruefung/Unterwasserschall_MarinEARS/unterwasserschall-marinears_node.html
2. Bellmann M. A., Brinkmann J., May A., Wendt T., Gerlach S. & Remmers P. (2020) Underwater noise during the impulse pile-driving procedure: Influencing factors on pile-driving noise and technical possibilities to comply with noise mitigation values. Supported by the *Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Bundesministerium für Umwelt, Naturschutz und nukleare Sicherheit (BMU))*, FKZ UM16 881500. Commissioned and managed by the *Federal Maritime and Hydrographic Agency (Bundesamt für Seeschifffahrt und Hydrographie (BSH))*, Order No. 10036866. Edited by the *itap GmbH*.
Available in German and English under
https://www.bsh.de/DE/PUBLIKATIONEN/_Anlagen/Downloads/Projekte/Erfahrungsbericht-Rammschall.html?nn=2611410
3. Müller, A., 2019. Inclusion of noise mitigation measures in the reporting to the impulsive noise registry. Report on the behalf of the Federal Maritime and Hydrographic Agency (BSH) as part of the R&D “Assessment approaches for underwater sound monitoring associated with offshore approval procedures, maritime spatial planning and the marine strategy framework directive – BeMo”, Order No. 10036955,
Available in English under
https://www.bsh.de/DE/PUBLIKATIONEN/_Anlagen/Downloads/Projekte/Inclusion-of-noise-mitigation_Report.html

Publications:

Dähne M, Tougaard J, Carstensen J, Rose A & Nabe-Nielsen J (2017) Bubble curtains attenuate noise levels from offshore wind farm construction and reduce temporary habitat loss for harbour porpoises. *Marine Ecology Progress Series* 580: 221–237.

"Effect ranges of underwater noise from anchor vibration operations in the Wadden Sea": <https://www.sciencedirect.com/science/article/pii/S138511012030112X>

Research Projects:

“Effects of the Underwater Sound of Offshore Windfarms on Marine Mammals – Underwater Noise Effects („Auswirkungen des Unterwasserschalls der Offshore-Windenergieanlagen auf marine Säugetiere – Unterwasserschalleffekte (UWE)“). Research Project funded by Federal Agency for Nature Conservation (BfN):

Publication: Schaffeld, T., Schnitzler, J. G., Ruser, A., Woelfing, B., Baltzer, J., and Siebert, U. (2020). “Effects of multiple exposures to pile driving noise on harbor porpoise hearing during simulated flights—An evaluation tool,” *J. Acoust. Soc. Am.*, 147, 685–697. doi:10.1121/10.0000595

Study on Effects of offshore pile driving on harbour porpoise abundance in the German Bight (GESCHA).

Final report: <http://bioconsult-sh.de/site/assets/files/1573/1573.pdf>

International Conference:

“Noise mitigation for the construction of increasingly large offshore wind turbines Technical options for complying with noise limits” (22.–23. Nov. 2018)

Abstracts: <https://www.bfn.de/fileadmin/BfN/meeresundkuestenschutz/Dokumente/Noise-Mitigation-2018/NMC-2018-Abstracts-2018-11-20.pdf>

Report: <https://www.bfn.de/fileadmin/BfN/meeresundkuestenschutz/Dokumente/Noise-mitigation-for-the-construction-of-increasingly-large-offshore-wind-turbines.pdf>

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

Outline of management procedures for preventing cumulative impacts of impulsive noise from pile driving:

Approvals given by BSH. BSH include two incidental provisions with measures for the protection of the marine environment from noise impact due to pile-driving works:

- Reduction of the noise at the source: Mandatory application of low-noise working methods according to the state-of-the-art for the installation piles and mandatory restriction of the noise emissions during pile-driving works. The condition primarily aims at protecting marine animal species from impulsive noise entries by avoiding killing and injury.
- Avoidance of significant cumulative impacts: The spatial extension of pressure from noise emissions must not exceed certain percentages of the area of the German Exclusive Economic Zone (EEZ) and the nature conservation areas at any time. This ensures that the animals will always find sufficient high-quality habitats unaffected from significantly disturbing noise emissions. The primary purpose of the condition is to protect marine habitats by avoiding and minimizing disturbances by impulsive noise.

Moreover, the incidental provisions in approvals given by BSH containing measures to reduce noise and protect the environment apply to all offshore-projects (wind farms and network connection platforms) in the German EEZ of the North- and Baltic Sea. The incidental provisions apply across projects, provide the framework for the development of concepts for noise mitigation measures and contain instructions for the implementation of noise mitigation concept and monitoring in the construction phase. The noise reduction at the source and the restrictions to prevent noise related pressure on habitats are the main measures to ensure protection of the key species harbour porpoise and other marine species, while providing the industry with the framework necessary for the safe planning of offshore-projects and the development of noise-reducing technologies.

Further information concerning nature conservation issues can be found in the UBA recommendation (UBA, 2011) and in the noise mitigation concept of the BMU (BMU, 2013) (https://www.ascobans.org/sites/default/files/document/AC21_Inf_3.2.2.a_German_Sound_Protection_Concept.pdf)

For the protection of the marine environment, the BSH follows the precautionary principle and considers the state of knowledge and requirements set by BMU, UBA and BfN. The framework set by BSH includes following issues:

- The strategy for the protection of the marine environment from percussive pile driving noise, is based on two aspects:
 - reduction of underwater noise entry at the source,
 - reduction of habitat loss for marine species through avoidance behavior induced by noise emissions.
- The key species in German waters of the North- and Baltic Sea is the harbour porpoise (as a strictly protected species according to the Federal Nature Conservation Act (BNatSchG) and the Habitats-Directive 92/43/EEC).
- Temporary threshold shift (TTS) of the harbour porpoise is classified as an injury.
- For the protection of the harbour porpoise and the marine environment against effects of pile-driving noise, thresholds at activity level have been set.
- Compliance with the specified thresholds at activity level requires the application of technical noise mitigation measures.
- The thresholds at activity level are based on a dual criterion, consisting of the Sound Exposure Level (SEL) and the zero-to-peak Sound Pressure Level, both measured in 750 m distance to the pile-driving site.
- The noise mitigation values are intentionally set as broadband levels, that can provide the framework necessary for the development of technical noise mitigation for offshore construction sites and thus contribute to the achievement of the targets for the reduction of the noise entry at the source and the associated reduction of habitat loss.
- The multiple acoustic stress due to several single strokes per pile is taken into account by two additional measures:
 - definition of the noise mitigation value at 160 dB re 1 μ Pa² s, to be observed by the 5% exceedance level of the Sound Exposure Level (SEL₀₅) with 4 dB under the level of 164 dB, in which a temporary threshold shift (TTS) was experimentally found for a harbour porpoise,
 - definition of the 5% exceedance level (SEL₀₅) as reference parameter for proving the compliance with the noise mitigation values; the SEL₀₅ is with at least 3 dB above the median value.
- Cumulative effects on the key species harbour porpoise are avoided or reduced according to the noise mitigation concept of the BMU (2013) by restricting the acoustic pressure on habitats to a maximum allowed area of the EEZ and the nature conservation areas.

Measures are defined to ensure avoidance and reduction of significant cumulative effects resp. disturbances of the stock of the harbour porpoise that can be caused by impulsive noise entries. The rules and measures are directly derived from the concept of the BMU for the protection of the harbour porpoise in the German EEZ of the North Sea (BMU, 2013).

- It must be ensured, that at any time, not more than **10% of the area of the German EEZ of the North Sea** and not more than **10% of an adjacent nature conservation area** are affected by significant disturbance-causing noise due to pile-driving works for the foundations.
- During the sensitive period of the harbour porpoise from 1st May to 31st August, it must be ensured, that **not more than 1% of the subregion I of the nature conservation area „Sylter Außenriff – Östliche Deutsche Bucht“ with the special function of a breeding area** is affected by significant disturbance-causing noise due to pile-driving works for the foundations.

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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	This information can only be confirmed for impulsive noise from pile driving activities, which are mitigated and monitored according to regulation in place
Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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
Alpha ventus	27.04.2010	27.4.b	5	12	Tripod foundation	Yes	<input type="checkbox"/> Single bubble curtains <input type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: R&D on the development of BBC			6 Jackets and 6 Tripods
EnBW Baltic 1	02.05.2011	27.3.d.24	2,3	21	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input type="checkbox"/> Other, please specify:			sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
BARD offshore 1	26.08.2013	27.3.d.24	5	80	Tripod foundation	Yes	<input type="checkbox"/> Single bubble curtains <input type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: R&D on the			sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory

							development of HSD and BBC-Trials			
Riffgat	12.02.2014	27.4.b	3,6	30	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: Vibratory pile driving for a few meters, impact pile driving with I H C-NMS Isolation casings			sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Meerwind	09.02.2015	27.4.b	3,6	80	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: Trials on DBBC configuration			sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Dan Tysk	30.04.2015	27.4.b	6,2	80	Pile-driving	Yes	<input checked="" type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: Combination of two BBC systems in trial, R&D on biological implications			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory

Nordsee Ost	11.05.2015	27.4.b	6,2	48	Other, please specify:	Yes	<input checked="" type="checkbox"/> Single bubble curtains <input type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: Trials with BBC, two BBC systems deployed			Jackets in Prepiling Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Trianel Windpark Borkum, Phase 1	21.07.2015	27.4.b	5	40	Tripod foundation	Yes	<input checked="" type="checkbox"/> Single bubble curtains <input type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: R&D on the development of BBC and on biological implications			Tripods in Prepiling. Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Butendiek	05.08.2015	27.4.b	3,6	80	Pile-driving	Yes	<input checked="" type="checkbox"/> Single bubble curtains <input type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: IHC_NMS Isolating casings in combination with BBC			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
EnBW Baltic 2	1.09.2015	27.3.d.24	3,6	80	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains			40 Jackets, 40 Monopiles. Sound exposure level at a threshold of 160 dB in 750 meter.

							<input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: Trials on sound propagation and BBC-application			Mitigation measures are mandatory
Global Tech 1	02.09.2015	27.4.b	5	80	Pile-driving	Yes	<input checked="" type="checkbox"/> Single bubble curtains <input type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: R&D on the development of BBC for wter depths of 40 m			Tripods in postpiling. Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Borkum Riffgrund 1	09.10.2015	27.4.b	3,6	30	Other, please specify:	Yes	<input type="checkbox"/> Single bubble curtains <input type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: IHC Noise Mitigation System			Pile-driving/suction bucket/ gravity foundation/ tripod foundation Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Amrumbank West	23.10.2015	27.4.b	3,6	80	Pile-driving	Yes	<input checked="" type="checkbox"/> Single bubble curtains <input type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: HSD-system in combination with			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory

							BBC, Trials with different installation equipment			
Sandbank	21.01.207	27.4.b	4	72	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: HSD-sytem in combination with DBBC			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Veja Mate	31.05.2017	27.4.b	6	67	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify:HSD-System in combination with DBBC			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Gode Wind 1	27.06.2017	27.4.b	6	55	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: IHC-NMS in combination with DBBC			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Gode Wind 2	27.06.2017	27.4.b	6	42	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains			Sound exposure level at a threshold of 160 dB in 750

							<input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: IHC-NMS in combination with DBBC			meter. Mitigation measures are mandatory
Nordsee One	28.06.2017	27.4.b	6,15	54	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: IHC-NMS in combination with DBBC			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Nordergründe	31.10.2017	27.4.b	6,2	18	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input type="checkbox"/> Other, please specify:			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Wikinger	29.10.2018	27.3.d.24		70	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: Trials with			Foundation: four-leg jacket in postpiling Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory

							HSD and integrated small bubble curtain			
Borkum Riffgrund 2	04.06.2019	27.4.b	8	56	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: IHC-NMS in combination with DBBC			20 Suction buckets with three-leg jacket. Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Deutsche Bucht	31.09.2019	27.4.b	8,4	31	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: HSD-system in combination with DBBC			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Trianel Borkum Riffgrund Phase 2	31.09.2019	27.4.b	8,4	40	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: HSD-system in combination with DBBC			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
EnBWHohe See	31.10.2019	27.4.b	7	71	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation

							<input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: IHC-NMS in combination with DBBC			measures are mandatory
EnBW Albatros	31.10.2019	27.4.b	7	16	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: IHC-NMS in combination with DBBC			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Merkur Offshore	15.06.2019	27.4.b	6	66	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: IHC-NMS in combination with DBBC			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory
Arkona-Becken Südost	16.04.2019	27.3.d.24	6	60	Pile-driving	Yes	<input type="checkbox"/> Single bubble curtains <input checked="" type="checkbox"/> Double bubble curtains <input type="checkbox"/> Acoustic deterrent devices <input type="checkbox"/> Time/area closures <input checked="" type="checkbox"/> Other, please specify: HSD-system			Sound exposure level at a threshold of 160 dB in 750 meter. Mitigation measures are mandatory

							in combination with DBBC			
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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.		

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.		

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.		

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:

Laying of cables by the Interconnector Nord.Link (DC high voltage power cable) from Norway to Büsum through territorial and coastal waters (started in 2018 in the coastal waters of SH). EIA has been carried out within the licensing process. No adverse effects to harbour porpoises due to mitigation measures (f.ex. cable route does not cross the whale sanctuary of the Wadden Sea National Park SH; choice of cable laying techniques, time frame)

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

see also 3.4

<https://www.offshore-stiftung.de/status-quo-offshore-windenergie>

https://www.bsh.de/EN/TOPICS/topics_node.html

<https://marinears.bsh.de>

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	Unchanged	
Wave power	Not Applicable	
Tidal energy	Not Applicable	
Tidal lagoon/barrage	Not Applicable	

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.

Concerning the German respective term, which is “Störung” there is no legal definition. However there is a huge variety of definitions in legal commentary books and articles in legal journals and furthermore “jurisdiction” defining this issue. The plethora of information is immense and would require an own publication. Here only a few examples, where respective coherent information about this term can be found:

FRENZ; MÜGGENBURG (2016 2nd edition) :B NatSchG Bundesnaturschutzgesetz / Kommentar Page 979 - 980

LORZ; KONRAD et.al. (2013 3rd ed :Becksche Kurz Kommentare "Naturschutzrecht" page 353 -354.

LÜTTKES, EWER (2018 2nd ed. : Bundesnaturschutzgesetz – Kommentar, page 476 -477

SCHLACKE (2017): Gemeinschaftskommentar zum Bundesnaturschutzgesetz, page 714 -715

Federal State of Lower Saxony:

NWattNPG §2(1) only specifies that animals are to be protected from harassment:

<http://www.nds->

[voris.de/jportal/?quelle=jlink&query=WattenmeerNatPG+ND+%C2%A7+2&psml=bsvorisprod.psml&max=true](http://www.nds-voris.de/jportal/?quelle=jlink&query=WattenmeerNatPG+ND+%C2%A7+2&psml=bsvorisprod.psml&max=true).

NPNordSBefV §2 specifies that animals should not be damaged, harmed or unnecessarily disturbed by boating: <http://www.gesetze-im-internet.de/npnordsbefv/BJNR002420992.html>

National Park Law Schleswig-Holstein Wadden Sea: Art. 5 Protection provisions

(1) In the national park, all actions, apart from expressly permitted measures and uses, are prohibited that could destroy, damage, change or lastingly disturb the protected area or its components. In **particular, it shall not be permitted**

[...]

3. to pursue or trap wild animals, to disturb wild animals with noise or by other means, to injure or kill wild animals, or to damage or take possession of wild animals or their eggs or other developmental forms, or to permit dogs to run unleashed.

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)	<input type="checkbox"/> No <input type="checkbox"/> Yes, please describe:
	Choose an item.	(include link to website)	<input type="checkbox"/> No <input type="checkbox"/> Yes, please describe:
	Choose an item.	(include link to website)	<input type="checkbox"/> No <input type="checkbox"/> 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					

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
H Belt Sea	2016	BD Bottlenose dolphin	https://www.shz.de/lokales/flensburger-tageblatt/selfie-und-delfie-sind-offenbar-weitergezogen-id12942371.html	No
H Belt Sea	09.04.2019	CD Short-beaked Common dolphin	https://www.kn-online.de/Kiel/Delfin-zu-Gast-in-der-Kieler-Foerde	No

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)	Code of conduct: "Verhaltenskodex: Beobachtung von Delfinen und Walen in deutschen Gewässern" (voluntary guideline by NGOs WDC and GRD in cooperation with the Federal Agency for Nature Protection (BfN) to regulate the behaviour of humans around wild cetaceans in German waters (code of conduct) – including non-commercial watching) Link: https://www.bfn.de/fileadmin/BfN/presse/2020/Dokumente/20200622_Verhaltenscodex-Wale-Delfine.pdf Federal State of Schleswig Holstein: Laws in place which forbid it (National Park Law Schleswig-Holstein Wadden Sea: Art. 5 Protection provisions) with possibility of proceedings and, where appropriate, penalties	
Date of implementation:	22.06.2020	Region: all German waters
Has the measure been effective?	<input type="checkbox"/> No <input type="checkbox"/> Yes. Comments: not applicable	
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:

None with respect to a “cetacean watching industry”. -
 However in a larger context of cetacean watching –including creating awareness of visitors of beaches close to porpoise habitats - the following information might be of interest:

The so called “whale path” which consists of information sign-posts along the western beach of the island of Sylt (i.e. adjacent to the harbour porpoise sanctuary) has been expanded by 12 new signposts, now totaling 22 positions. The signpost informs about the presence, biology and many other aspects of harbour porpoises and other cetaceans. They also inform about other animals and their habitats.

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
Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Not applicable. Comments:
 There is no commercial whale watching in German waters.

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)

Federal State of Lower Saxony:

1. Structures of the German boat market (with data differentiated between coast and inland)
2. There are several online platforms on Marinas at the North Sea coast (might be incomplete)

Web link or other relevant link to data: (where can this information be found)

1. <https://www.bvwww.org/forschung/forschungsprojekte/strukturen-im-bootsmarkt.html>
2. E.g. <https://marinas.info/yachthafen/nordsee>

See also Wadden Sea Quality Status report chapter on tourism:
[\(https://qsr.waddensea-worldheritage.org/reports/tourism/\)](https://qsr.waddensea-worldheritage.org/reports/tourism/),
 number of tourists on the East-Frisian Islands and along the coast:
https://www.ihk-emden.de/standortpolitik/Tourismus/Fakten_Zahlen/Statistiken/2357142
 data on tourism density in Germany:
<https://www.bbsr.bund.de/BBSR/DE/Home/Topthemen/2020-tourismus.html> .

Federal State of Schleswig Holstein:
 Tourist number per region
<https://www.nationalpark-wattenmeer.de/sh/wissen/soziooekonomie>

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
Oil Southern North Sea	Data on marine traffic worldwide (see density maps) including pleasure craft	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	https://www.marinetraffic.com

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
Publications about cetaceans in Germany do not tackle incidents of disturbance or harassment in relation to recreational sea use. However, such incidents might have happened – therefore “unknown”!					

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:	Boating regulation for the marine National Park limits speed of boats	
Date of implementation:	1992	Region: OII Southern North Sea
Has the measure been effective?	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Comments: Enforcement is difficult	
Other information:	http://www.gesetze-im-internet.de/npnordsbefv/BJNR002420992.html	

Measure:	Federal State of Schleswig Holstein: Laws in place (National Park Law Schleswig-Holstein Wadden Sea). Provisions and conditions can be set within the framework of approval procedures. Regarding shipping and water-sports an Order on the navigation in federal waterways in the National Parks in the area of the North Sea, 1997 (Verordnung über das Befahren der Bundeswasserstraßen in Nationalparks im Bereich der Nordsee (NPNordSBefV) a.o. sets speed limits and the crossing of protected areas. This Order is under revision.	
Date of implementation:	1997	Region: OII Southern North Sea
Has the measure been effective?	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Comments: Presumably even more effective for other species than for harbour porpoises, but the avoidance of speed boat races et al. helps harbour porpoises too to avoid ship strikes..	
Other information:	Cf. VOGEL,S.- (1994): Verletzungen und Tötungen von Meeressäugern durch Schiffsverkehr / Studie im Auftrag des BfN / 32 pages	

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)

No publications known !

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:

The NPNordSBefV is currently under revision by the Federal Ministry of Transport which triggers discussions with recreational sea user’s organisations (cf.

<https://www.soltwaters.de/soltwaters/antrag-auf-novellierung-der-befahrensverordnung-eingereicht.html>).

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
HP Harbour porpoise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Lack of data on recreational boating and related issues

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)

No problems or publications etc known.

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?

<input checked="" type="checkbox"/> OSPAR	<input type="checkbox"/> None	<input type="checkbox"/> Unknown
<input type="checkbox"/> HELCOM	<input checked="" type="checkbox"/> Other, please state: : https://www.schleswig-holstein.de/DE/UXO/Partner/partner_Meldestelle.html ; https://underwaternoise.ices.dk/impulsive/webservices.aspx	

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

Tables in annex

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)

For the coastal waters of the federal state of Lower Saxony, which include the Lower Saxon Wadden Sea National Park, a binding guideline for the handling of **Unexploded Ordnance (UXO)**, issued by the ‘Kampfmittelbeseitigungsdienst Niedersachsen’ (internal guidance) is applied for several years. Major features are: if possible, UXOs are defused. If not possible, UXOs are towed to tidal areas, where ignition above water level is possible during low tide. If removal is not possible, ignition is carried out on site, using double bubble curtain and seal scarer.

The national Maritime Safety Center collects reports about UXO and provides them to the respective responsible governmental organisation to counter the threat. Environmental concerns as well as risks to human life and shipping have to be taken into account before an action is taken (i.e. shifting, destroying, disposing on land, etc.). MSFD measures deal with UXO in German TTW and EEZ and their effects to the environment.

Further information on www.munition-im-meer.de

Since 2009 the German cross-administrative working group (www.underwatermunitions.de) actively seeks and shares information between public authorities from federal and state-level are being responsible for relevant areas of concern with regard to underwater munitions, as there are safety, security, nature conservation or pollution control issues. As one result some guidelines where implemented between authorities and recommendations where drafted and submitted to the general public. The annual report of the working group in German language is available on the Website:

http://www.schleswig-holstein.de/DE/UXO/Themen/Fachinhalte/textekarten_Berichte.html

Explosive Ordnance disposal teams of the federal states Schleswig-Holstein, Niedersachsen and Mecklenburg-Vorpommern are aware of the potential threat of explosions to small cetaceans. Mitigation measures considered for each planned detonation include separation of the fuse box from the main charge

in certain types of air mines, translocation of UXO and detonation in shallow waters or on a sandbank (in air), use of pingers/seal scarers, use of bubble curtains.

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)

For information on the expert group and their annual reports see: https://www.schleswig-holstein.de/DE/UXO/uxo_node.html

Decision Aid for Marine Munitions (DAIMON), international project consisting of partners from Poland, Germany, Sweden, Finland, Norway, Lithuania and Russia (Lead: Poland)- <http://www.daimonproject.com/>

Environmental monitoring for the delaboration of munitions on the seabed (UDEM) <https://udem.geomar.de/>

Robotic underwater salvage and disposal process with the technology to remove explosive ordnance in the sea, in particular in coastal and shallow waters (RoBEM) <http://www.munitionsraeumung-meer.de/en/national-research/robemm/>

MSFD Measure UZ2-04 (Dealing with munitions at sea) including following aspects:

- Measures for dealing with hazardous situations (e.g., establishment of a national registry for munitions encounters, development of leaflets, research projects as provided above)
- Measures to complete the still incomplete knowledge (e.g., archive research, co-operation project with scientific bodies, investigations at known munitions dumping sites, development of a munitions cadastral survey (see 8.1), development of scientific methods)
- Development of a systematic procedure for risk assessment and prioritization of munitions contaminated areas.

Ongoing historical document research to gather information In order to improve the knowledge about UXO locations, participating in international research projects like DAIMON II, BASTA with regards to munitions in the seas

www.basta-munition.eu
www.daimonproject.com

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

<input checked="" type="checkbox"/> Increasing	<input type="checkbox"/> Decreasing	<input type="checkbox"/> Staying the same	<input type="checkbox"/> Unknown
Nature of evidence:			
Regular assessment: https://www.schleswig-holstein.de/DE/UXO/Berichte/berichte_node.html			

Not applicable. Comments:

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

see Annex

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.

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)

During regularly conducted necropsies of harbour porpoises, harbour seals and grey seals the focus is additionally set on detecting ingested litter items and information on incidents of entanglement of all three species.

“Fishing for Litter” – a cooperative project between Niedersachsen, Schleswig-Holstein, NABU and fishermen

OSPAR Monitoring Programme “Beach Litter - Abundance, Composition and Trends”
[\(https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/pressures-human-activities/marine-litter/beach-litter/\)](https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/pressures-human-activities/marine-litter/beach-litter/)

OSPAR Monitoring Programme “Composition and Spatial Distribution of Litter on the Seafloor”
[\(https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/pressures-human-activities/marine-litter/composition-and-spatial-distribution-litter-seafloor/\)](https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/pressures-human-activities/marine-litter/composition-and-spatial-distribution-litter-seafloor/)

OSPAR Monitoring Programme “Plastic Particles in Fulmar Stomachs in the North Sea”
[\(https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/pressures-human-activities/marine-litter/plastic-particles-fulmar-stomachs-north-sea/\)](https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/pressures-human-activities/marine-litter/plastic-particles-fulmar-stomachs-north-sea/)

Parameter:
 Type, number, size, weight of litter, place of finding

Macro debris (debris larger than 2.5 cm) is investigated in harbour porpoises and any other dead cetacean found on the coast of Schleswig-Holstein as part of necropsies (e.g. size, type, location of finding and associated lesions). Found object are measured, photographed (*in situ*) and archived. Tissue samples of the surrounded tissue is further analysed histopathologically to identify possible associated lesions. Measurements on chemical pollutants are not part of the current monitoring program and are only conducted occasionally as part of research projects.

Fish monitoring in the framework of Habitats Directive includes bycaught litter

9.2. Are these data publicly available?

- No.
- Yes. Please provide a link:

<https://www.ospar.org/work-areas/eiha/marine-litter/assessment-of-marine-litter>

<https://qsr.waddensea-worldheritage.org/reports/marine-litter>

Unger, B., Herr, H., Benke, H., Böhmert, M., Burkhardt-Holm, P., Dähne, M., ... & Siebert, U. (2017). Marine debris in harbour porpoises and seals from German waters. *Marine environmental research*, 130, 77-84.

<https://www.sciencedirect.com/science/article/abs/pii/S0141113617302350>

<https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/pressures-human-activities/marine-litter/beach-litter>

<https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/pressures-human-activities/marine-litter/composition-and-spatial-distribution-litter-seafloor>

<https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/pressures-human-activities/marine-litter/plastic-particles-fulmar-stomachs-north-sea>

<http://qsr.waddensea-worldheritage.org/pollution>

ICES databases

www.ices.de (litter on the seafloor)
<http://dx.doi.org/10.1016/j.marpolbul.2016.08.027>

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
HP Harbour porpoise	4	1990 - 2014	OII Southern North Sea	Entanglement (1x: netting material); Ingestion (3x: fish hook, plastics, bracelet)
Choose an item.	5	1990 - 2014	H Belt Sea	Entanglement (4x: netting material); Ingestions (1x: fish hook)

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:	Fishing for litter	
Date of implementation:	Since 2004	Region: OII Southern North Sea
Has the measure been effective?	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Comments:	
Other information:	<p>https://www.nabu.de/natur-und-landschaft/aktionen-und-projekte/meere-ohne-plastik/fishing-for-litter/index.html</p> <p>“Fishing for litter”: Fishing for litter is an environmental initiative, internationally coordinated by KIMO and OSPAR, aiming to reduce the amount of litter in the sea and to highlight the problem of marine litter among the public and the fishing sector. In Germany, where the initiative is coordinated by the NGO NABU, the composition of a subsample of the litter is assessed each year according to the OSPAR beach litter sampling protocol (see sub-chapter 2.1 of the QSR 2017)</p> <p>“Strandmüll-Sammelaktionen”</p>	

	Coastal Cleanup Day Project "Dolly ROPE Suspension (DropS)"
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Copy table if needed.

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

Clean-up of beaches after deposition onshore by the waves through collection machines at public bathing beaches. Beach clean-ups outside public bathing sites by events with volunteers, coordinated by the National Park authority (MSFD measure). Collection of debris by beach combers and deposition in special collection sites ('Beach-Debris-Box'), provided by the National Park authority and local administrations.

Objects are collected during regularly conducted necropsies of harbour porpoises from the North Sea and Baltic Sea. Objects and lesions found are noted, measured and archived at ITAW. This meets the needs for implementing the MSFD.

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)

Research project on macroplastic pollution, major sources, pathways and accumulation areas of marine debris, and plans for abatement strategies by the University of Oldenburg: <http://portal.macroplastics.de/>.

Doctoral thesis by Bianca Unger on the "Marine Debris in the North- and Baltic Seas: spatio-temporal distribution patterns and its occurrence in marine mammals" at University of Veterinary Medicine Hannover, Foundation (defended in May 2019).

Marine Strategy Framework Directive:
National Reports for the Marine Strategy Framework Directive (<http://www.meeresschutz.info/msrl.html>)

Trilateral Cooperation on the Protection of the Wadden Sea:
Fleet D.M., Dau K., Gutow L., Schulz M., Unger B. & van Franeker J.A. (2017) Marine litter. In: Wadden Sea Quality Status Report 2017. Eds.: Kloepper S. et al., Common Wadden Sea Secretariat, Wilhelmshaven, Germany. Last updated 21.12.2017. Downloaded 20.04.2018. http://qsr.waddensea-worldheritage.org/reports/marine-litter#subsection_2 (esp. Sub-chapters 2.5)

OSPAR:
OSPAR Intermediate Assessment (<https://oap.ospar.org/en/ospar-assessments/intermediate-assessment-2017/pressures-human-activities/marine-litter/>)

Unger, B., Herr, H., Benke, H., Böhmert, M., Burkhardt-Holm, P., Dähne, M., Hillmann, M., Wolff-Schmidt, K., Wohlsein, P., Siebert, U. (2017) Marine debris in harbour porpoises and seals from German waters. *Marine Environmental Research* 130:77-84.

Unger, B.; Bravo Rebolledo, E. L.; Deaville, R.; Gröne, A.; Jsseldijk, L. L.; Leopold, M. F.; Siebert, U.; Spitze, J.; Wohlsein, P.; Herr, H.: Large amounts of marine debris found in sperm whales stranded along the North Sea coast in early 2016; In: *Marine Pollution Bulletin* 112, 1-2 (2016) 134–141; <http://dx.doi.org/10.1016/j.marpolbul.2016.08.027>

"Runder Tisch Meeresmüll" (<http://www.muell-im-meer.de>)

Litter in fish stomachs (see report „MSRL - Zustand der deutschen Nordseegewässer 2018 (Entwurf)“ UBA F&E project, in Veröffentlichung; Lenz et al. 2016; Rummel et al. 2016)

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The number of impacted animals in the time between 1990-2014 was low, the associated lesions severe. No clear trend could be drawn to judge an increase or decrease. Please keep in mind, that this is a minimum estimate, not all animals are washed ashore and are available for necropsy.</p> <p>Possible increasing: Experience from MSC Zoe ~350 container loss on 1 January 2019</p>

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:

Faeces samples of harbour porpoises are collected since 2014 (German North Sea and Baltic Sea) in the course of the regular conducted necropsies at ITAW. Evaluation of the quantity and quality (RAMAN Spectroscopy) has started in the course of a project financed by the Federal Environmental Agency.

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.

Microplastics:
Name: Institute for Terrestrial and Aquatic Wildlife Research (ITAW), University of Veterinary Medicine, Hannover
Role in monitoring: collection of samples and analysis
Postal Address: Wertstrasse 6, 25761 Büsum, Germany
Contact Person: Prof. Prof. Dr. h. c. Ursula Siebert
Telephone: +49 5118568158
Email: Ursula.Siebert@tiho-hannover.de
Weblink: <https://www.tiho-hannover.de/kliniken-institute/institute/institut-fuer-terrestrische-und-aquatishewildtierforschung/mitarbeiter/mitarbeiter-buesum/usiebert/>

Name: Deutsches Meeresmuseum
Role in monitoring: sample collection and analyses
Postal Address: Katharinenberg 14-20; 18439 Stralsund; Germany
Contact Person: Dr Michael Dähne
Telephone: +49 3831 2650 310
Email: Michael.Daehne@meeresmuseum.de
Weblink: www.meeresmuseum.de

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
				Choose a species					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.

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

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

<input checked="" type="checkbox"/> POPs (e.g. PCBs)	<input type="checkbox"/> Radionuclides	<input checked="" type="checkbox"/> Brucella	<input type="checkbox"/> Others:
<input type="checkbox"/> Oil (e.g. PAHs)	<input checked="" type="checkbox"/> Toxic elements	<input checked="" type="checkbox"/> Microplastics	<input type="checkbox"/> Others:
<input checked="" type="checkbox"/> HAB toxins	<input type="checkbox"/> TBT	<input type="checkbox"/> Nanoplastics	<input type="checkbox"/> Others:
<input type="checkbox"/> Sewage	<input checked="" type="checkbox"/> Morbillivirus	<input type="checkbox"/> Others:	<input type="checkbox"/> 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.)

All animals are sampled if the state of decay allows for sample taking. A protocol for sample handling was established in the course of the PhD study named above and is about to be published. This mainly focusses on the avoidance of secondary pollution.

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)

Analyses are conducted in the course of a PhD study "Occurrence of microplastic particles in marine mammals from German waters and improvement of sample storage" (Project description: <https://www.tiho-hannover.de/index.php?id=7767&L=1>) which covers the quantity and quality of microplastics in faeces samples collected during necropsies

Unger, B., Herr, H., Benke, H., Böhmert, M., Burkhardt-Holm, P., Dähne, M., Hillmann, M., Wolff-Schmidt, K., Wohlsein, P., Siebert, U. (2017) Marine debris in harbour porpoises and seals from German waters. *Marine Environmental Research* 130:77-84.

Unger, B.; Bravo Rebolledo, E. L.; Deaville, R.; Gröne, A.; Jsseldijk, L. L.; Leopold, M. F.; Siebert, U.; Spitze, J.; Wohlsein, P.; Herr, H.: Large amounts of marine debris found in sperm whales stranded along the North Sea coast in early 2016; In: *Marine Pollution Bulletin* 112, 1-2 (2016) 134–141; <http://dx.doi.org/10.1016/j.marpolbul.2016.08.027>

10.9. If applicable, list any additional evidence/data of reduced 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.

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	concerning Microplastics

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:	

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	
2016	Oil Southern North Sea	HP Harbour porpoise	20	20	Hamburg Port area, May 2016, mainly after Port anniversary (special situation with lots of vessels and fast watercraft)
	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:

In Germany ship strikes are protocolled (if occurring) within the standard post mortem examination protocol.

The issue of potential ship-strikes with cetaceans were analyzed already early in the 90ies the Federal Agency for nature conservation. According to their report for certain species there is a high probability to become a victim of ship strikes, if there are no speed limitations for ships. – Concerned are in particular slow moving big whales like e.g. Eubalaena glacialis. However, such whales do in principle not occur in German waters and exceptional sightings are utmost unusual. And for the only permanent inhabitant of German water, the harbour porpoise, speed limitations were created in the Wadden Sea to avoid any ship strike risk in an area, where this otherwise might have been possible.

Ship strikes seem not an issue of concern in the ASCOBANS range, the German marine waters. However, observations show that porpoises manage to reach the estuaries and fresh water parts of German rivers. There in the past ship strikes occurred and these were protocolled. Since a few years the presence of harbor porpoises in German estuaries and rivers are monitored and the situation of ship strikes assessed.

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				

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

- No.

Yes. Please provide details:

Schweinswale e.V.
 Daiserstr. 6
 81371 München
 Telefon: 089-7257575
 Mobil: 0176-22208271
<https://walschutz.org/>

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.

Rules that regulate the speed of motor boats inside National Parks at the coast of the North Sea and Baltic Sea. The regulations aim primarily on seals and migratory birds, but all marine species benefit from it.

See
<http://www.gesetze-im-internet.de/npnordsbefv/BJNR002420992.html> (North Sea)
 and
<http://www.gesetze-im-internet.de/npbefvmvk/BJNR154200997.html> (Baltic Sea)

See: Answer given above under 6.4 !

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The presence of harbour porpoises in the Wadden Sea increased during the last decade which might also imply an increased exposure to ship strikes in our region but no data / assessment available.

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. CMS³ 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

³ [CMS Resolution 12.21](#) on Climate Change and Migratory Species.

⁴ This refers to direct and indirect effects.

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)
<input checked="" type="checkbox"/> Changes in small cetacean abundance	https://www.bfn.de/themen/meeresnaturschutz/marines-monitoring.html
<input checked="" type="checkbox"/> Changes in small cetacean distribution	https://www.bfn.de/themen/meeresnaturschutz/marines-monitoring.html
<input type="checkbox"/> Changes in small cetacean migration or movement range	
<input checked="" type="checkbox"/> Changes in small cetacean migration or movement timing	https://www.nationalpark-wattenmeer.de/nds/service/publikationen/1129_schweinswale-im-k%C3%BCstenmeer-gis-daten-und-berichte
<input type="checkbox"/> Changes in small cetacean community structure	
<input type="checkbox"/> Changes in reproductive success and timing in small cetaceans	
<input checked="" type="checkbox"/> Changes in prey (fish) abundance and distribution	https://www.nationalpark-wattenmeer.de/nds/service/publikationen/nahrungsnetzbeziehungen-zwischen-flusseeeschwalben-und-fischen-der-jade-10

Monitoring activity	Comments (if possible, provide contact / link to project)
<input type="checkbox"/> Changes in timing of prey (fish) spawning and migration	
<input checked="" type="checkbox"/> Changes in fishing effort	https://www.ml.niedersachsen.de/startseite/aktuelles/veroeffentlichungen/die-niedersaechsische-landwirtschaft-in-zahlen-121348.html
<input type="checkbox"/> Changes in the occurrence of pathogens (from sampled individuals)	
<input checked="" type="checkbox"/> Incidences of algal blooms (if yes, where; specify year)	https://www.nlwkn.niedersachsen.de/wasserwirtschaft/nordseekueste/queteueberwachung/monitoring-der-uebergangs-und-kuestengewasser-117758.html Phaeocystis 2018: https://www.nlwkn.niedersachsen.de/aktuelles/pressemitteilungen/schaumalge-laesst-nordsee-bluehen-164588.html
<input type="checkbox"/> Other (specify):	

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)

/

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:

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No effects known so far: However, effects due to increasing water temperatures or change in distribution of prey species appear likely in the future.

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.

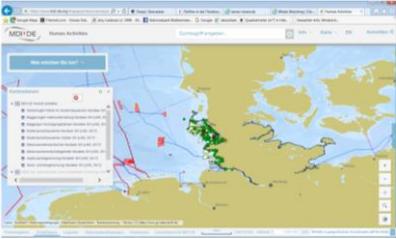
Note: In the term “physical habitat change”, we include a) coastal/marine construction – artificial islands, harbours, bridges, oil/gas platforms, wind turbines, tidal turbines; and b) seabed damage – dredging, bottom trawling.

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
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Oil Southern North Sea	Grid connection of Nordergründe Wind farm constructed in 2016, operational since 2017	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	https://www.erneuerbare-energien.de/EE/Redaktion/DE/Standardartikel/Offshore-Windenergie/Netzanbindung/nordergruende-netzanbindung.html
Oil Southern North Sea	Dredging activities	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	https://qsr.waddensea-worldheritage.org/reports/extraction-and-dredging https://www.ospar.org/work-areas/eiha/dredging-dumping https://odims.ospar.org/odims_data_files/
Oil Southern North Sea		<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	https://www.mdi-de.org

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:	Noise mitigation for the construction of increasingly large offshore wind turbines
Industry:	Offshore wind farms

Activity type:	Maximal allowance of noise emission
Has the measure been effective?	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Comments:
Other information:	https://www.bfn.de/en/activities/marine-nature-conservation/conferences/noise-mitigation-2018.html https://www.bsh.de/EN/TOPICS/Offshore/offshore_node.html https://www.bfn.de/fileadmin/BfN/awz/Dokumente/schallschutzkonzept_BMU.pdf

Measure:	<p>In the German EEZ and coastal waters noise mitigation measures to prevent impacts due to construction activities esp. pile driving on small cetaceans are set by a series of legislative and administrative actions.</p> <p>1. Legislative actions:</p> <p>a) Maritime Spatial Planning Ordinance (Ro-V, 2009, to be updated in 2019) does not allow licensing of offshore wind farms in nature conservation areas (existing wind farms are excluded), impacts of wind farms on maritime environment should be monitored, spacious ecologic interactions should be considered during site selection</p> <p>b) Federal Nature Conservation Act (BNatSchG, 2009). Most relevant articles, § 34 sets rules and regulations for the protection of habitats for populations of species (e.g. harbour porpoise) within nature conservation areas, § 44 sets regulations for the protection of species within nature conservation areas concerning the entire area of stakeholders,</p> <p>c) Offshore Wind Energy Act (WindSeeG, 2017) and Offshore Installation Act (SeeAnIG, 2016; previously Offshore Installation Ordinance (SeeAnIV, 1997)), sets rules for selecting, planning and licensing of offshore wind farms in the German EEZ under consideration of the Environmental Impact Assessment Act (UVPG, last amended 2017) and BNatSchG (2009)</p> <p>d) Nature Conservation Area Ordinances (2017) set among others rules and criteria for the protection of habitats for protected species in nature conservation areas.</p> <p>2. Administrative actions:</p> <p>a) Site Development Plan (FEP, 2019) includes rules and criteria for the specification of sites under consideration of the legislative basis mentioned above.</p> <p>b) Management Plans for the Nature Conservation Areas (under development) include rules and measures for the protection of habitats for harbour porpoise in Nature Conservation Areas.</p>
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	<p>c) Licenses for Offshore Wind Farm Projects in the German EEZ given by BSH (2001 and ongoing) include noise mitigation measures for the protection of harbor porpoise from impacts due to pile driving. The noise mitigation measures included in incidental clauses of licenses given by BSH are laying on the legislative actions (a – d) and on administrative actions (a, b) referred above. Moreover, the noise mitigation measures included in incidental clauses consider new research results, negotiated agreements and state-of-the-art in technical solutions.</p> <p>3. Agreement and Recommendations:</p> <p>a) Recommendations on Noise Thresholds for Offshore Construction (UBA, 2011),</p> <p>b) Concept for the Protection of Harbour Porpoises from Sound Exposures during the Construction of Offshore Wind Farms in the German North Sea (Sound Protection Concept, “Schallschutzkonzept Nordsee”, BMU 2013) Description of noise mitigation measures as applied in the German EEZ: included in incidental clauses of licenses given by BSH for offshore construction and mandatory implemented by all projects.</p> <ul style="list-style-type: none"> - Use of a foundation method with low noise emissions, - Thresholds for Pile Driving: SEL05 of 160 dB re 1µPas² and SPL of 190 dB re 1 µPa at 750 m, mandatory since 2008, - Time limitation of piling duration (180 min for monopiles, 140 min per pile for jacket piles), - prediction of noise emissions due to pile driving (mostly through empirical models under consideration of all available data from underwater sound measurements, - application of deterrence for marine mammals prior to piling to prevent physical injury, deterrence measures have to be proven to have worked within 750 m using a C-POD - ramp up piling procedure, - constraints on hammer energy (up to max. 2000 kJ), - control technique requirements for hammer (high frequency - low energy procedure), - technical mitigation systems for noise reduction applied at far distance to piling site (single or double bubble curtains) and depending on site and project characteristics simultaneously at near distance (hydro sound dampers, noise mitigation tube), - extensive monitoring of the effectivity of noise mitigation measures including real-time monitoring of SEL for the purpose of guiding the hammer operation at site to meet the
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	<p>threshold, surveys of underwater sound at each pile site and in the next nature conservation area to evaluate the effectivity of noise mitigation and surveys to detect the activity of harbour porpoise in the vicinity of piling sites,</p> <ul style="list-style-type: none"> - tight reporting procedure of the monitoring results to the responsible agencies, - construction releases given by BSH are based on a step-by-step procedure: Each release applies for a limited number of locations (piles), - extension of release after evaluation of the effectivity of noise mitigation measures applied as revealed by the results of the monitoring, <p>The cumulative effects of wind farm construction on harbour porpoise density, main distribution areas and protected areas (cf. Habitats-Directive) are considered by license authority (BSH).</p> <p>Federal State Schleswig Holstein: Conditions as ancillary provisions of permits for noise reduction, time slots for construction work, etc.</p>
Industry:	
Activity type:	
Has the measure been effective?	<input type="checkbox"/> No. <input checked="" type="checkbox"/> 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).

<p>Provide web links if available.</p> <p>Dähne M, Tougaard J, Carstensen J, Rose A & Nabe-Nielsen J (2017) Bubble curtains attenuate noise levels from offshore wind farm construction and reduce temporary habitat loss for harbour porpoises. Marine Ecology Progress Series 580: 221–237.</p> <p>Brandt MJ, Dragon AC, Diederichs A, Bellmann M, Wahl V, Piper W, Nabe-Nielsen J & Nehls G (2018) Disturbance of harbour porpoises during construction of the first seven offshore wind farms in Germany. Marine Ecology Progress Series 596: 213–232.</p> <p>A new study on the effects of noise mitigated construction, released in June, 2019: https://bwo-offshorewind.de/wp-content/uploads/2019/06/study-on-the-effects-of-noise-mitigated-construction-works-on-the-harbour-porpoise-population-in-the-german-north-sea.pdf</p>

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:

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
Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

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.

<p>National plans(s) and processes in force:</p>	<ol style="list-style-type: none"> 1. Marine Spatial Planning of the EEZ (North- and Baltic Seas) since 2009 2. Federal State of Schleswig-Holstein: Landesentwicklungsplan Schleswig-Holstein (being reviewed) will contain a section about coastal waters, the National Park Wadden Sea SH is part of the areas of priority for nature protection. 3. State Development Plan Mecklenburg Vorpommern (2016) : http://www.regierung-mv.de/Landesregierung/em/Raumordnung/Landesraumentwicklungsprogramm 4. State Development Niedersachsen (2017): http://www.ml.niedersachsen.de/themen/raumordnung_landesplanung/landesraumordnungsprogramm/landes-raumordnungsprogramm-niedersachsen-5062.html
<p>National plan(s) and processes in preparation:</p>	
<p>Further information, including links to online resources and maps where available:</p>	<p>http://www.bsh.de/en/Marine_uses/Spatial_Planning_in_the_German_EEZ/index.jsp</p> <p>http://www.schleswig-holstein.de/DE/Fachinhalte/L/landesplanung_raumordnung/raumordnungsplaene/landesentwicklungsplan/neuer_landesentwicklungsplan.html</p> <p>Within the 12sm zone, the Federal State of Lower Saxony is competent for spatial planning and the “Landes-Raumordnungsprogramm” LROP applies (also includes regulation on cable corridors within the Lower Saxon Wadden Sea National Park). For further information: https://www.ml.niedersachsen.de/startseite/themen/raumordnung_landesplanung/landes_raumordnungsprogramm/neubekanntmachung-der-lrop-verordnung-2017-158596.html</p> <p>State Development Plan Mecklenburg Vorpommern (2016) : http://www.regierung-mv.de/Landesregierung/em/Raumordnung/Landesraumentwicklungsprogramm</p> <p>State Development Niedersachsen (2017): http://www.ml.niedersachsen.de/themen/raumordnung_landesplanung/landesraumordnungsprogramm/landes-raumordnungsprogramm-niedersachsen-5062.html http://www.schleswig-holstein.de/DE/Fachinhalte/L/landesplanung_raumordnung/raumordnungsplaene/landesentwicklungsplan/neuer_landesentwicklungsplan.html</p>

Transboundary plans(s) and processes in force:	/
Transboundary plan(s) and processes in preparation:	/
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.

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

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)	Legislati on/ 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
Sylter Außenriff	<input type="checkbox"/> Jastarnia Plan <input checked="" type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Comm on Dolphi n SAP <input type="checkbox"/> Not Applicabl e	Oil Southern North Sea	5.314, 3	HP Harbour porpoise (Copy drop- down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommend ed <input type="checkbox"/> Not Applicable	2007	Habitat Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.bundesanzeiger.de/ebanzwww/content/loader/BAnz_AT_13_05_2020_B1100.pdf?state.action=genericsearch_loadbundolpdf&state.filename=BAnz_AT_13_05_2020_B1100.pdf&state.pubcode=17527994&&state.orig_filename=200411001798M001.pdf Fishery Management Measures (Joint Recommendations) under development	https://www.bfn.de/themen/meeresnaturschutz/nationalemereesschutzgebiete . Html https://www.bfn.de/en/activities/marine-conservation/national-marine-protected-areas/north-sea-eez/sylt-outer-reef-sac.html	https://www.bfn.de/en/activities/marine-conservation/national-marine-protected-areas/north-sea-eez/sylt-outer-reef-sac.html
Hamburgi sches Wattenmeer	<input type="checkbox"/> Jastarnia Plan <input checked="" type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin	Oil Southern North Sea	130,26	HP Harbour porpoise (Copy drop- down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommend ed <input type="checkbox"/> Not Applicable	1990	Habitat Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.waddensea-worldheritage.org/resources/2010-wadden-sea-plan	https://www.nationalpark-wattenmeer.de/hh	

	SAP <input type="checkbox"/> Not Applicable									
Lower Saxon Wadden Sea National Park	<input type="checkbox"/> Jastarnia Plan <input checked="" type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	Oil Southern North Sea	3.450	Choose an item. Harbour Porpoise	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	01/01/86	http://www.nds-woris.de/jportal/?quelle=jlink&query=WattenmeerNatPG+ND&psml=bsvo risprod.p sml&max=true&aiz=true	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.waddensea-worldheritage.org/resources/2010-wadden-sea-plan	https://numis.niedersachsen.de/treffernzeige?cmd=doShowDocument&docuid=7BC86FCC-7FBE-435C-AC7B-64A22237854C	
Schleswig-Holstein Wadden Sea National Park	<input type="checkbox"/> Jastarnia Plan <input checked="" type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	Oil Southern North Sea	4410 km ² (thereof 2840km ² as a whale sanctuary)	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	1999	National Park, Habitats Directive, Marine Strategy Framework Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.nationalpark-wattenmeer.de/sh/nationalpark/erlaubt-verboten	https://www.nationalpark-wattenmeer.de/sh/service/mediathek/fotos/864_karte-nationalpark-schleswig-holsteinisches-wattenmeer	https://www.nationalpark-wattenmeer.de/sh https://www.nationalpark-wattenmeer.de/sh/walschutzgebiet https://www.nationalpark-wattenmeer.de/sh/overview-english
Fehmarn Belt	<input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan	H Belt Sea	280	HP Harbour porpoise (Copy drop-down to add	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation	2007	Habitat Directive	<input checked="" type="checkbox"/> No. <input type="checkbox"/> Yes. Link:	https://www.bfn.de/themen/meeresnaturschutz/nationalemereerschutzbereiche Html	https://www.bfn.de/en/activities/marine-nature-conservation/national-marine-protected-areas/baltic-sea-

	<input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable			more species)	<input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable				https://www.bfn.de/en/activities/marine-nature-conservation/national-marine-protected-areas/north-sea-eez.html	http://www.umweltatlas.de/eez/fehmar-belt-sac.html
Küstenber eiche Flensburg er Förde von Flensburg bis Geltinger Birk	<input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	H Belt Sea	109,46	HP Harbour porpoise (Copy drop- down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2010	Habitat Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=1123-393&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	http://www.umweltatlas.landsh.de/atlas/script/index.php?aid=101 https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=1123-393&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	
Schlei incl. Schleimü nde und vorgelag erter Flachgrün de	<input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not	H Belt Sea	87,48	HP Harbour porpoise (Copy drop- down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2010	Habitat Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=1423-394&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	http://www.umweltatlas.landsh.de/atlas/script/index.php?aid=101 https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=1423-394&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	

	Applicable								submit=true&suchen=Suchen	
Südküste der Eckernförder Bucht und vorgelagerte Flachgründe	<input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	H Belt Sea	82,38	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2010	Habitats Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHScchutzgebiete.html?g_nr=&g_name=Südküste+der+Eckernförder+Bucht+und+vorgelagerte+Flachgründe&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	http://www.umweltatzen.landsh.de/atlas/script/index.php?aid=101 https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHScchutzgebiete.html?g_nr=&g_name=Südküste+der+Eckernförder+Bucht+und+vorgelagerte+Flachgründe&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	
Küstenlandschaft Bottsand - Marzka p u. vorgelagerte Flachgründe	<input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input checked="" type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	H Belt Sea	54,86	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2010	Habitats Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHScchutzgebiete.html?g_nr=1528-391&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	http://www.umweltatzen.landsh.de/atlas/script/index.php?aid=101 https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHScchutzgebiete.html?g_nr=1528-391&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	http://www.umweltatzen.landsh.de/atlas/script/index.php?aid=101 https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHScchutzgebiete.html?g_nr=1528-391&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen
Staberhuk	<input type="checkbox"/> Jastarnia Plan	H Belt Sea	16,57	HP Harbour porpoise	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted	2010	Habitats Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link:	http://www.umweltatzen.landsh.de/atlas/	http://www.umweltatzen.landsh.de/atlas/

	<input type="checkbox"/> North Sea Plan <input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable			(Copy drop-down to add more species)	<input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable			https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=1533-301&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	script/index.php?aid=101 https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=1533-301&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	script/index.php?aid=101 https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=1533-301&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen
Meeresgebiet der östlichen Kieler Bucht	<input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	H Belt Sea	618,30	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2010	Habitats Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=&g_name=Meeresgebiet+der+östlichen+Kieler+Bucht&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	http://www.umweltdaten.landsh.de/atlas/script/index.php?aid=101 https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=&g_name=Meeresgebiet+der+östlichen+Kieler+Bucht&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	http://www.umweltdaten.landsh.de/atlas/script/index.php?aid=101 https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=&g_name=Meeresgebiet+der+östlichen+Kieler+Bucht&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen
Küstenlandschaft vor Großenbrode und vorgelagerte Meeresbereiche	<input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin	H Belt Sea	17,39	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2010	Habitats-Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=1632-392&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	http://www.umweltdaten.landsh.de/atlas/script/index.php?aid=101 https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=1632-392&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	http://www.umweltdaten.landsh.de/atlas/script/index.php?aid=101 https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHSc hutzgebiete.html?g_nr=1632-392&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen

	SAP <input type="checkbox"/> Not Applicable								art=&lr=&what=ffh&submit=true&suchen=Suchen	art=&lr=&what=ffh&submit=true&suchen=Suchen
Sagas-Bank	<input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	H Belt Sea	32,38	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2010	Habitats Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.schleswig-holstein.de/DE/Fachinhalte/S/schutzgebiete/ffh/FFHScchutzgebiete.html?g_nr=1733-3-301&g_name=&lk=&art=&lr=&what=ffh&submit=true&suchen=Suchen	http://www.umweltatzen.landsh.de/atlas/script/index.php?aid=101	http://www.umweltatzen.landsh.de/atlas/script/index.php?aid=101
Pommersche Bucht mit Oderbank	<input checked="" type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	H Arkona Basin	1.101	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2007	Habitat Directive	<input checked="" type="checkbox"/> No. <input type="checkbox"/> Yes. Link:	https://www.bfn.de/themen/meeresnaturschutz/nationalemereeschutzgebiete https://www.bfn.de/en/activities/marine-nature-conservation/national-marine-protected-areas/north-sea-eez.html	https://www.bfn.de/en/activities/marine-nature-conservation/national-marine-protected-areas/baltic-sea-eez/odra-bank-sac.html
Plantagenetgrund	<input checked="" type="checkbox"/> Jastarnia Plan	H Arkona Basin	280	HP Harbour porpoise	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted	2015	Habitat Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: http://www.stalunv.de/wm/Themen/Naturschutz-und-Landschaftspflege/	http://www.stalunv.de/wm/Themen/Naturschutz-und-Landschaftspflege/	http://www.stalunv.de/wm/Themen/Naturschutz-und-Landschaftspflege/

	<input type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable			(Copy drop-down to add more species)	<input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable			schutz-und-Landschaftspflege/NATURA-2000/Managementplanung/DE-1343-301-Plantagenetgrund	NATURA-2000/Managementplanung/DE-1343-301-Plantagenetgrund http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/DE-1343-301-Plantagenetgrund http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1343301	NATURA-2000/Managementplanung/DE-1343-301-Plantagenetgrund http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/DE-1343-301-Plantagenetgrund http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1343301
Erweiterung Libben, Steilküste und Blockgründe Wittow und Arkona	<input checked="" type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	H Arkona Basin	75,75	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2009	Habitat Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/DE-1345-301-Erweiterung-Libben-Steilkueste-Blockgruende-Wittow-Arkona	http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/DE-1345-301-Erweiterung-Libben-Steilkueste-Blockgruende-Wittow-Arkona http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1345301	http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/DE-1345-301-Erweiterung-Libben-Steilkueste-Blockgruende-Wittow-Arkona http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1345301
Steilküste und Blockgründe Wittow	<input checked="" type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan	H Arkona Basin	16,5	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation	2016	Habitat Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: http://www.stalu-mv.de/vp/Themen/Naturschutz-und-Landschaftspflege/Natura-2000/Managementplanung/DE-1346-301-Erweiterung-Libben-Steilkueste-Blockgruende-Wittow-Arkona	http://www.stalu-mv.de/vp/Themen/Naturschutz-und-Landschaftspflege/Natura-2000/Managementplanung/DE-1346-301-Erweiterung-Libben-Steilkueste-Blockgruende-Wittow-Arkona http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1346301	http://www.stalu-mv.de/vp/Themen/Naturschutz-und-Landschaftspflege/Natura-2000/Managementplanung/DE-1346-301-Erweiterung-Libben-Steilkueste-Blockgruende-Wittow-Arkona http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1346301

	<input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable			more species)	<input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable			2000/Managementplanung/DE-1346-301-Steilkueste-und-Blockgruende-Wittow h	301-Steilkueste-und-Blockgruende-Wittow http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1346301#	301-Steilkueste-und-Blockgruende-Wittow http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1346301#
Darss	<input checked="" type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	H Arkona Basin	384,16	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2016	Habitat Directive	<input checked="" type="checkbox"/> No. (planning phase) <input type="checkbox"/> Yes. Link: http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/	http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/ http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1540302	http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/ http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1540302
Recknitz-Ästuar und Halbinsel Zingst	<input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not	H Arkona Basin		HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2004		<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: http://www.stalu-mv.de/vp/Themen/Naturschutz-und-Landschaftspflege/Natura-2000/Managementplanung/DE-1542-302-Recknitz-Aestuar-und-Halbinsel-Zingst	http://www.stalu-mv.de/vp/Themen/Naturschutz-und-Landschaftspflege/Natura-2000/Managementplanung/DE-1542-302-Recknitz-Aestuar-und-Halbinsel-Zingst	

<p>Westrüge nsche Boddenla ndschaft mit Hiddense e</p>	<p>Applicable <input checked="" type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable</p>	<p>H Arkona Basin</p>	<p>233,04</p>	<p>HP Harbour porpoise (Copy drop-down to add more species)</p>	<p><input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable</p>	<p>2016</p>	<p>Habitat Directive</p>	<p><input checked="" type="checkbox"/> No. <input type="checkbox"/> Yes. Link:</p>	<p>http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/ http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1544302</p>	<p>http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/ http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1544302</p>
<p>Greifswal der Boddenra ndschwelle und Teile der Pommers chen Bucht</p>	<p><input checked="" type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable</p>	<p>H Arkona Basin</p>	<p>398,72</p>	<p>HP Harbour porpoise (Copy drop-down to add more species)</p>	<p><input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable</p>	<p>2016</p>	<p>Habitat Directive</p>	<p><input checked="" type="checkbox"/> No. <input type="checkbox"/> Yes. Link:</p>	<p>http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/ http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1749302</p>	<p>http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/ http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1749302</p>
<p>Küste Klützer Winkel und Ufer von Dassower See und Trave</p>	<p><input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan</p>	<p>H Belt Sea</p>	<p>35,70</p>	<p>HP Harbour porpoise (Copy drop-down to add more species)</p>	<p><input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation</p>	<p>2016</p>	<p>Habitat Directive</p>	<p><input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/</p>	<p>http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/</p>	<p>http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/</p>

	<input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable			more species)	<input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable			2000/Managementplanung/DE-2031-301-Kueste-Kluetzer-Winkel-und-Ufer-von-Dassower-See-und-Trave	http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE2031301	http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE2031301
Wismarbu cht	<input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	H Belt Sea	219,48	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2004	Habitat Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/DE-1934-302-Wismarbucht/	http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/DE-1934-302-Wismarbucht/	http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/ http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1934303
Erweiterung Wismarbu cht	<input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not	H Belt Sea	35,17	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2016	Habitat Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/DE-1934-401-Wismarbucht-und-Salzhaaff	http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/ http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1934303	http://www.stalu-mv.de/wm/Themen/Naturschutz-und-Landschaftspflege/NATURA-2000/Managementplanung/ http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1934303

Applicable									
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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
Doggerbank	<input type="checkbox"/> Jastarnia Plan <input checked="" type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	Oil Dogger Bank	1.699	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2008	Habitat Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.bundesanzeiger.de/eбанzwww/contentloader/BAnz_AT_13_05_2020_B1000.pdf?state.action=genericsearch_loadbundolpdf&state.filename=BAnz_AT_13_05_2020_B1000.pdf&state.pubcode=17527991&state.orig_filename=200411001716M001.pdf Fishery Management Measures (joint recommendations) under development	https://www.bfn.de/themen/meeresnaturschutz/nationale-meeresschutzgebiete/nordsee-awz/doggerbank.html https://www.bfn.de/themen/meeresnaturschutz/nationale-meeresschutzgebiete.html	https://www.bfn.de/themen/meeresnaturschutz/nationale-meeresschutzgebiete/nordsee-awz/doggerbank.html https://www.bfn.de/themen/meeresnaturschutz/nationale-meeresschutzgebiete.html http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1003301
Borkum Reef Ground	<input type="checkbox"/> Jastarnia Plan <input checked="" type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan	Oil Southern North Sea	625	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted	2008	Habitat Directive	<input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Link: https://www.bundesanzeiger.de/eбанzwww/contentloader/BAnz_AT_13_05_2020_B900.pdf?state.action=genericsearch_lo	https://www.bfn.de/themen/meeresnaturschutz/nationale-meeresschutzgebiete.html	https://www.bfn.de/themen/meeresnaturschutz/nationale-meeresschutzgebiete/nordsee-awz/borkum-riffgrund.html

	<input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable				<input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable			adbundolpdf&state.filename=BA%2013_05_2020_B900.pdf&state.pubcode=17527976&state.orig_filename=200411001713M001.pdf Fishery Management Measures (joint recommendations) under development	https://www.bfn.de/themen/meeresnatur-schutz/nationale-meeresschutzgebiete/nordsee-awz/borkum-riffgrund.html	https://www.bfn.de/themen/meeresnatur-schutz/nationale-meeresschutzgebiete.html http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1209301
Kadet Trench	<input type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input checked="" type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	H Arkona Basin	100	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2008	Habitat Directive	<input checked="" type="checkbox"/> No. <input type="checkbox"/> Yes. Link:	https://www.bfn.de/themen/meeresnatur-schutz/nationale-meeresschutzgebiete/ostsee-awz/kadetrinne.html	https://www.bfn.de/themen/meeresnatur-schutz/nationale-meeresschutzgebiete.html http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1339301
Adler Ground	<input checked="" type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	H Arkona Basin	234	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2008	Habitat Directive	<input checked="" type="checkbox"/> No. <input type="checkbox"/> Yes. Link:	https://www.bfn.de/themen/meeresnatur-schutz/nationale-meeresschutzgebiete/ostsee-awz/adlergrund.html	https://www.bfn.de/themen/meeresnatur-schutz/nationale-meeresschutzgebiete.html http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1251301

Western Rønne Bank	<input checked="" type="checkbox"/> Jastarnia Plan <input type="checkbox"/> North Sea Plan <input type="checkbox"/> WBBK Plan <input type="checkbox"/> Common Dolphin SAP <input type="checkbox"/> Not Applicable	H Arkona Basin	87	HP Harbour porpoise (Copy drop-down to add more species)	<input checked="" type="checkbox"/> Designated <input type="checkbox"/> Submitted <input type="checkbox"/> Under consultation <input type="checkbox"/> Recommended <input type="checkbox"/> Not Applicable	2008	Habitat Directive	<input checked="" type="checkbox"/> No. <input type="checkbox"/> Yes. Link:	https://www.bfn.de/themen/meeresnaturschutz/nationale-meeresschutzgebiete/ostsee-awz/westl-roennebank.html	https://www.bfn.de/themen/meeresnaturschutz/nationale-meeresschutzgebiete.html http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=DE1249301
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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)
Lower Saxon Wadden Sea National Park	Fisheries	Spatial restrictions in shallow waters probably with minor relevance to harbour porpoises (http://www.nds-voris.de/jportal/?quelle=jlink&query=WattenmeerNatPG+ND+%C2%A7+9&psml=bsvorisprod.psml&max=true)
Lower Saxon Wadden Sea National Park	Shipping	See section 6.4
Schleswig-Holstein Wadden Sea National Park	bycatch	In the whale sanctuary within the National Park Schleswig-Holstein Wadden Sea all kinds of gillnet fishery are prohibited within the 3 nautical mile zone (according to the „Landesverordnung zur Änderung der Landesverordnung über die Ausübung der Fischerei in den Küstengewässern vom 4. Dezember 2013“). Beyond the 3 nautical mile zone gillnet fishery in the whale sanctuary with nets exceeding a special height and mesh size (nets with a stretched span between bottomline and floatline higher than 1.30 m and a mesh size above 150 mm) is prohibited for German fishermen.
Schleswig-Holstein Wadden Sea National Park	Ship strikes, noise, disturbance	There is a navigation regulation in the Schleswig-Holstein Wadden Sea National Park. An adaptation of the regulations under consideration of the whale sanctuary is the subject of an ongoing joint application to the Federal Ministry of Transport with Lower Saxony and Hamburg.
Erweiterung Wismarbuch	fishing	Preservation of low-disturbance migration zones through further technical development and application of selective fishing methods Preservation of zones free of sound events that cause physical damage (temporary or permanent)

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

Visual monitoring: In the framework of the Natura 2000 monitoring program aerial surveys covering the entire EEZ of the German North Sea, parts of Schleswig-Holstein National Park (esp. the whale sanctuary) and the western German Baltic Sea (Kiel Bight, Mecklenburg Bight and Rügen) were conducted between June and August 2015 to assess distribution and density of harbour porpoise. In addition, one dedicated aerial survey was carried out in the south (Borkum Reef Ground) of the German EEZ in the North Sea in May 2015. These surveys are funded by the BfN. [Fais, Viquerat, Herr, Siebert ITAW].

Acoustic monitoring: Within the framework for monitoring duties (Bund-Länder-Messprogramm) of the coastal federal states in Germany, 4 C-PODs were deployed throughout waters of Schleswig-Holstein during 2016-2018 (ongoing) in order to monitor acoustic activities in the German Wadden Sea. This work is funded by LKN.SH and carried out by ITAW.

Acoustic Monitoring throughout waters of Mecklenburg-Vorpommern, funded by the BfN and conducted by the DMM.

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)

<https://www.bfn.de/fileadmin/BfN/service/Dokumente/skripten/Skript478.pdf>

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 is 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
Außenems	Underwater bioacoustic monitoring by WSA Emden-Nordsee	Since 2009	(e.g. line transect, Photo ID, etc.) C-Pod-Monitoring	HP Harbour porpoise	Data until 2011 (since then no report published)	https://www.kuestendaten.de/media/zdm/portaltideems/pdf/Planfeststellungsul_Auemsvertief/F_Umweltvertraeglichkeit_suntersuchung/F_04-3_UVU_Meeresaeuger_2012-12-19.pdf

Außenjade	Underwater bioacoustic monitoring by ITAW	Since 2014	(e.g. line transect, Photo ID, etc.) C-Pod-Monitoring	HP Harbour porpoise	See separate ITAW report	http://www.nationalpark-wattenmeer.de/nds/service/publikationen/1129_schweinswale-im-k%C3%BCstenmeer-gis-daten-und-berichte
German southern North Sea, Borkum Reefground	National Monitoring	Spring 2016	Line Transect	HP Harbour porpoise	6203 (3987 - 8813)	https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
German southern North Sea, Borkum Reefground	National Monitoring	Summer 2016	line transect,	HP Harbour porpoise	5911 (3485 - 9478)	https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
Sylter Outer reef	National Monitoring	Summer 2016	(e.g. line transect, Photo ID, etc.)	Choose an item.	4634 (1273 - 9496)	https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
Baltic Sea (FE, FW and GW)	National Monitoring	Summer 2016	line transect,	HP Harbour porpoise	549 (250 - 920)	https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
Baltic Sea	National Monitoring	All year 2016	PAM	HP Harbour porpoise		https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-

						schweinswal monitoring.html
German southern North Sea, Borkum Reefground	National Monitoring	Spring 2017	line transect,	HP Harbour porpoise	3.571 (95% CI: 1.330-7.348)	https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
German North Sea, Doggerbank	National Monitoring	Summer 2017	Line transect	HP Harbour porpoise	625 (95% CI: 429 - 820)	https://www.bfn.de/themen/meeresnaturschutz/marines-monitoring.html
Baltic Sea	National Monitoring	All year 2017	PAM	HP Harbour porpoise		https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
German North Sea, Doggerbank	National Monitoring	Spring 2018	Line transect	HP Harbour porpoise	5.575 (2287 - 9497)	https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
Weser Elbmündung	National Monitoring	Spring 2018	Line transect	HP Harbour porpoise	3.298 (1391 - 6285)	https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
German southern North Sea, Borkum Reefground	National Monitoring	Spring 2018	Line transect	HP Harbour porpoise	5.645 (3302 - 9352)	https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/b

						erichte-zum-schweinswal-monitoring.html
German North Sea, Doggerbank	National Monitoring	Summer 2018	Line transect	HP Harbour porpoise	4320 (2723 - 6252)	http://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
Sylter Outerreef West	National Monitoring	Summer 2018	Line transect	HP Harbour porpoise	5252 (2753 - 8673)	http://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
Sylter Outerreef East with German Bay	National Monitoring	Summer 2018	Line transect	HP Harbour porpoise	5465 (2438 - 9446)	http://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
German southern North Sea, Borkum Reefground	National Monitoring	Summer 2018	Line transect	HP Harbour porpoise	4025 (383 - 8348)	http://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
German Baltic Sea (westliche Ostsee (Kieler Förde; Fehmarn, Mecklenburger Bucht West, Mecklenburger Bucht Ost))	National Monitoring	Summer 2018	Line transect	HP Harbour porpoise	874 (265 - 1765)	http://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswal-monitoring.html
Baltic Sea	National Monitoring	All year 2018	PAM	HP Harbour porpoise		https://www.bfn.de/themen/meeresnat

						urschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswalmonitoring.html
Baltic Sea	National Monitoring	All year 2019	PAM	HP Harbour porpoise		https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswalmonitoring.html

Relevant information on distribution during the reporting period:

(Include species, method, time period, weblinks, and other relevant information)
 Opportunistic Sighting Programs:
 Baltic Sea:
 Reporting: <https://www.deutsches-meeresmuseum.de/wissenschaft/sichtungen/sichtung-melden/>
 Maps: <https://www.deutsches-meeresmuseum.de/wissenschaft/sichtungen/sichtungskarte/>

Rivers Elbe and Weser:
 Reporting: <https://walschutz.org/sichtung-melden/>
 Maps: <https://walschutz.org/interaktive-sichtungskarten/>

Federal State of Lower Saxony:
 Collection of data on stranded small cetaceans continues (https://www.nationalpark-wattenmeer.de/nds/service/publikationen/1129_schweinswale-im-k%C3%BCstenmeer-gis-daten-und-berichte)
<https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswalmonitoring.html>

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)

National Monitoring Program
<https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswalmonitoring.html>

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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	https://www.bfn.de/themen/meeresnaturschutz/downloads/berichte-zum-monitoring/berichte-zum-schweinswalmonitoring.html

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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?

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

Age of sexual and physical maturity	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Please describe: Investigations are not carried out on a regular Basis, but within the framework of specific research questions. E.g.: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0186951 Species: HP Harbour porpoise
Inter-birth intervals	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Please describe: Investigations are not carried out on a regular Basis, but within the framework of specific research questions. E.g.: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0186951 Species: HP Harbour porpoise
Calf and adult mortality rates	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Please describe: Species: Choose an item.
Potential reproductive span/capacity	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Please describe: Investigations are not carried out on a regular Basis, but within the framework of specific research questions. E.g.: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0186951 Species: HP Harbour porpoise
Longevity	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Please describe: Species: Choose an item.
Diet	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Please describe: Species: Choose an item.
Age and sex structure	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Please describe: Species: HP Harbour porpoise
Other relevant factors	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Please describe: Species: Choose an item.

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)?

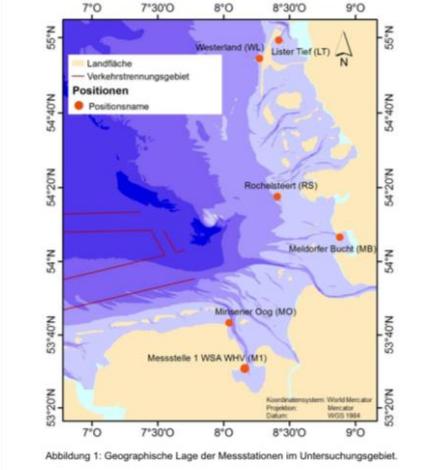
- No.
- Yes. Please provide an overview in the table below.

Within MPAs	<p>Approach:</p> <input checked="" type="checkbox"/> Line transect surveys <input type="checkbox"/> Photo-ID <input checked="" type="checkbox"/> Strandings <input checked="" type="checkbox"/> Passive Acoustic Monitoring <input type="checkbox"/> Other, please specify:
	<p>Target Species: (Copy drop-down to add more species) HP Harbour porpoise</p>
	<p>Institution(s): (Name, website, etc)</p> <p>Institution(s): LKN.SH (National Park Administration): https://www.nationalpark-wattenmeer.de/sh ITAW: https://www.tiho-hannover.de/kliniken-institute/institute/institut-fuer-terrestrische-und-aquatische-wildtierforschung/ Acoustic monitoring: Within the framework for monitoring duties (Bund-Länder-Messprogramm) of the coastal federal states in Germany, 4 C-PODs were deployed throughout waters of Schleswig-Holstein during 2016-2019 (ongoing) in order to monitor acoustic activities in the German Wadden Sea. This work is funded by LKN.SH and carried out by ITAW. The monitoring runs in cooperation with Lower Saxony (2 stations).</p> <p>German Oceanographic Museum: https://www.deutsches-meeresmuseum.de/wissenschaft/projekte/aktuell/topmarine/</p>
Wider Seas	<p>Approach:</p> <input checked="" type="checkbox"/> Line transect surveys <input type="checkbox"/> Photo-ID <input checked="" type="checkbox"/> Strandings <input checked="" type="checkbox"/> Passive Acoustic Monitoring <input type="checkbox"/> Other, please specify:
	<p>Target Species: (Copy drop-down to add more species) HP Harbour porpoise</p>
	<p>Institution(s): (Name, website, etc)</p> <p>German Oceanographic Museum: https://www.deutsches-meeresmuseum.de/wissenschaft/projekte/aktuell/topmarine/</p>

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

Number of surveys	Area covered	Species	Timeframe of survey
See this section 1.1.	German Northsea and Part of German Baltic Sea	HP Harbour porpoise	https://geodienste.bfn.de/schweinswalverbreitung?lang=de
		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
https://geodienste.bfn.de/c-pod?lang=de	Since 2002 ongoing all year	HP Harbour porpoise	https://geodienste.bfn.de/c-pod?lang=de C-Pods
	2011-2019 (ongoing)	HP Harbour porpoise	C-Pods
		Choose an item.	

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

- No.
 Yes. Describe below:

Programme	Collaborators	Links
Mini SCANS	Germany, Denmark, Sweden	

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

Provide web links if available.

<https://www.bfn.de/themen/meeresnaturschutz/marines-monitoring/wirbeltiere/schweinswale.html>

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

Species	Relevant outputs
HP Harbour porpoise	https://qsr.waddensea-worldheritage.org/reports/marine-mammals
HP Harbour porpoise	https://geodienste.bfn.de/c-pod?lang=de https://geodienste.bfn.de/schweinswalmonitoring?lang=de https://geodienste.bfn.de/schweinswalverbreitung?lang=de https://www.deutsches-meeresmuseum.de/wissenschaft/sichtungen/sichtungskarte/

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
--------------	-------------	----------	---------------------	--------

Harbour porpoises frequenting the rivers Weser and Elbe	Schweinswale e.V./ Institute for Terrestrial and Aquatic Wildlife Research (ITAW)	Implemented in 2007, on a more scientific level since 2012	Determination of occurrence, behaviour and threats to harbour porpoises in the rivers Weser and Elbe especially in the port area of Hamburg	Opportunistic sighting scheme; passive acoustic monitoring, land based observations; collecting of strandings
Opportunistic Sightings	German Oceanographic Museum	Since 2002 Online Maps since 2012	Identification of important habitats in the German Baltic Sea for porpoises and seals by incidental sightings and stranded animals	Opportunistic sighting scheme and collection of strandings

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:

This issue is under the competency of the German (Länder" (Federal States). Therefore no national network but local stranding networks in respective Federal States.

Federal State of Lower Saxony (LS) (Waddensea National Park):
 Strandings are reported by professionals up to incidental observers, using a form or formless.
 Carcasses (of small cetaceans) that can be retrieved will be deep frozen and examined by veterinarians.

Federal State of Schleswig-Holstein (SH):

Cetacean strandings along the coastline of the Federal State of Schleswig-Holstein are reported to the local sealhunters of the region. The Institute for Terrestrial and Aquatic Wildlife Research, University of Veterinary Medicine Hanover will be informed afterwards. All animals are collected and transported to the Institute for further investigations.

In 2018/2019 a number of animals could not be investigated further, due to transportation problems from the island Sylt.

Federal State of Mecklenburg-Western Pomerania (MV):

Oceanographic Museum, Stralsund

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:

Stranding network per Federal State

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

No.

Yes. Please provide details:

Every animal that is collected along the coastline of SH will be transported to the Institute for Terrestrial and Aquatic Wildlife Research, University of Veterinary Medicine Hanover. Depending on the state of preservation, basic biometrics are recorded, or a full necropsy is performed, taking samples from different organs for histological, microbiological and virological investigations varying on a case-to-case basis. If possible, a cause of death is determined based on macroscopic findings and results from further investigations.

German Oceanographic Museum Foundation

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:

Federal State of Lower Saxony:

https://www.nationalpark-wattenmeer.de/nds/service/publikationen/1129_schweinswale-im-k%C3%BCstenmeer-gis-daten-und-berichte

Federal State of Schleswig-Holstein:

An annual report about stranding data and necropsy results from Schleswig-Holstein can be found on the website of the Ministry of Energy, Agriculture, the Environment, Nature and Digitalization of Schleswig-Holstein (MELUND).

Federal State of Mecklenburg-Vorpommern:

An annual report about stranding data and necropsy results from Mecklenburg-Vorpommern can be found on the website of the Landesamt für Umwelt, Naturschutz und Geologie MV, Güstrow (MELUND). https://www.lung.mv-regierung.de/insite/cms/umwelt/natur/artenschutz/as_saeuger.htm

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
NLPV	<input checked="" type="checkbox"/> Responding to live-strandings <input type="checkbox"/> Collection of carcasses <input type="checkbox"/> Necropsies <input checked="" type="checkbox"/> Stranding database	See section 1A3		
SH: Insitute for Terrestrial and Aquatic Wildlife Research, University of Veterinary Medicine Hannover, Foundation, Werftstraße 6, 25761 Büsum	<input checked="" type="checkbox"/> Responding to live-strandings <input type="checkbox"/> Collection of carcasses <input checked="" type="checkbox"/> Necropsies <input checked="" type="checkbox"/> Stranding database	+49 511 856 – 8158	Ursula.siebert@tiho-hannover.de	https://www.tiho-hannover.de/kliniken-institute/institute/institut-fuer-terrestrische-und-aquatische-wildtierforschung/
Agency for Coastal Defence, National Park and Marine Conservation Schleswig-Holstein (LKN.SH), Britta Diederichs	<input checked="" type="checkbox"/> Responding to live-strandings <input type="checkbox"/> Collection of carcasses <input checked="" type="checkbox"/> Necropsies <input checked="" type="checkbox"/> Stranding database	+ 49 4861 616-22	Britta.Diederichs@lkn.landsh.de	https://www.nationalpark-wattenmeer.de/sh
Deutsches Meeresmuseum	<input checked="" type="checkbox"/> Responding to live-strandings <input checked="" type="checkbox"/> Collection of carcasses <input checked="" type="checkbox"/> Necropsies <input checked="" type="checkbox"/> Stranding database	+49 3831 2650 310 / +49 173 9688 267	michael.daehne@mee resmuseum .de	www.meeresmuseum.de https://www.deutsches-meeresmuseum.de/wissenschaft/sichtungen/sichtungskarte/ https://www.deutsches-meeresmuseum.de/wissenschaft/sichtungen/sichtungsmelden/

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

No.

Yes. Please provide details:

Schweinswale e.V. receives many photos together with information about date and exact position of stranded harbour porpoises from citizens contributing to the sighting scheme. Some of these carcasses maybe are not collected because of their advanced decomposition or because they are not found again;

Reports received of stranded harbour porpoises along the coast of Schleswig-Holstein are immediately forwarded to the ITAW or persons in charge (seal hunters), reports of strandings in Mecklenburg-Western Pomerania to the German Oceanographic Museum Foundation
 In the area of the Weser and Elbe river strandings are collected in cooperation with authorities and brought to different institutes for necropsies.

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)
2016	HP Harbour porpoise	OII Southern North Sea	SH: 131	SH: 128	SH: 3	Two animals were successfully recovered, one animal died during the attempt to accompany it back into the water
2016	HP Harbour porpoise	OII Southern North Sea		LS: 77		Two animals were successfully recovered, one animal died during the attempt to accompany it back into the water
2016	HP Harbour porpoise	H Belt Sea	SH: 180	SH: 180	0	
2016	HP Harbour porpoise	H Arkona Basin		MV: 34		
2016	CD Short-beaked Common dolphin	OII Southern North Sea	1	SH: 1	0	
2016	KW Killer Whale	OII Southern North Sea	1	SH: 1	0	
2017	HP Harbour porpoise	OII Southern North Sea		LS: 61		
2017	HP Harbour porpoise	OII Southern North Sea	SH: 120	SH: 120	0	
2017	HP Harbour porpoise	H Belt Sea	SH: 115	SH: 115	0	
2017	LFPW Long-finned pilot whale	OII Southern North Sea	SH: 1	SH: 1		
2017	Choose an item.	OII Southern North Sea	SH: 1	SH: 1		Minke whale (Balaenoptera Acutorostrata) Possible ship strike
2017	HP Harbour porpoise	H Arkona Basin		MV: 58		
2018	HP Harbour porpoise	OII Southern North Sea		LS: 80		
2018	HP Harbour porpoise	OII Southern North Sea	SH: 91	SH: 90	1	
2018	HP Harbour porpoise	H Belt Sea	SH: 139	SH: 139	0	
2018	LFPW Long-finned pilot whale	OII Southern North Sea	SH: 1	SH: 1	0	

2018	HP Harbour porpoise	H Arkona Basin		MV: 81		
2019	HP Harbour porpoise	Oll Southern North Sea		LS: na		
2019	HP Harbour porpoise	Oll Southern North Sea	SH: 85	SH: 84	1	The animal had to be released by the local seal hunter
2019	HP Harbour porpoise	H Belt Sea	SH: 148	SH: 148	0	
2019	HP Harbour porpoise	H Arkona Basin		MV: 64		

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
According to Siebert et al. (2001)	1010	Suspected bycatch (3,3%), bycatch (1,7%), cachexia (1,6%), suspected predation (0,9%), suspected trauma (0,8%), suffocation due to fish in larynx (0,7%), suspected septicaemia (0,3%), death of mother (0,2%)	

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)

https://www.lung.mv-regierung.de/insite/cms/umwelt/natur/artenschutz/as_saeuger.htm

<http://docplayer.org/73482196-Totfundmonitoring-von-meeressaeugetieren-an-der-kueste-von-mecklenburg-vorpommern.html>

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.

<p>Are national guidelines relevant for small cetaceans currently in place in your country?</p>	<p><input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Please identify the guidelines concerned: Noise Protection Concept, (BMUB 20139)</p>
<p>Is national legislation relevant for small cetaceans currently in place in your country?</p>	<p><input type="checkbox"/> No. <input checked="" type="checkbox"/> Yes. Please identify the legal statues concerned: BNatSchG (Federal Nature Conservation Act) and respective legislation of the German Federal states (called: Länder) – for example: Federal State of Schleswig Holstein: National Park Law Schleswig-Holstein Wadden Sea: (e.g. Art. 5 Protection provisions) with possibility of proceedings and, where appropriate, penalties</p>
<p>Are regional and/or international guidelines relevant for small cetaceans currently in place in your country?</p>	<p>:</p> <p>There is even respective regional legislation in place in all for 4 German Coastal Länder (Lower Saxony, Schleswig-Holstein, Hamburg and Mecklenburg-Vorpommern). This includes the regional Nature protection Acts or cf. above specific regulations for National Parks. (like speed limitations for ships – cf. above)</p>
<p>Is regional and/or international legislation relevant for small cetaceans currently in place in your country?</p>	<p>Regional legislation cf. above. Supranational legislation of the EU-In particular the Habitats Directive - was already addressed in several parts of this report.</p>

1.2. Have there been any instances/issues related to national, regional and/or international legislation during the reporting period in your country?
 No.

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) Plan⁵ 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

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

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)
UNESCO Wadden Sea World Heritage Visitor Centre in Wilhelmshaven	“Harbour Porpoise Days” (including boat trips to the area)	Since 2017 annually in April	Jadebusen	General public (residents and tourists)	https://schweinswaltage.de/
UNESCO Wadden Sea World Heritage Visitor Centre in Wilhelmshaven	boat trips with a focus on marine life (including whale watching)	During tourist season (April – October)	Jadebusen	General public (residents and tourists)	https://www.wattenmeer-besucherzentrum.de/seiten/erlebnisfahrten.htm
Seal Nursery centre	“Waloseum” (visitor centre)	Since 2006	Norddeich	Visitors	https://seehundstation-norddeich.de/website/waloseum/
Borkum Foundation	whale path (nature/culture interpretation trail)	permanent	Borkum	Visitors and islanders	https://borkum-stiftung.de/projekt/walpfad/
CWSS	Quality status report	2017	Trilateral Wadden Sea	general public, scientists	https://gsr.waddensea-worldheritage.org/reports/marine-mammals
Several (e.g. Agency for Coastal Defence, National Park and Marine Conservation Schleswig-Holstein – National Park Administration)	National Park Information Centre (esp. Multimar Wattforum)	Ongoing	Schleswig-Holstein West coast (esp. Tönning)	general public, children	https://multimar-wattforum.de/
Several (e.g. cf. above – National Park Administration SH)	“Whale path” info elements	Ongoing	Island of Sylt	general public	https://www.nationalpark-wattenmeer.de/sh/misc/sylter-walpfad-mit-22-stationen-vollendet/4915

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

1.3.

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?
Schweinswale im Wattenmeer	Produced jointly with our colleagues from Schleswig-Holstein	NLPV	2019	https://www.nationalpark-wattenmeer.de/nds/service/mediathek/dokumente/themenfaltblatt-schweinswale/1689	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes

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

Jade Wale: <http://mst-hillmann.de/jadewale/> (active on Facebook and Instagram)
www.whales.org
<https://marine-mammals.com>
<https://www.meeresmuseum.de/>,
 /

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

Jan Hermann: <http://www.cetacea.de/>
 Schweinswale e.V.: <https://walschutz.org/>

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

-

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

No.

Section VII: Other Matters

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

-

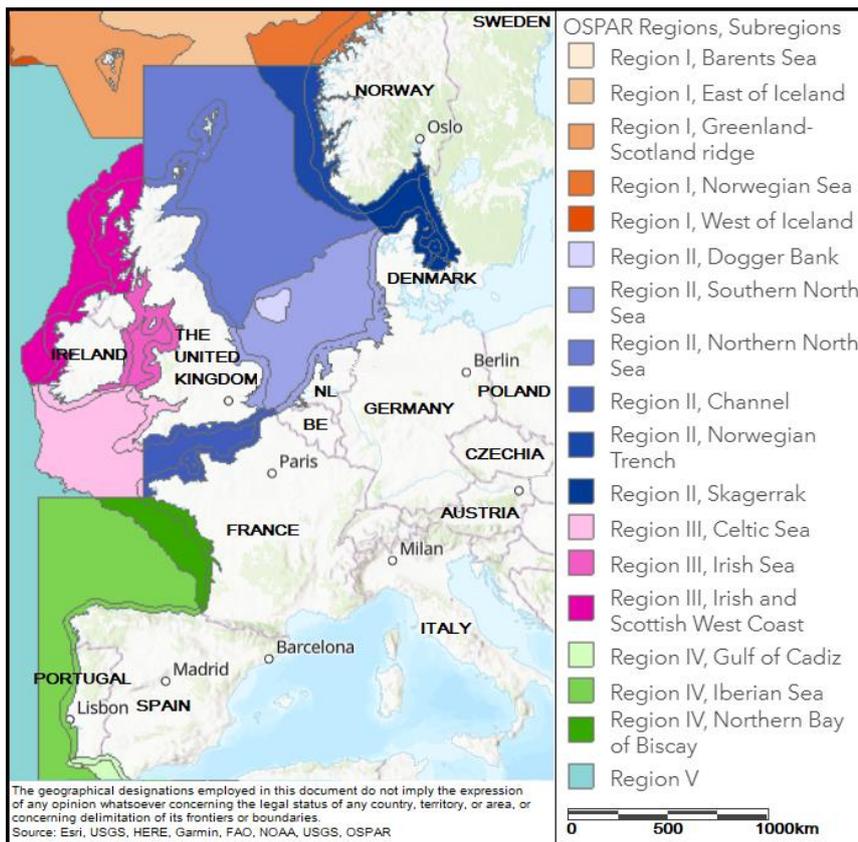
B. Difficulties in implementing the Agreement: -

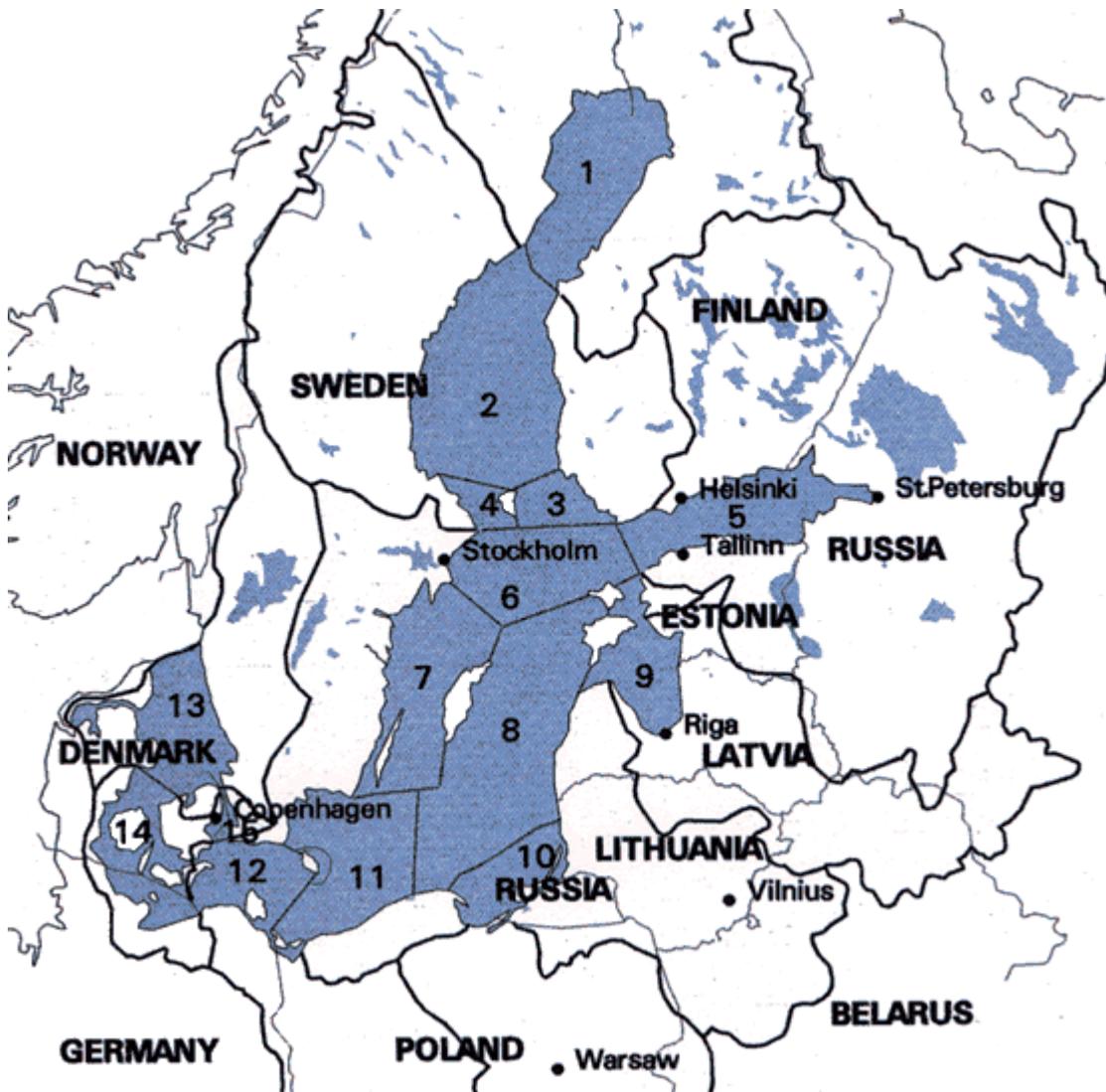
⁶ Opportunity to include other information relevant to the topics covered in this form but which are missing.

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

<p>OSPAR Region I Arctic Waters</p> <p><input type="checkbox"/> Norwegian Sea</p> <p>OSPAR Region II Greater North Sea</p> <p><input type="checkbox"/> Dogger Bank</p> <p><input type="checkbox"/> Southern North Sea</p> <p><input type="checkbox"/> Northern North Sea</p> <p><input type="checkbox"/> Channel</p> <p><input type="checkbox"/> Norwegian Trench</p> <p><input type="checkbox"/> Skagerrak</p> <p>OSPAR Region III Celtic Sea</p> <p><input type="checkbox"/> Celtic Sea</p> <p><input type="checkbox"/> Irish Sea</p> <p><input type="checkbox"/> Irish & Scottish W. Coast</p>	<p>OSPAR Region IV Bay of Biscay and Iberian Coast</p> <p><input type="checkbox"/> N. Bay of Biscay</p> <p><input type="checkbox"/> Iberian Sea</p> <p><input type="checkbox"/> Gulf of Cadiz</p> <p>OSPAR Region V Wider Atlantic</p> <p><input type="checkbox"/></p> <p>HELCOM</p> <p><input type="checkbox"/> Bothnian Bay</p> <p><input type="checkbox"/> Bothnian Sea</p> <p><input type="checkbox"/> Archipelago Sea</p> <p><input type="checkbox"/> Åland Sea</p>	<p>HELCOM cont.</p> <p><input type="checkbox"/> Gulf of Finland</p> <p><input type="checkbox"/> Northern Baltic Proper</p> <p><input type="checkbox"/> Western Gotland Basin</p> <p><input type="checkbox"/> Eastern Gotland Basin</p> <p><input type="checkbox"/> Gulf of Riga</p> <p><input type="checkbox"/> Gdansk Basin</p> <p><input type="checkbox"/> Bornholm Basin</p> <p><input type="checkbox"/> Arkona Basin</p> <p><input type="checkbox"/> Kattegat</p> <p><input checked="" type="checkbox"/> Belt Sea</p> <p><input type="checkbox"/> The Sound</p>
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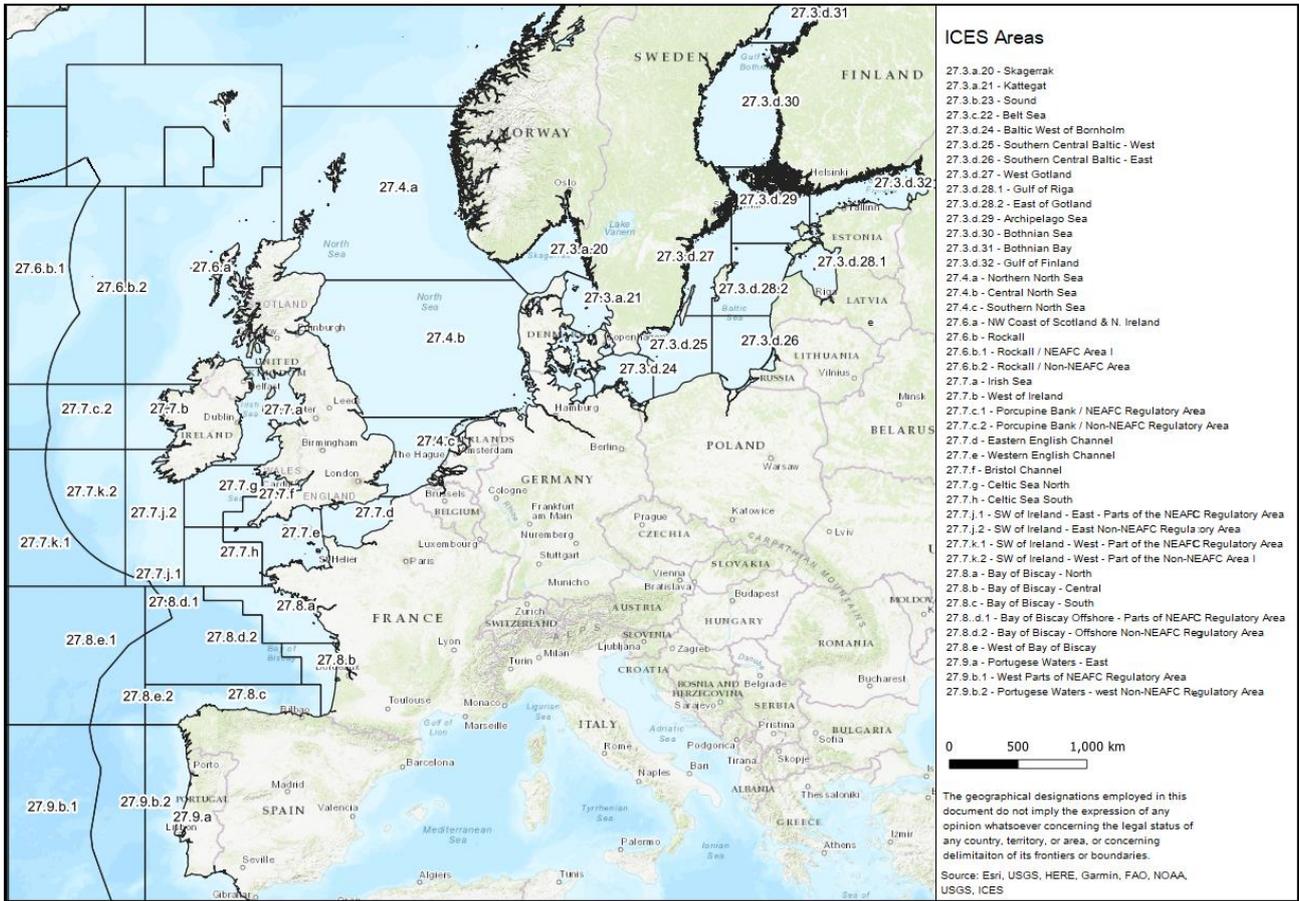
A map of the Baltic Sea drainage basins (catchment area), and marine subdivisions, including basins.

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

Drop down menu small cetacean species:
 HP Harbour porpoise

ANNEX 1:
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
	27.3.c.22		26/01/16	conventional	disposed of on land	unknown						
	27.3.c.22	Entanglement in nets	05/02/16	conventional	released at sea	unknown	27.3.c.22					
	27.3.c.22		01/03/16	conventional	disposed of on land	unknown						
	27.3.c.22		03/03/16	conventional	disposed of on land	unknown						
	27.3.c.22		07/03/16	conventional	disposed of on land	unknown						
	27.3.c.22		10/03/16	conventional	disposed of on land	unknown						
	27.3.c.22		14/03/16	conventional	released at sea	unknown	27.3.c.22					
	27.3.c.22		15/03/16	conventional	disposed of on land	unknown						
	27.3.c.22		17/03/16	conventional	released at sea	unknown	27.3.c.22					
	27.3.c.22		24/03/16	conventional	disposed of on land	unknown						
	27.3.c.22		17/04/16	conventional	disposed of on land	unknown						
	27.3.c.22		21/04/16	conventional	disposed of on land	unknown						
	27.3.c.22		16/05/16	conventional	disposed of on land	unknown						
	27.3.c.22		19/05/16	conventional	released at sea	unknown	27.3.c.22					
	27.3.c.22		19/05/16	conventional	released at sea	unknown	27.3.c.22					
	27.4.b		23/05/16	conventional	disposed of on land	unknown						
	27.3.c.22		26/05/16	conventional	disposed of on land	unknown						
	27.3.c.22		30/05/16	conventional	disposed of on land	unknown						
	27.4.b		19/06/16	conventional	disposed of on land	unknown						
	27.3.c.22		01/07/16	unknown	released at sea	unknown	27.3.c.22					
	27.4.b		05/07/16	conventional	disposed of on land	unknown						
	27.3.c.22		01/08/16	conventional	disposed of on land	unknown						
	27.3.c.22		10/09/16	conventional	released at sea	unknown	27.3.c.22					
	27.3.c.22		13/09/16	conventional	disposed of on land	unknown						
	27.3.c.22		13/09/16	conventional	released at sea	unknown	27.3.c.22					
	27.3.c.22		14/09/16	conventional	released at sea	unknown	27.3.c.22					
	27.3.c.22		25/09/16	conventional	disposed of on land	unknown						
	27.3.c.22		08/11/16	conventional	disposed of on land	unknown						
	27.3.c.22		14/11/16	conventional	disposed of on land	unknown						
	27.3.c.22		18/11/16	conventional	disposed of on land	unknown						
	27.3.c.22		02/12/16	conventional	disposed of on land	unknown						
	27.3.c.22		02/12/16	conventional	disposed of on land	unknown						
	Unknown	Entanglement in nets	25/01/17	conventional	disposed of on land	unknown						
	27.3.c.22		01/02/17	conventional	disposed of on land	unknown						
	27.3.c.22		16/02/17	conventional	disposed of on land	unknown						
	27.3.c.22		17/02/17	conventional	released at sea	unknown	27.3.c.22					
	27.3.c.22		17/02/17	conventional	released at sea	unknown	27.3.c.22					
	Unknown	Entanglement in nets	22/02/17	conventional	released at sea	unknown	unknown					
	27.3.c.22		22/02/17	conventional	disposed of on land	unknown						
	27.3.c.22		23/02/17	conventional	disposed of on land	unknown						

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

27.3.c.22		20/03/17	unknown	released at sea	unknown	27.3.c.22					
27.3.c.22		20/03/17	unknown	released at sea	unknown	27.3.c.22					
27.3.c.22		20/03/17	conventional	disposed of on land	unknown						
unknown	Entanglement in nets	29/03/17	conventional	disposed of on land	unknown						
27.3.c.22		03/04/17	conventional	disposed of on land	unknown						
27.3.c.22		04/04/17	conventional	disposed of on land	unknown						
27.3.c.22		05/04/17	conventional	disposed of on land	unknown						
27.4.b		08/04/17	conventional	disposed of on land	unknown						
27.3.c.22		10/04/17	conventional	disposed of on land	unknown						
27.4.b		18/04/17	conventional	destroyed - blasted	unknown	27.4.b		unknown	unknown	unknown	unknown
27.3.c.22		26/04/17	conventional	disposed of on land	unknown						
27.3.c.22		04/05/17	conventional	disposed of on land	unknown						
27.3.c.22		04/05/17	conventional	disposed of on land	unknown						
27.3.c.22		04/05/17	conventional	disposed of on land	unknown						
27.3.c.22		10/05/17	conventional	disposed of on land	unknown						
27.3.c.22		15/05/17	conventional	disposed of on land	unknown						
27.3.c.22		15/05/17	conventional	released at sea	unknown	27.3.c.22					
27.3.c.22		15/05/17	conventional	disposed of on land	unknown						
27.3.c.22		16/05/17	conventional	disposed of on land	unknown						
27.3.c.22		16/05/17	conventional	disposed of on land	unknown						
27.3.c.22		16/05/17	conventional	disposed of on land	unknown						
27.3.c.22		17/05/17	conventional	disposed of on land	unknown						
27.3.c.22		17/05/17	conventional	disposed of on land	unknown						
27.3.c.22		22/05/17	conventional	disposed of on land	unknown						
27.3.c.22		23/05/17	conventional	disposed of on land	unknown						
27.3.c.22		23/05/17	conventional	disposed of on land	unknown						
27.3.c.22		29/05/17	conventional	disposed of on land	unknown						
27.3.c.22		29/05/17	conventional	disposed of on land	unknown						
27.3.c.22		29/05/17	conventional	disposed of on land	unknown						
27.3.c.22		29/05/17	conventional	disposed of on land	unknown						
27.3.c.22		30/05/17	conventional	disposed of on land	unknown						
27.3.c.22		30/05/17	conventional	disposed of on land	unknown						
27.3.c.22		02/06/17	conventional	disposed of on land	unknown						
27.3.c.22		02/06/17	conventional	disposed of on land	unknown						
27.3.c.22		02/06/17	conventional	disposed of on land	unknown						
27.3.c.22		02/06/17	conventional	disposed of on land	unknown						
27.3.c.22		15/06/17	conventional	disposed of on land	unknown						
27.3.c.22		29/06/17	conventional	disposed of on land	unknown						
27.3.c.22		29/06/17	conventional	disposed of on land	unknown						
27.3.c.22		29/06/17	conventional	disposed of on land	unknown						
27.3.c.22		05/07/17	conventional	disposed of on land	unknown						
27.3.c.22		05/07/17	conventional	disposed of on land	unknown						
27.3.c.22		07/07/17	conventional	disposed of on land	unknown						
27.3.c.22		07/07/17	conventional	disposed of on land	unknown						
27.3.c.22		10/07/17	conventional	disposed of on land	unknown						
27.3.c.22		11/07/17	conventional	disposed of on land	unknown						
27.3.c.22		13/07/17	conventional	disposed of on land	unknown						

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

	27.4.b		18/07/17	conventional	disposed of on land	unknown							
	27.4.b		19/07/17	conventional	disposed of on land	unknown							
	27.4.b		20/07/17	conventional	disposed of on land	unknown							
	27.3.c.22		24/07/17	conventional	disposed of on land	unknown							
	27.3.c.22		24/07/17	conventional	disposed of on land	unknown							
	27.3.c.22		25/07/17	conventional	disposed of on land	unknown							
	27.3.c.22		01/08/17	conventional	disposed of on land	unknown							
	27.4.b	found on sh	05/08/17	firebomb	disposed of on land	unknown							
	27.4.b		09/08/17	conventional	disposed of on land	unknown							
	27.3.c.22		10/08/17	conventional	disposed of on land	unknown							
	27.3.c.22		14/08/17	conventional	disposed of on land	unknown							
	27.4.b		14/08/17	conventional	disposed of on land	unknown							
	27.3.c.22		15/08/17	conventional	disposed of on land	unknown							
	27.3.c.22		15/08/17	conventional	disposed of on land	unknown							
	27.3.c.22		15/08/17	conventional	disposed of on land	unknown							
	27.3.c.22		16/08/17	conventional	disposed of on land	unknown							
	27.3.c.22		17/08/17	conventional	disposed of on land	unknown							
	27.4.b		29/08/17	conventional	disposed of on land	unknown							
	27.3.c.22		04/09/17	conventional	disposed of on land	unknown							
	27.3.c.22		04/09/17	conventional	disposed of on land	unknown							
	27.3.c.22		04/09/17	conventional	disposed of on land	unknown							
	27.3.c.22		04/09/17	conventional	disposed of on land	unknown							
	27.3.c.22		05/09/17	conventional	disposed of on land	unknown							
	27.3.c.22		05/09/17	conventional	disposed of on land	unknown							
	27.3.c.22		05/09/17	conventional	disposed of on land	unknown							
	27.3.c.22		06/09/17	conventional	disposed of on land	unknown							
	unkown	found on sh	14/09/17	conventional	disposed of on land	unknown							
	27.4.b		19/09/17	conventional	disposed of on land	unknown							
	27.3.c.22		26/09/17	conventional	disposed of on land	unknown							
	27.3.c.22		27/09/17	conventional	released at sea	unknown	27.3.c.22						
	27.3.c.22		28/09/17	conventional	released at sea	unknown	27.3.c.22						
	27.3.c.22		28/09/17	conventional	disposed of on land	unknown							
	27.3.c.22		28/09/17	conventional	disposed of on land	unknown							
	27.3.c.22		09/10/17	conventional	disposed of on land	unknown							
	27.3.c.22		18/10/17	conventional	disposed of on land	unknown							
	27.3.c.22		18/10/17	conventional	disposed of on land	unknown							
	27.3.c.22		18/10/17	conventional	disposed of on land	unknown							
	27.3.c.22		18/10/17	conventional	disposed of on land	unknown							
	27.3.c.22		23/10/17	conventional	disposed of on land	unknown							
	27.3.c.22		23/10/17	conventional	disposed of on land	unknown							
	27.3.c.22		23/10/17	conventional	disposed of on land	unknown							
	27.3.c.22		07/11/17	conventional	disposed of on land	unknown							
	27.3.c.22		07/11/17	conventional	disposed of on land	unknown							
	27.3.c.22		07/11/17	conventional	disposed of on land	unknown							
	27.3.c.22		08/11/17	conventional	disposed of on land	unknown							
	27.3.c.22		08/11/17	conventional	disposed of on land	unknown							
	27.3.c.22		08/11/17	conventional	disposed of on land	unknown							

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

27.3.c.22		08/11/17	conventional	disposed of on land	unknown								
27.3.c.22		16/11/17	conventional	disposed of on land	unknown								
27.3.c.22		20/11/17	conventional	disposed of on land	unknown								
27.4.b		21/11/17	conventional	disposed of on land	unknown								
27.3.c.22		24/11/17	conventional	disposed of on land	unknown								
27.3.c.22		01/12/17	conventional	disposed of on land	unknown								
27.3.c.22		21/12/17	conventional	disposed of on land	unknown								
27.4.b		08/01/18	conventional	disposed of on land	unknown								
27.3.c.22		23/01/18	conventional	disposed of on land	unknown								
27.3.c.22		24/01/18	conventional	disposed of on land	unknown								
27.3.c.22		01/02/18	conventional	disposed of on land	unknown								
27.3.c.22		02/02/18	conventional	disposed of on land	unknown								
27.3.c.22		06/02/18	conventional	disposed of on land	unknown								
27.4.b		03/03/18	conventional	disposed of on land	unknown								
27.3.c.22		07/03/18	conventional	disposed of on land	unknown								
27.4.b		26/03/18	firebomb	disposed of on land	unknown								
27.3.c.22		16/04/18	conventional	disposed of on land	unknown								
27.3.c.22		17/04/18	conventional	disposed of on land	unknown								
27.3.c.22		23/04/18	conventional	disposed of on land	unknown								
27.3.c.22		24/04/18	conventional	disposed of on land	unknown								
27.3.c.22		25/04/18	conventional	disposed of on land	unknown								
27.3.c.22		26/04/18	conventional	disposed of on land	unknown								
27.3.c.22		02/05/18	conventional	disposed of on land	unknown								
27.3.c.22		03/05/18	conventional	disposed of on land	unknown								
27.3.c.22		04/05/18	conventional	disposed of on land	unknown								
27.3.c.22		04/05/18	conventional	disposed of on land	unknown								
27.3.c.22		04/05/18	conventional	disposed of on land	unknown								
27.3.c.22		07/05/18	conventional	disposed of on land	unknown								
27.3.c.22		14/05/18	conventional	disposed of on land	unknown								
27.3.c.22		15/05/18	conventional	disposed of on land	unknown								
27.3.c.22		15/05/18	conventional	disposed of on land	unknown								
27.3.c.22		16/05/18	conventional	disposed of on land	unknown								
27.3.c.22		16/05/18	conventional	disposed of on land	unknown								
27.3.c.22		17/05/18	conventional	disposed of on land	unknown								
27.3.c.22		17/05/18	conventional	disposed of on land	unknown								
27.3.c.22		18/05/18	conventional	disposed of on land	unknown								
27.3.c.22		18/05/18	conventional	disposed of on land	unknown								
27.3.c.22		22/05/18	conventional	disposed of on land	unknown								
27.3.c.22		22/05/18	conventional	disposed of on land	unknown								
27.3.c.22		23/05/18	unknown	disposed of on land	unknown								
27.3.c.22		23/05/18	conventional	disposed of on land	unknown								
27.3.c.22		24/05/18	conventional	disposed of on land	unknown								
27.3.c.22		27/05/18	conventional	disposed of on land	unknown								
27.3.c.22		05/06/18	conventional	disposed of on land	unknown								
27.3.c.22		05/06/18	conventional	disposed of on land	unknown								
27.3.c.22		05/06/18	conventional	disposed of on land	unknown								
27.4.b		20/06/18	conventional	disposed of on land	unknown								

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

	27.4.b		26/06/18	conventional	destroyed - blasted	unknown	27.4.b		unknown	unknown	unknown	unknown
	27.3.c.22		02/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		02/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		02/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		02/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		03/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		03/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		03/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		04/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		04/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		05/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		06/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		06/07/18	firebomb	disposed of on land	unknown						
	27.3.c.22		09/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		10/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		12/07/18	firebomb	disposed of on land	unknown						
	27.3.c.22		12/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		12/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		13/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		13/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		16/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		17/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		20/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		20/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		20/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		23/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		23/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		23/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		23/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		24/07/18	conventional	destroyed - blasted	unknown	27.3.c.22		unknown	unknown	unknown	unknown
	27.3.c.22		25/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		25/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		25/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		25/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		26/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		26/07/18	conventional	disposed of on land	unknown						
	27.3.c.22		06/08/18	conventional	disposed of on land	unknown						
	27.3.c.22		06/08/18	conventional	disposed of on land	unknown						
	27.3.c.22		07/08/18	conventional	disposed of on land	unknown						
	27.3.c.22		07/08/18	conventional	disposed of on land	unknown						
	27.3.c.22		07/08/18	conventional	disposed of on land	unknown						
	27.3.c.22		07/08/18	conventional	disposed of on land	unknown						
	27.3.c.22		08/08/18	conventional	disposed of on land	unknown						
	27.3.c.22		08/08/18	conventional	disposed of on land	unknown						
	27.3.c.22		08/08/18	conventional	disposed of on land	unknown						
	27.3.c.22		08/08/18	conventional	disposed of on land	unknown						
	27.3.c.22		13/08/18	conventional	disposed of on land	unknown						

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

27.3.c.22		13/08/18	conventional	disposed of on land	unknown							
27.3.c.22		13/08/18	conventional	disposed of on land	unknown							
27.3.c.22		17/08/18	conventional	disposed of on land	unknown							
27.3.c.22		17/08/18	conventional	disposed of on land	unknown							
27.3.c.22		17/08/18	conventional	disposed of on land	unknown							
27.3.c.22		21/08/18	conventional	disposed of on land	unknown							
27.3.c.22		21/08/18	conventional	disposed of on land	unknown							
27.3.c.22		21/08/18	conventional	disposed of on land	unknown							
27.3.c.22		21/08/18	conventional	disposed of on land	unknown							
27.3.c.22		21/08/18	conventional	disposed of on land	unknown							
27.3.c.22		22/08/18	conventional	disposed of on land	unknown							
27.3.c.22		22/08/18	conventional	disposed of on land	unknown							
27.3.c.22		22/08/18	conventional	disposed of on land	unknown							
27.3.c.22		22/08/18	conventional	disposed of on land	unknown							
27.3.c.22		22/08/18	conventional	disposed of on land	unknown							
27.3.c.22		23/08/18	conventional	disposed of on land	unknown							
27.3.c.22		23/08/18	conventional	disposed of on land	unknown							
27.3.c.22		23/08/18	conventional	disposed of on land	unknown							
27.3.c.22		28/08/18	conventional	disposed of on land	unknown							
27.3.c.22		29/08/18	conventional	disposed of on land	unknown							
27.3.c.22		29/08/18	conventional	disposed of on land	unknown							
27.3.c.22		29/08/18	conventional	disposed of on land	unknown							
27.3.c.22		05/09/18	conventional	disposed of on land	unknown							
27.3.c.22		10/09/18	conventional	disposed of on land	unknown							
27.3.c.22		12/09/18	conventional	disposed of on land	unknown							
27.3.c.22		17/09/18	conventional	disposed of on land	unknown							
27.3.c.22		18/09/18	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		26/09/18	conventional	disposed of on land	unknown							
27.3.c.22		27/09/18	conventional	disposed of on land	unknown							
27.4.b		11/10/18	conventional	disposed of on land	unknown							
27.3.c.22		17/10/18	conventional	disposed of on land	unknown							
27.3.c.22		25/10/18	unknown	disposed of on land	unknown							
27.3.c.22	found on sh	08/11/18	firebomb	unknown	unknown		burnings caused by white phosphorus reported by tourist					
27.3.c.22		14/11/18	conventional	disposed of on land	unknown							
27.3.c.22		15/11/18	conventional	disposed of on land	unknown							
27.3.c.22		12/12/18	conventional	disposed of on land	unknown							
27.3.c.22		14/12/18	conventional	disposed of on land	unknown							
27.3.c.22		20/12/18	conventional	disposed of on land	unknown							
27.3.c.22		22/01/19	conventional	disposed of on land	unknown							
27.3.c.22		04/02/19	conventional	disposed of on land	unknown							
27.3.c.22		05/02/19	conventional	disposed of on land	unknown							
27.3.c.22		19/03/19	conventional	disposed of on land	unknown							
27.3.c.22		21/03/19	conventional	disposed of on land	unknown							
27.4.b		28/02/19	conventional	disposed of on land	unknown							
27.3.c.22		03/04/19	conventional	disposed of on land	unknown							
27.3.c.22		09/04/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		25/04/19	conventional	disposed of on land	unknown							
27.3.c.22		25/04/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		02/05/19	conventional	disposed of on land	unknown							

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

27.3.c.22		08/05/19	conventional	disposed of on land	unknown							
27.3.c.22		09/05/19	conventional	disposed of on land	unknown							
27.3.c.22		09/05/19	conventional	disposed of on land	unknown							
27.3.c.22		09/05/19	conventional	disposed of on land	unknown							
27.3.c.22		14/05/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		14/05/19	conventional	disposed of on land	unknown							
27.3.c.22		15/05/19	conventional	disposed of on land	unknown							
27.3.c.22		24/05/19	conventional	disposed of on land	unknown							
27.3.c.22		09/06/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		11/06/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		08/10/18	unknown	released at sea	unknown	27.3.c.22						
27.3.c.22		08/10/18	unknown	released at sea	unknown	27.3.c.22						
27.3.c.22		08/10/18	unknown	released at sea	unknown	27.3.c.22						
27.3.c.22		03/06/19	conventional	disposed of on land	unknown							
27.3.c.22		06/06/19	conventional	disposed of on land	unknown							
27.3.c.22		20/06/19	conventional	disposed of on land	unknown							
27.3.c.22		04/06/19	conventional	disposed of on land	unknown							
27.3.c.22		05/06/19	conventional	disposed of on land	unknown							
27.3.c.22		05/06/19	conventional	disposed of on land	unknown							
27.3.c.22		11/07/19	conventional	disposed of on land	unknown							
27.3.c.22		11/07/19	conventional	disposed of on land	unknown							
27.3.c.22		17/07/19	conventional	disposed of on land	unknown							
27.3.c.22		17/07/19	conventional	disposed of on land	unknown							
27.3.c.22		17/07/19	conventional	disposed of on land	unknown							
27.3.c.22		18/07/19	conventional	disposed of on land	unknown							
27.3.c.22		18/07/19	conventional	disposed of on land	unknown							
27.3.c.22		22/07/19	conventional	disposed of on land	unknown							
27.3.c.22		22/07/19	conventional	disposed of on land	unknown							
27.3.c.22		23/07/19	conventional	disposed of on land	unknown							
27.4.b		01/07/19	conventional	disposed of on land	unknown							
27.3.c.22		01/08/19	conventional	disposed of on land	unknown							
27.3.c.22		05/08/19	conventional	disposed of on land	unknown							
27.3.c.22		05/08/19	conventional	disposed of on land	unknown							
27.3.c.22		06/08/19	conventional	disposed of on land	unknown							
27.3.c.22		28/08/19	conventional	disposed of on land	unknown							
27.3.c.22		29/08/19	conventional	disposed of on land	unknown							
27.3.c.22		09/09/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		30/10/19	conventional	disposed of on land	unknown							
27.3.c.22		17/09/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		17/09/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		17/09/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		17/09/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		17/09/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		28/08/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		28/08/19	conventional	released at sea	unknown	27.3.c.22						
27.3.c.22		27/08/19	conventional	released at sea	unknown	27.3.c.22						

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

27.3.c.22		27/08/19	conventional	released at sea	unknown	27.3.c.22					
27.3.c.22		23/07/19	conventional	disposed of on land	unknown						
27.3.c.22		24/07/19	conventional	disposed of on land	unknown						
27.3.c.22		24/07/19	conventional	disposed of on land	unknown						
27.3.c.22		29/07/19	conventional	disposed of on land	unknown						
27.3.c.22		29/07/19	conventional	disposed of on land	unknown						
27.3.c.22		29/07/19	conventional	disposed of on land	unknown						
27.3.c.22		29/07/19	conventional	disposed of on land	unknown						
27.3.c.22		30/07/19	conventional	disposed of on land	unknown						
27.3.c.22		30/07/19	conventional	disposed of on land	unknown						
27.3.c.22		30/07/19	conventional	disposed of on land	unknown						
27.3.c.22		30/07/19	conventional	disposed of on land	unknown						
27.3.c.22		31/07/19	conventional	disposed of on land	unknown						
27.3.c.22		31/07/19	conventional	disposed of on land	unknown						

ANNEX 2: Table 8.2.

Ref No.	Contracting Party ID No	Latitude	Longitude	Nature of Encounter	Date	Type of munition	Action taken	State of munition	Release latitude	Release longitude	Remarks
	DE-MD9T_OL_06/02/16_3	53.7941	7.9046	found on shore	11/02/2016	conventional	disposed of on land	heavily			German high-explosive shells in different sizes (5pcs 3.7cm, 3pcs 2.0cm), 5pcs fuses, 14.5kg explosive charges, 11pcs propelling charges and 16kg parts of munition; WW II.) and 3pcs British fuses and a PIAT-projectile from second WW), salvaged by EOD Team
	DE-M8ZH_OL_07/03/16_4	53.7033	8.0325	found on shore	15/03/2016	conventional	disposed of on land	partly			Three German FLAK grenade detonators (II. WW), salvaged and disposed of on land by EOD Team
	DE-M9TS_OL_10/03/16_8	53.8249	8.1674	others	16/03/2016	conventional	disposed of on land	partly			lots of German ammunition from second WW. (4pcs x8.8cm high-explosive shells, 3pcs x10.5cm high-explosive shells, 19kg parts of ammunition, found during ground survey for wind farm
	DE-M9TT_OL_10/03/16_9	53.8240	8.1691	others	16/03/2016	conventional	disposed of on land	partly			a German 10.5cm high-explosive shell from second WW. , found during ground survey for wind farm
	DE-M9TU_OL_10/03/16_10	53.8242	8.1690	others	16/03/2016	conventional	disposed of on land	partly			two German 10.5cm high-explosive shells from second WW., found during ground survey for wind farm
	DE-M9TV_OL_10/03/16_11	53.8242	8.1691	others	16/03/2016	conventional	disposed of on land	partly			two German 10.5cm high-explosive shells from second WW. found during ground survey for wind farm
	DE-M9TW_OL_10/03/16_12	53.8255	8.1614	others	17/03/2016	conventional	destroyed, blasted	partly	53.7042	8.0987	a German 30.5cm high-explosive shell from second WW. (found during ground survey for wind farm), removed to blasting place by EOD Team, blasted during low tide
	DE-M9TX_OL_10/03/16_13	53.8286	8.1568	others	17/03/2016	conventional	destroyed, blasted	partly	53.7042	8.0987	a German 28cm high-explosive shell from second WW. (found during ground survey for wind farm), removed to blasting place by EOD Team, blasted during low tide
	DE-M9TY_OL_10/03/16_14	53.8246	8.1659	others	17/03/2016	conventional	destroyed, blasted	partly	53.7042	8.0987	a German 24cm high-explosive shell from second WW. (found during ground survey for wind farm), removed to blasting place by EOD Team, blasted during low tide
	DE-M9TZ_OL_10/03/16_15	53.8253	8.1648	others	17/03/2016	conventional	destroyed, blasted	partly	53.7042	8.0987	a German 24cm high-explosive shell from second WW. (found during ground survey for wind farm), removed to blasting place by EOD Team, blasted during low tide
	DE-M9U0_OL_10/03/16_16	53.8245	8.1648	others	17/03/2016	conventional	destroyed, blasted	partly	53.7042	8.0987	a German 24cm high-explosive shell from second WW. (found during ground survey for wind farm), removed to blasting place by EOD Team, blasted during low tide
	DE-M9U1_OL_10/03/16_17	53.8262	8.1652	others	17/03/2016	conventional	destroyed, blasted	partly	53.7042	8.0987	a German 24cm high-explosive shell from second WW. (found during ground survey for wind farm), removed to blasting place by EOD Team, blasted during low tide
	DE-M9U2_OL_10/03/16_18	53.8261	8.1641	others	17/03/2016	conventional	destroyed, blasted	partly	53.7042	8.0987	a German 24cm high-explosive shell from second WW. (found during ground survey for wind farm), removed to blasting place by EOD Team, blasted during low tide

ANNEX 2: Table 8.2.

Ref No.	Contracting Party ID No	Latitude	Longitude	Nature of Encounter	Date	Type of munition	Action taken	State of munition	Release latitude	Release longitude	Remarks
	DE-M9U3_OL_10/03/16_19	53.8260	8.1636	others	17/03/2016	conventional	destroyed, blasted	partly	53.7042	8.0987	a German 24cm high-explosive shell from second WW. (found during ground survey for wind farm), removed to blasting place by EOD Team, blasted during low tide
	DE-M9U4_OL_10/03/16_20	53.8254	8.1607	others	17/03/2016	conventional	destroyed, blasted	partly	53.7042	8.0987	a German 24cm high-explosive shell from second WW. (found during ground survey for wind farm), removed to blasting place by EOD Team, blasted during low tide
	DE-M9U5_OL_10/03/16_21	53.8223	8.1705	others	17/03/2016	conventional	destroyed, blasted	partly	53.7042	8.0987	a German 24cm high-explosive shell from second WW. (found during ground survey for wind farm), removed to blasting place by EOD Team, blasted during low tide
	DE-M9U6_OL_10/03/16_22	53.8217	8.1713	others	17/03/2016	conventional	destroyed, blasted	partly	53.7042	8.0987	a German 24cm high-explosive shell from second WW. (found during ground survey for wind farm), removed to blasting place by EOD Team, blasted during low tide
	DE-M9U7_OL_10/03/16_23	53.8240	8.1661	others	17/03/2016	conventional	destroyed, blasted	partly	53.7042	8.0987	a German 24cm high-explosive shell from second WW. (found during ground survey for wind farm), removed to blasting place by EOD Team, blasted during low tide
	DE-M9U9_OL_10/03/16_24	53.8241	8.1676	others	17/03/2016	conventional	disposed of on land	partly			German high-explosive shells (3pcs x10.5cm, 2pcs x8.8cm) and 3kg parts of ammunition, found during ground survey for wind farm
	DE-M9UA_OL_10/03/16_25	53.8261	8.1674	others	17/03/2016	firebomb	disposed of on land	partly			two British incendiary bombs 30lbs, II. WW, found during ground survey for wind farm
	DE-M95B_OL_16/03/16_7	53.6883	8.4292	others	23/03/2016	conventional	destroyed, blasted	unknown	53.6883	8.4292	English high-explosive bomb (500lbs) with long-term fuse No.37 (II. WW, 255kg), mined by EOD
	DE-M9TN_AWZ_VM_240-Objekt849_1	54.3045	5.8602	others	13/04/2016	conventional	Destroyed, blasted	partly	54.3045	5.8602	high-explosive bomb GP-250 lb (AN-M57) found during ground survey for wind farm
	DE-MT9Q_AWZ_VM_455-Object 869_5	54.3046	5.8598	others	13/04/2016	firebomb	destroyed, blasted	partly	54.3046	5.8598	incendiary bomb (AN-M 47, 100lbs), found during bottom survey for windfarm, destroyed together with Object 832
	DE-M9TR_AWZ_VM_448-Object 832_6	54.2987	5.8552	others	13/04/2016	conventional	destroyed, blasted	partly	54.3046	5.8598	high-explosive bomb (AN-M 47, 250lbs, partly open) found during bottom survey for windfarm, destroyed together with Object 869
	DE-M9TO_AWZ_VM_250-Objekt1314_2	54.3122	5.8742	others	14/04/2016	firebomb	Destroyed, blasted	heavily	54.3122	5.8742	incendiary bomb (100lbs, AN-M57, partly open), found during ground survey for wind farm
	DE-M9UB_AWZ_VM_Target 1275_26	54.3162	5.8844	others	14/04/2016	conventional	destroyed, blasted	partly	54.3162	5.8844	British ground mine A MK-4, found during bottom survey for windfarm, destroyed together with Objects 05 and 1769
	DE-M9UC_AWZ_VM_Objekt 337_27	54.3133	5.9176	others	14/04/2016	conventional	disposed of on land	partly			practice bomb (5 kg), found during bottom survey for wind farm

ANNEX 2: Table 8.2.

Ref No.	Contracting Party ID No	Latitude	Longitude	Nature of Encounter	Date	Type of munition	Action taken	State of munition	Release latitude	Release longitude	Remarks
	DE-MDFM_AWZ_VM_Objekt 1769_94	54.3162	5.8844	others	14/04/2016	conventional	destroyed, blasted	good condition	54.3162	5.8844	dropped 5kg practice bomb, found during bottom survey for windfarm, destroyed together with Objctcs 05 and 1275
	DE-MDFN_AWZ_VM_Objekt 05_95	54.3162	5.8844	others	14/04/2016	conventional	destroyed, blasted	good condition	54.3162	5.8844	dropped 5kg practice bomb, found during bottom survey for windfarm, destroyed together with Objects 1769 and 1275
	DE-MA9E_OL_15/04/16_28	53.7940	7.9046	found on shore	19/04/2016	conventional	disposed of on land	heavily			diverse German high-explosive shells (2x15mm, 18x2cm, 9x3.7cm, 2x8.8cm, 1x10.5cm), 2pcs fuses, 0.7kg explosive, 125x fuse charges, 26kg ammunition parts, 1x6cm amour-piercing shell, 1x5cm hand-grenade, 1x bazooka; second WW.), salvaged and disposed of on land by EOD Team
	DE-MAAX_OL_17/05/16_30	53.5842	8.2296	found on shore	13/05/2016	conventional	disposed of on land	heavily			3pcs 3.7cm high-explosive shell and 7pcs fuses (German; from WW II.) found by civilian, salvaged and disposed of on land vy EOD Team
	DE-MA9J_2-23-05-2016-1_29	54.1882	7.9094	found on shore	23/05/2016	conventional	disposed of on land	unknown			an one 113mm grenade found by civilian, salvaged by EOD Team
	DE-MAAY_OS_08/05/16_31	53.7239	7.2313	found on shore	23/05/2016	conventional	disposed of on land	heavily			2kg German ammunition parts from second WW II. found by civilian, salvaged and disposed on land by EOD Team
	DE-MACM_OL_19/06/16_39	53.8232	8.1697	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the second WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MACO_OL_19/06/16_40	53.8224	8.1668	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MACP_OL_19/06/16_41	53.8229	8.1681	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MACQ_OL_19/06/16_42	53.8263	8.1645	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MACR_OL_19/06/16_43	53.8262	8.1644	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	two German 24cm high-explosive grenades from the second WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MACS_OL_19/06/16_44	53.8260	8.1632	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the second WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE_MAD3_OL_19/06/16_45	53.8259	8.1633	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the second WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MAD4_OL_19/06/16_46	53.8261	8.1655	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide

ANNEX 2: Table 8.2.

Ref No.	Contracting Party ID No	Latitude	Longitude	Nature of Encounter	Date	Type of munition	Action taken	State of munition	Release latitude	Release longitude	Remarks
	DE-MAD5_OL_19/06/16_47	53.8264	8.1655	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MAD6_OL_19/06/16_48	53.8265	8.1654	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MAD7_OL_19/06/16_49	53.8237	8.1684	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MAD8_OL_19/06/16_50	53.8242	8.1646	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MAD9_OL_19/06/16_51	53.8217	8.1665	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 28cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MADA_OL_19/06/16_52	53.8212	8.1687	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	three German 10.5cm high-explosive grenades from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MADB_OL_19/06/16_53	53.8227	8.1704	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 21cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MADC_OL_19/06/16_54	53.8227	8.1704	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	two German 10.5cm high-explosive grenades from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MADD_OL_19/06/16_55	53.8229	8.1698	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 21cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MADE_OL_19/06/16_56	53.8227	8.1682	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 21cm high-explosive grenade from the second WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MADF_OL_19/06/16_57	53.8243	8.1689	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	three German 10.5cm high-explosive grenades from the second WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MADG_OL_19/06/16_58	53.8257	8.1765	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 32cm high-explosive grenade from the second WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MADH_OL_19/06/16_59	53.8223	8.1705	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 21cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide
	DE-MADI_OL_19/06/16_60	53.8212	8.1687	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 21cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place , cmined by EOD Team during low tide

ANNEX 2: Table 8.2.

Ref No.	Contracting Party ID No	Latitude	Longitude	Nature of Encounter	Date	Type of munition	Action taken	State of munition	Release latitude	Release longitude	Remarks
	DE-MADJ_OL_19/06/16_61	53.8242	8.1690	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	two German 10.5cm high-explosive grenades from the second WW. (found during ground survey for wind farm) moved to the blasting place , mined by EOD Team during low tide
	DE-MADK_OL_19/06/16_62	53.8240	8.1691	others	13/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	two German 10.5cm high-explosive grenades from the second WW. (found during ground survey for wind farm) moved to the blasting place , mined by EOD Team during low tide
	DE-MADL_OL_24/06/16_63	53.8241	8.1676	others	15/06/2016	conventional	disposed of on land	heavily			two German 8.8cm high-explosive grenades from the second WW. (found during ground survey for wind farm), salvaged and disposed on shore by EOD Team
	DE-MADM_OL_24/06/16_64	53.8240	8.1676	others	15/06/2016	conventional	disposed of on land	heavily			a German 10.5cm and two 8.8cm high-explosive grenades from the second WW. (found during ground survey for wind farm), salvaged and disposed on shore by EOD Team
	DE-MADN_OL_24/06/16_65	53.8229	8.1698	others	15/06/2016	conventional	disposed of on land	heavily			two German 8.8cm high-explosive grenades from the second WW. (found during ground survey for wind farm), salvaged and disposed on shore by EOD Team
	DE-MADO_OL_24/06/16_66	53.8319	8.1554	others	15/06/2016	conventional	disposed of on land	heavily			German 7.5cm high-explosive grenade from the second WW. (found during ground survey for wind farm) , salvaged by EOD Team
	DE-MADP_OL_24/06/16_67	53.8229	8.1681	others	15/06/2016	conventional	disposed of on land	heavily			four German 3.7cm high-explosive grenades from the second WW. (found during ground survey for wind farm) , salvaged by EOD Team
	DE-MADQ_OL_24/06/16_68	53.8243	8.1679	others	15/06/2016	conventional	disposed of on land	heavily			two German 8.8cm high-explosive grenades from the second WW. (found during ground survey for wind farm) salvaged by EOD Team
	DE-MADR_OL_24/06/16_69	53.8232	8.1697	others	15/06/2016	conventional	disposed of on land	heavily			German 8.8cm high-explosive grenade from the first WW. (found during ground survey for wind farm) salvaged by EOD Team
	DE-MACL_OS_07/06/16_70	53.7401	6.5444	laying pipelines or cables	17/06/2016	conventional	disposed of on land	heavily			British second World War moored mine without fuse, recovered by civil firm and transferred to harbour Emden and handed over to the EOD Team
	DE-M9VA_395246/2016_32	53.9000	9.1583	dredging	19/06/2016	conventional	disposed of on land	unknown			FLAK-grenade found during dredging, salvaged and disposed on land by EOD Team
	DE-MA89_004/5A/0418717/2016_33	53.8942	8.5633	others	24/06/2016	conventional	destroyed, blasted	unknown	53.8900	8.5632	40mm FLAK-grenade moved to detonation place (approx. 500m south of place of discovery), mined by EOD Team
	DE-MADT_OL_34/06/16_71	53.8277	8.1648	others	28/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 28cm high-explosive grenade from the second WW. (found during ground survey for wind farm) moved to the blasting place and mined by EOD Team during low tide

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Ref No.	Contracting Party ID No	Latitude	Longitude	Nature of Encounter	Date	Type of munition	Action taken	State of munition	Release latitude	Release longitude	Remarks
	DE-MADU_OL_34/06/16_72	53.8230	8.1711	others	28/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the first WW. (found during ground survey for wind farm), moved to the blasting place and cmined by EOD Team during low tide
	DE-MADV_OL_34/06/16_73	53.8258	8.1771	others	28/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 24cm high-explosive grenade from the first WW. (found during ground survey for wind farm), moved to the blasting place and cmined by EOD Team during low tide
	DE-MADW_OL_34/06/16_74	53.8243	8.1674	others	28/06/2016	conventional	destroyed, blasted	heavily	53.7042	8.0987	German 10.5cm high-explosive grenade from the first WW. (found during ground survey for wind farm) moved to the blasting place and cmined by EOD Team during low tide
	DE-MA8O_Vg/436692/2016_34	53.8933	9.1483	dredging	05/07/2016	conventional	disposed of on land	unknown			a full magazin with 30 x 2cm FLAK-grenades found during dredging, salvaged and disposed on land by EOD Team
	DE-MBV0_OL_07/07/16_78	53.6139	8.4250	others	13/07/2016	conventional	destroyed, blasted	heavily	53.6139	8.4250	German 28cm high-explosive shell from the first WW., destroyed at the location by EOD Team
	DE-MBV1_OL_07/07/16_79	53.6141	8.4245	others	13/07/2016	conventional	destroyed, blasted	heavily	53.6141	8.4245	German 28cm high-explosive shell from the first WW., destroyed at the location by EOD Team
	DE-MABE_OL_12/07/16_38	53.7884	6.5286	laying pipelines or cables	21/07/2016	conventional	destroyed, blasted	heavily	53.7884	6.5286	British floating mine from second WW. found during bottom survey, cmined by EOD Team
	DE-MAAV_OL_13/07/16_36	53.6876	6.5543	laying pipelines or cables	23/07/2016	conventional	destroyed, blasted	heavily	53.6876	6.5543	identified British moored mine found during ground survey for laying of cable, cmined by EOD Team
	DE-MAAU_OL_14/07/16_37	53.7613	6.5375	laying pipelines or cables	24/07/2016	conventional	destroyed, blasted	heavily	53.7613	6.5375	British moored mine MK-2 (II. WW), cmined at location by EOD Team
	DE-MAAW_OL_15/07/16_35	53.6811	6.5520	laying pipelines or cables	25/07/2016	conventional	destroyed, blasted	unknown	53.6811	6.5520	identified German EMA found during bottom survey, cmined by EOD Team
	DE-MACI_DW_OL_10/07/16_75	53.6964	6.5544	laying pipelines or cables	29/07/2016	conventional	destroyed, blasted	unknown	53.6048	6.8716	German 30.5cm high-explosive shell found during seabed survey, moved near to blasting point and cmined by EOD
	DE-MACJ_DW_OL_10/07/16_76	53.6966	6.5542	laying pipelines or cables	29/07/2016	conventional	destroyed, blasted	unknown	53.6048	6.8716	German 30.5cm high-explosive shell found during seabed survey, moved near to blasting point and cmined by EOD
	DE-MDA3_OL_03/08/16_81	53.6212	8.1486	dredging	02/08/2016	conventional	disposed of on land	heavily			a British high-explosive shell (105mm) found in the catch box of a suction dredge NORDSEE, salvaged and disposed of on land by EOD Team (hint: position is not exact)
	DE-MBVJ_99	53.6319	6.7474	found on shore	16/08/2016	conventional	destroyed, blasted	unknown			grenade was cmined, reported by Bfs 140/16
	DE-MACK_OL_10/07/16_77	53.7090	6.5545	laying pipelines or cables	18/08/2016	conventional	disposed of on land	heavily			artillery shell "Bleihemd" (24.5cm, I. WW) found during bottom survey, salvaged by civil company and handed over to the EOD Team

ANNEX 2: Table 8.2.

Ref No.	Contracting Party ID No	Latitude	Longitude	Nature of Encounter	Date	Type of munition	Action taken	State of munition	Release latitude	Release longitude	Remarks
	DE-MDA4_OS_16/08/16_82	53.7941	7.9046	found on shore	29/08/2016	conventional	disposed of on land	heavily			a lot of German high-explosive shells in different sizes (13pcs 2cm, 9pcs 3.7cm, 1x8.8cm, 4pcs 5cm hand-grenades, a smoke candle 42, 10pcs fuses and 5kg parts of ammunition, 0.3kg explosive charges; WW II.), salvaged and disposed of on land by EOD Team
	DE-MBCD_004/5A/0578540/2016_83	53.9583	8.4267	found on shore	03/09/2016	conventional	disposed of on land	heavily			two stick-grenades M24, id and removed on shore by EOD Team
	DE-MBKE_OL_03/09/16_84	53.6167	8.1500	dredging	06/09/2016	conventional	disposed of on land	heavily			a British fuse (II.WW) found in the catch box of a suction dredge NORDSEE, salvaged by EOD Team
	DE-MBNQ_AWZ_BW3_NL_MG_0813_L2B19_80	54.3333	6.4602	laying pipelines or cables	12/09/2016	conventional	destroyed, blasted	good condition	54.3333	6.4602	American aircraft bomb 1000lbs (charge are TNT and Amatol), found during bottom survey on cable route
	DE-MBKF_OS_10/09/16_85	53.2833	7.2260	entanglement in nets	23/09/2016	conventional	disposed of on land	heavily			two German high-explosive charges (3.7cm calibre) found during fishing, salvaged and disposed of on land by EOD Team
	DE-MBIR_98	53.9638	8.4367	others	27/09/2016	conventional	disposed of on land	unknown			fragment of 7.5cm German grenade incl. charge and a sea marker, id and removed to shore by EOD Team
	DE-MBLO_96	54.1883	7.8817	found on shore	11/10/2016	conventional	destroyed, blasted	unknown			five anti-tank mines from second WW. found on shore, mined by EOD Team
	DE-MBM5_97	53.9583	8.4288	found on shore	13/10/2016	conventional	disposed of on land	unknown			explosive part (TNT-charge) of hand-grenade 24, found by civilian and salvaged by EOD Team
	DE-MBW2_OL_04/11/16_86	53.6220	8.1961	laying pipelines or cables	11/11/2016	conventional	disposed of on land	partly			German high-explosive shell (10.5cm calibre) from second WW. found during laying of cable, salvaged and disposed of on land by EOD Team
	DE-MDFG_OL_04/11/16_87	53.6492	8.1844	laying pipelines or cables	11/11/2016	conventional	disposed of on land	partly			German high-explosive shell (8.8cm calibre) from second WW. found during laying of cable, salvaged and disposed of on land by EOD Team
	DE-MDFH_OL_04/11/16_88	53.6223	8.1986	laying pipelines or cables	11/11/2016	conventional	disposed of on land	partly			five German high-explosive shells (3.7cm calibre) from second WW. found during laying of cable, salvaged and disposed of on land by EOD Team
	DE-MDFI_OL_04/11/16_89	53.6503	8.1830	laying pipelines or cables	11/11/2016	conventional	disposed of on land	partly			four German mortar shells (10cm) from second WW. found during laying of cable, salvaged and disposed of on land by EOD Team
	DE-MDFJ_OL_04/11/16_90	53.6498	8.1826	laying pipelines or cables	11/11/2016	conventional	disposed of on land	partly			fourty-nine German fuses in a case from second WW. found during laying of cable, salvaged and disposed of on land by EOD Team
	DE-MDFL_92	53.9500	8.3667	others	15/11/2016	unknown	released at sea	unknown			part of propelling charge

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Ref No.	Contracting Party ID No	Latitude	Longitude	Nature of Encounter	Date	Type of munition	Action taken	State of munition	Release latitude	Release longitude	Remarks
	DE-MBW3_OL_08/11/16_91	53.7941	7.9046	found on shore	24/11/2016	conventional	disposed of on land	heavily			lots of ammunition (high-explosive shells 4 x2cm, 4 x3.7cm, 2 x10.5cm; 6 detonators; 10kg parts of munition; 1 German smoke candle 42) from the second WW. found during routine check, salvaged and disposed of on land by EOD Team
	DE-MBVI_93	53.5575	6.6572	entanglement in nets	24/11/2016	unknown	released at sea	unknown			unexploded object, lost by fishing vessel (reported by BfS 195/16 also)

Ref_No	Contracting_Party	Contracting_Party_ID_No	Latitude	Longitude	Nature_of_Encounter	Date	Type_of_munition	Action_taken	State_of_munition	Release_latitude	Release_longitude	Remarks
6673	Germany	DE-MCMT_OL_02/01/2017_1	54.0817	6.9432	Others	10/01/17	Conventional	Destroyed, blasted	Heavily corroded	53.6678	8.0625	floating German moored mine EMB (II.WW; 15-250kg charge) reported by SURSUM CORDA, id and towed by EOD Team than moved to blasting point Stoertebekerbank by vessel MELLUM and cmined by EOD Team
6674	Germany	DE-MCQS_WP1B_MAG_105_AWZ_2	54.8633	7.2212	Laying pipelines or cable	17/02/17	Conventional	Released at sea	Good condition	54.8633	7.2212	AIM-9 air-to-air missile, found during bottom survey, left in place
6675	Germany	DE-MCQT_WP1B_MAG_119_AWZ_3	54.8793	7.2508	Laying pipelines or cable	17/02/17	Conventional	Released at sea	Good condition	54.8793	7.2508	AIM-9 air-to-air missile, found during bottom survey, left in place
6676	Germany	DE-MCQU_WP1B_MAG_018_AWZ_4	54.6773	6.8456	Laying pipelines or cable	19/02/17	Conventional	Released at sea	Unknown	54.6773	6.8456	part of German mine EMA, found during bottom survey, left in place
6677	Germany	DE-MCQV_WP2B_MAG_0073_AWZ_5	54.2238	6.4195	Laying pipelines or cable	05/03/17	Conventional	Released at sea	Unknown	54.2238	6.4195	part of German mine EMA/EMB found during bottom survey, left in place
6678	Germany	DE-MCQW_WP2B_MAG-0362_AWZ_6	53.8734	6.4970	Laying pipelines or cable	07/03/17	Conventional	Released at sea	Unknown	53.8734	6.4970	part of German "Schacht" mine SMA found during bottom survey, left in place
6679	Germany	DE-MD3E_WP2B_MAG_0405_7	53.7164	6.5501	Laying pipelines or cable	25/03/17	Conventional	Released at sea	Good condition	53.7164	6.5501	British floating mine, found during bottom survey of civil firm, left in place
6680	Germany	DE-MD3F_5213/748/17_M5304_AWZ_8	53.9662	6.4546	Others	21/04/17	Conventional	Destroyed, blasted	Unknown	53.9662	6.4546	British ground mine A MK-6 (or prob. A MK-12, partly damaged) found during bottom survey for a windfarm, cmined by EOD Team
6681	Germany	DE-MD3G_5213/748/17_M5304_AWZ_9	53.9796	6.4223	Others	26/03/17	Conventional	Released at sea	Partly corroded	53.9643	6.4286	German practice bomb (2,5kg, probably DM18, blue paint still exists on tail and fin) found during bottom survey for a windfarm, moved to new position, recovery planned
6682	Germany	DE-MD3H_10	53.6135	6.5386	Others	30/03/17	Conventional	Destroyed, blasted	Unknown	53.6135	6.5386	German aerial mine bomb (II. WW.) found during bottom survey, cmined by Dutch EOD Team
6683	Germany	DE-MD4N_OL_14/03/17_11	53.7619	8.0142	Dredging	06/03/17	Conventional	Disposed of on land	Heavily corroded			package with six pieces signal ammunition (German, II.WW;) found during dredging, salvaged and disposed of on land by EOD Team
6684	Germany	DE-MD4O_OL_15/03/17_12	53.7849	7.9527	Found on shore	09/03/17	Conventional	Disposed of on land	Heavily corroded			a lot of explosive-shells in different sizes (22pcs 2cm, 16pcs 3.7cm, 5pcs 10.5cm), one handle grenade (3.7cm), two Bazookas, 0.7kg explosive charge, 12pcs fuses, 70kg parts of ammunition (German, II.WW) found at sounding
6685	Germany	DE_MD93_OL_63/03/17_13	53.7856	7.9602	Found on shore	22/03/17	Conventional	Destroyed, blasted	Heavily corroded	53.7856	7.9602	a handle hand-grenade 3.7cm and four explosive shells 3.7cm, cmined on place by EOD Team
6686	Germany	DE-MD94_OL_64/03/17_14	53.6100	8.4136	Others	23/03/17	Conventional	Destroyed, blasted	Heavily corroded	53.6100	8.4136	a German anti-tank grenade found at low water (28cm, I.WW), cmined on place by EOD Team
6687	Germany	DE-MD95_OL_64/03/17_15	53.6102	8.4130	Others	23/03/17	Conventional	Destroyed, blasted	Heavily corroded	53.6102	8.4130	a German anti-tank grenade found at low water (28cm, I.WW), cmined on place by EOD Team
6688	Germany	DE-MD96_OL_68/03/17_16	53.7840	7.9659	Found on shore	30/03/17	Conventional	Destroyed, blasted	Heavily corroded	53.7840	7.9659	a warhead of torpedo G7, four German explosive shells 3.7cm (II.WW) and six British 75mm explosive shells (II.WW), cmined on place by EOD Team
6689	Germany	DE-MD97_OL_68/03/17_17	53.7872	7.9527	Found on shore	30/03/17	Conventional	Disposed of on land	Heavily corroded			a lot of ammunition (German high-explosive shells: 3x10.5cm, 2x3.7cm, 109x2cm; 7pcs fuses; 12kg parts of munition from second WW.) and a British incendiary bomb (INC-30) and a fuse, salvaged and disposed of on land by EOD Team

Ref_No	Contracting_Party	Contracting_Party_ID_No	Latitude	Longitude	Nature_of_Encounter	Date	Type_of_munition	Action_taken	State_of_munition	Release_latitude	Release_longitude	Remarks
6690	Germany	DE-MD9L_2017_156_1284_CE_ORD2016_AWZ_18	53.9224	6.4850	Others	05/04/17	Conventional	Released at sea	Unknown	53.9643	6.4286	British rocket SAP-MK1 (25lbs, armed condition) found during bottom survey for a windfarm, moved and recovery planned
6691	Germany	DE-MD9K_2017_157_0589_CE_MMT2016_AWZ_19	53.9221	6.4839	Others	05/04/17	Conventional	Released at sea	Unknown	53.9643	6.4286	British rocket SAP-MK1 (25lbs, armed condition) found during bottom survey for a windfarm, moved and recovery planned
6692	Germany	DE-MD4L_BKR02_17_V335_AWZ_20	53.9809	6.4249	Others	28/04/17	Conventional	Destroyed, blasted	Partly corroded	53.9809	6.4249	British ground mine A Mk (unknown type) found during bottom survey for a windfarm, mined by EOD Team
6693	Germany	DE-MD4K_5213/748/17_M5304_AWZ_21	53.9613	6.4664	Others	27/04/17	Conventional	Destroyed, blasted	Unknown	53.9613	6.4664	German Sweep obstructor buoy type D (SpB Typ D; partly damaged) found during bottom survey for a windfarm, mined by EOD Team
6694	Germany	DE-MD9P_ID-Nr.1-08-04-2017-1_22	55.0452	8.3951	Found on shore	08/04/17	Conventional	Disposed of on land	Heavily corroded			two conventional American practice bombs (25lbs) found by walker, salvaged and disposed of on land by EOD Team
6695	Germany	DE-MD3Y_Az.2017-0837_23	54.7447	8.2965	Found on shore	19/04/17	Conventional	Destroyed, blasted	Heavily corroded	54.7447	8.2965	German bomb with two fuses (250kg), mined in situation by EOD Team
6696	Germany	DE-MD9S_OL_35/04/17_24	53.7849	7.9527	Found on shore	19/04/17	Conventional	Disposed of on land	Heavily corroded	54.4575	6.2996	warhead of German torpedo (II. WW) without charge and fuse Found on shore, salvaged and disposed of on land by EOD Team
6697	Germany	DE-MDA2_OL_35/04/17_25	53.5997	8.1243	Found on shore	16/05/17	Conventional	Disposed of on land	Unknown			remnants of British hand grenade, salvaged and disposed of on land by EOD Team
6698	Germany	DE-MDL5_BT_20170628_AWZ_26	54.4575	6.2996	Others	23/08/17	Conventional	Destroyed, blasted	Unknown	54.4575	6.2996	moored mine and a brass pipe found during bottom survey for a windfarm, mined by EOD Team
6699	Germany	DE-MDLN_BT_20170628_AWZ_27	54.4384	6.3200	Others	19/06/17	Conventional	Destroyed, blasted	Heavily corroded	54.4384	6.3199	aircraft bomb (50kg) found during bottom survey for a windfarm by ROV, moved and put down on new position by EOD Team
6700	Germany	DE-MDMI_BT_20170628_AWZ_28	54.4384	6.3204	Others	27/08/17	Conventional	Destroyed, blasted	Heavily corroded	54.4384	6.3204	likely AS 100lbs aircraft bomb (covered with sediment, heavily crusted), found during bottom survey for a windfarm mined by EOD Team
6701	Germany	DE-MDMJ_BT_20170628_AWZ_29	54.4385	6.3210	Others	25/08/17	Conventional	Destroyed, blasted	Heavily corroded	54.4385	6.3210	aircraft bomb (poss. AS 100 or 250lbs, heavily crusted) found during bottom survey for a windfarm, mined by EOD Team
6702	Germany	DE-MDMK_BT_20170628_AWZ_30	54.4386	6.3214	Others	31/08/17	Conventional	Destroyed, blasted	Heavily corroded	54.4386	6.3214	two bombs (likely AS 100lbs or 250lbs, heavily crusted) side by side found during bottom survey for a windfarm, mined by EOD Team
6703	Germany	DE-MDML_BT_20170628_AWZ_31	54.4440	6.3414	Others	28/08/17	Conventional	Destroyed, blasted	Unknown	54.4440	6.3414	open moored mine found during bottom survey for a windfarm, mined by EOD Team
6704	Germany	DE-MDOI_DOC_NO-NSS-10030454-FR-01_32	54.3366	8.1331	Laying pipelines or cable	28/09/17	Conventional	Disposed of on land	Unknown			high-explosive shell (20kg) found during bottom survey for laying of cable, swept by EOD Team
6705	Germany	DE-MDOJ_Doc_No.NSS-10030454-FR-02_33	54.3665	8.0638	Laying pipelines or cable	29/09/17	Conventional	Disposed of on land	Unknown			unexploded ordnance (20kg) found during bottom survey for laying of cable, swept by EOD Team
6706	Germany	DE-MDOK_AWZ_34	54.3844	8.0231	Laying pipelines or cable	29/09/17	Conventional	Disposed of on land	Unknown			practice bomb (type Mk 106) found during bottom survey for laying of cable, swept by EOD Team

Ref_No	Contracting_Party	Contracting_Party_ID_No	Latitude	Longitude	Nature_of_Encounter	Date	Type_of_munition	Action_taken	State_of_munition	Release_latitude	Release_longitude	Remarks
6707	Germany	DE-MDP2_Target_G-0172-1_AWZ_35	54.4507	7.9961	Laying pipelines or cable	23/07/17	Conventional	Destroyed, blasted	Unknown	54.4507	7.9961	British practice smoke bomb (type MK1, 25lbs) found during bottom survey for laying of cable, mined by EOD Team
6708	Germany	DE-MDP3_Target_G-0177-1_AWZ_36	54.4316	8.0029	Laying pipelines or cable	23/09/17	Conventional	Destroyed, blasted	Unknown	54.4316	8.0029	British practice bomb (type Mk1, 25lbs) found during bottom survey for laying of cable, mined by EOD Team
6709	Germany	DE-MD9W_OL_13/05/17_37	53.6161	6.7670	Found on shore	04/05/17	Conventional	Disposed of on land	Heavily corroded			ammunition box with twenty German high-explosive grenades (3.7cm calibre) found by walker, salvaged and disposed of on land by EOD Team
6710	Germany	DE-ME2A_OL_42/05/17_38	53.7264	8.1388	Found on shore	17/05/17	Conventional	Disposed of on land	Heavily corroded			sundries German high-explosive shells (11x 3.7cm, 3x 5cm, 1x 7.5cm, 1x 10.5cm, 1x 15cm) and 4x fuses from second WW. found by the bird guard, salvaged and disposed of on land by EOD Team
6711	Germany	DE-MDWM_OL_54/07/17_39	53.7844	8.0356	Dredging	26/07/17	Conventional	Disposed of on land	Heavily corroded			an American high-explosive shell (25mm) from second WW found during dredging, salvaged and disposed of on land by EOD Team
6712	Germany	DE-MDWN_OL_68/07/17_40	53.8600	8.8874	Found on shore	31/07/17	Conventional	Disposed of on land	Heavily corroded			German high-explosive shell (3.7cm) from the II.WW, salvaged and disposed of on land by EOD Team
6713	Germany	DE-MDZO_PKE_0387_AWZ_41	54.4480	6.3219	Others	26/08/17	Conventional	Destroyed, blasted	Unknown	54.4480	6.3219	open moored mine (detonator in visible) found during bottom survey for a windfarm, mined by EOD Team
6714	Germany	DE-MDZM_PKE_0606_AWZ_42	54.4813	6.2963	Others	29/08/17	Conventional	Destroyed, blasted	Heavily corroded	54.4778	6.2984	open sea mine found during bottom survey for a windfarm, moved to blasting point by EOD Team
6715	Germany	DE-MDZN_PKE_ALB_049_AWZ_43	54.4897	6.2157	Others	01/09/17	Conventional	Destroyed, blasted	Unknown	54.4897	6.2157	depth charge found during bottom survey for a windfarm, mined by EOD Team
6716	Germany	DE-ME20_Az.2016-0067_44	54.1744	7.8992	Dredging	18/07/17	Conventional	Disposed of on land	Heavily corroded			warhead of torpedo and a machine part found during dredging, id and salvaged by EOD Team
6717	Germany	DE-ME1U_Az.HEI_0872_A-12_45	53.8872	9.1357	Dredging	09/08/17	Conventional	Disposed of on land	Heavily corroded			lots of different ordnances (1x 3.7cm high-explosive grenade, 2x 3.7cm high-explosive grenade cartridges; 3x 3.7cm shells, 1x 10.5cm shell, 3pcs parts of munition, 1x signal cartridge, 1x gun part), id and salvaged by EOD
6718	Germany	DE-ME1V_Az.HEI_0872_A-12_46	53.8872	9.1357	Dredging	29/08/17	Conventional	Disposed of on land	Heavily corroded			lots of different ordnances (1x 3.7cm high-explosive grenade, 4x 3.7cm high-explosive grenade cartridges; 1x 3.7cm shell, 2x 2cm shells, igniters, propelling charges), id and salvaged by EOD Team
6719	Germany	DE-ME1W_ID-Nr.2-14-08-2017-1_47	54.3164	8.6015	Found on shore	14/08/17	Conventional	Disposed of on land	Heavily corroded			bundles of incendiary bomb, id and salvaged by EOD Team
6720	Germany	DE-ME2C_OL_27/08/17_48	53.5798	8.2384	Found on shore	17/08/17	Conventional	Disposed of on land	Heavily corroded			German high-explosive shell (15mm calibre) from II.WW, salvaged and disposed of on land by EOD Team
6721	Germany	DE-ME2D_OL_28/08/17_49	53.7039	8.0334	Found on shore	17/08/17	Conventional	Disposed of on land	Heavily corroded			German high-explosive shell (3.7cm calibre) from II.WW, salvaged and disposed of on land by EOD Team
6722	Germany	DE-ME2E_OL_37/08/17_50	53.6170	6.8507	Entanglement in Nets	23/08/17	Conventional	Disposed of on land	Good condition			box filled with thirty-eight detonators typ A found during fishing, salvaged and disposed of on land by EOD Team
6723	Germany	DE-ME2F_OL_47/08/17_51	53.7888	7.9347	Found on shore	24/08/17	Conventional	Disposed of on land	Heavily corroded			lots of ammunition (German, II.WW: high-explosive shells 1x 13mm, 9x 2cm, 5x 3.7cm, 3x 8.8cm; 40pcs small arms projectiles; 4pcs fuses; 40kg propelling charges; one piece of munition; British, II.WW: incendiary bomb INC-30lbs), id and salvaged by EOD Team
6724	Germany	DE-ME72_G-0107-1_AWZ_52	54.7596	7.8586	Laying pipelines or cable	21/09/17	Conventional	Destroyed, blasted	Unknown	54.7596	7.8586	British moored mine ELIA (I.WW) found during bottom survey for laying of cable, mined by EOD Team

Ref_No	Contracting_Party	Contracting_Party_ID_No	Latitude	Longitude	Nature_of_Encounter	Date	Type_of_munition	Action_taken	State_of_munition	Release latitude	Release longitude	Remarks
6725	Germany	DE-ME71_AWZ_53	54.4255	8.1783	Laying pipelines or cable	24/09/17	Conventional	Destroyed, blasted	Unknown	54.4255	8.1783	British air delivered practice bomb (25lbs) found during bottom survey for laying of cable, id by EOD Team
6726	Germany	DE-ME70_G-0197-1A_AWZ_54	54.3833	8.0175	Laying pipelines or cable	25/09/17	Conventional	Disposed of on land	Unknown			smoke marker KC-25, id and salvaged by EOD Team
6727	Germany	DE-MEW0_55	53.8969	9.1511	Dredging	21/11/17	Conventional	Disposed of on land	Unknown			artillery projectile (II.WW;) found during dredging, salvaged by civil company
6728	Germany	DE-MF31_OL_34/11/17_56	53.7555	7.4859	Found on shore	15/11/17	Conventional	Disposed of on land	Heavily corroded			German high-explosive shell (3.7cm calibre; II.WW), salvaged and disposed of on land by EOD Team
6729	Germany	DE-MG82_OL_19/10/17_57	53.7115	8.1436	Found on shore	10/10/17	Conventional	Destroyed, blasted	Heavily corroded	53.7115	8.1436	German ammunition from WW. II (1x 10.5cm high-explosive shell, 2x 3.7cm high-explosive shells and a piece of munition) found by public member, mined at the site by EOD Team
6730	Germany	DE-MG7Y_Az.2016-0067_58	54.1754	7.8983	Others	19/09/17	Conventional	Disposed of on land	Heavily corroded			warhead of torpedo found during diving work, salvaged and disposed of on land by EOD Team