Agenda Item 2

Review of New Information on Threats and Other Issues Relevant to Small Cetaceans

Document NR 3

2020 Annual National Report:

Finland

Action Requested

Take note

Comment

Submitted by

Finland





ASCOBANS

2020 ASCOBANS National Report

The deadline for the submission of National Reports is 31 March 2021.

As outlined in ASCOBANS Resolution 8.1 (Rev.MOP9) National Reporting, this form will cover the year 2020 (Year 1), and the following topics included in the Annex to the Resolution, in addition to the standard Sections I (General Information) and VII (Other Matters):

- Noise (impulsive i.e. piling and continuous/ambient i.e. shipping) (Section II B3)
- Ocean Energy (Section II B4)
- Unexploded Ordnance (Section II C8)
- Marine Spatial Planning (Section II D15)

The national reports submitted will inform discussions at the 26th Meeting of the ASCOBANS Advisory Committee (8-12 November 2021).

- All questions apply to the reporting period of 1 January 31 December 2020.
- Region in the tables refers to the sub-regions as defined by the HELCOM and OSPAR, and Areas refers to the subareas as defined by ICES. An overview and maps of these can be found in **Annex A**. Species can be chosen from the list provided, based on ASCOBANS species list, see **Annex B**.
- Throughout the form, please include relevant web links where applicable.

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

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

High-level Summary of Key Messages

In your country, for 2020 (Year 1), what does this report reveal about:

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

>>> -Attending the SAMBAH II proposal work.

-Acoustic monitoring continued 2020

-Harbour porpoise included in the Finnish Marine Strategy in the PoM and in the monitoring plan as well as in the Finnish PAF (Prioritized Action Framework).

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

>>> The ICES advice on emergency actions for harbour porpoise in the Baltic Sea has caused some issues in Finland.

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

>>> If SAMBAH II gets funding, it will implement majority of the goals of the Agreement in Finland.

I. General Information

A. Country Information

Name of Party / Non-Party Range State:

>>> Finland

Details of the Report Compiler

Name:

>>> Penina Blankett

Function:

>>> Ministerial Adviser

Organization:

>>> Ministry of the Environment

Postal Address:

>>> P.O. Box 35, 00023 Government, Finland

Telephone:

>>> +358504638196

Email:

>>> penina.blankett@ym.fi

Details of contributor(s)

Please provide the following details per contributor:

Topic(s) contributed to, Name, Funciton, Organization, Postal Address, Telephone, and Email.

>>> Senior specialist Olli Loisa, Turku University of Applied Sciences, Joukahaisenkatu 3, 20520 Turku, +35850 598 5743, olli.loisa@turkuamk.fi

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: 9.2, 8.5 (Rev.MOP9), 8.4 (Rev.MOP9), 8.3, 7.3, 7.1, 6.1, 5.8, 5.7, 5.5, 3.3 Bycatch, the entanglement of an animal in fishing gear, is identified as a major cause of mortality in small cetaceans. Every effort should be made to reduce bycatch towards zero as quickly as possible. Parties to ASCOBANS have agreed on a number of resolutions that highlight the importance of mitigating bycatch of small cetaceans in the Agreement Area, as available data indicates that levels of bycatch pose a considerable threat to their conservation status. Parties have agreed that modifications of fishing gear and relevant practices shall be applied in order to reduce negative impacts where data indicates unacceptable interaction. The Agreement Area requires improved monitoring, collation of data, and consideration of appropriate mitigation measures, while also taking into account similar work in other areas. To better understand the extent of the impact of bycatch on small cetaceans, monitoring and mitigation measures in place, and ongoing work in the Agreement Area, countries are requested to provide relevant information.

Note: This section includes bycatch in recreational fisheries.

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

For the reporting period, please identify whether the following methods were used and the percentage (by monitoring method, of total bycaught animals, by gear type if applicable):

Dedicated observer schemes

Fisheries observes

Remote Electronic Monitoring

Self-reporting by fishermen

Pathological investigation

Assessment at stranding site

>>> Self-reporting by fishermen as part of the logbook or/and reporting to Natural Resources Institute Finland by-catch reportingsystem (https://lomakkeet.luke.fi/hylje) according to the Fishery legislation 62§.

You have attached the following Web links/URLs to this answer.

Seal observations and bycatch reporting

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

Please provide details in **this table** - download and then attach it using the blue 'link' button below Hold 'Ctrl' to select multiple options.

☑ HP - Harbour Porpoise

☑ Please provide amount per species:

>>> HP - 1 released live

You have attached the following documents to this answer.

Sec-II A 1.3 (1).xlsx

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

☑ No

1.5. Are there are mitigation measures in place?

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

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

☑ Unknown/Not Applicable

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

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.

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

- 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)?

 ☑ №
- 2.5. Are there any national efforts to evaluate cetacean body condition at sea (e.g. surveys)? $\ \ \, \square$ No
- 2.7. Is the perceived level of pressure from resource depletion in your country increasing, decreasing, staying the same or unknown?

 ☑ Unknown
- 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: 9.2, 9.1, 8.11 (Rev.MOP9), 8.9, 8.6, 8.4 (Rev.MOP9), 8.3, 7.1, 6.2, 6.1 Small cetaceans are especially susceptible to underwater noise due to their high responsiveness to sound and wide hearing range. Good environmental status, as defined by the European Union, suggests that the introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment. Anthropogenic noise pollution has generally increased in recent times and generates a broad range of frequencies due to a wide variety of human activities. Impulsive and continuous noise present different impacts on small cetaceans, which include communicative masking, behavioural response and physiological injury. Noise in marine environments potentially impedes communication, affects distribution and hence feeding and reproduction of small cetaceans. Studies show that not only cetaceans but also fish and other marine life may be negatively impacted by anthropogenic noise.

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

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

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

ICES Impulsive Noise Register (for HELCOM and OSPAR Parties)

☑ Yes

National Registry

☑ Yes, please specify (e.g. INCC noise registry):

>>> National register is planned, as part of the Finnish marine strategies monitoring programme for 2020-26.

Other

✓ No

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.

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

✓ No

3.3. Relevant new research/work/collaboration on underwater noise in your country.

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

You have attached the following Web links/URLs to this answer.

http://

<u>Underwater noise causes stress</u> - Underwater noise related information in marinefinland.fi webpage <u>Study of areas affected by underwater noise for maritime spatial planning purposes and harmful reduction of impacts</u> - The purpose of the project was to study underwater noise. The project measured underwater temporal and local variation of noise. Impacts on marine organism groups were examined as a literature review. The project produced noise maps that can be used to assess species groups specific pressures and in maritime spatial planning.

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

☑ Unknown

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 (Rev.MOP9), 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.

4.1. Were there any new wind energy farms in development/construction during the reporting period?

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

You have attached the following Web links/URLs to this answer.

http://

<u>Wind power map (updated)</u> - On the wind power map you will find wind turbines operating in Finland and planned wind power projects.

4.2. Were there any new wave power installations in development/construction during the reporting period?

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

4.3. Were there any new tidal energy installations in development/construction during the reporting period?

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

4.4. Were there any new tidal lagoon/barrage installations in development/construction during the reporting period?

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

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

☑ No

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

>>> During the planning of wind power projects, the current state of the area and the presence of protected animals and plants are always determined.

For the most part, wind power construction is subject to the same regulations as other construction. The construction of wind power plants should always be based on the land use plans drafted in accordance with the Land Use and Building Act.

Building permits are always required for wind power construction. It should be noted that land use planning has no means of solving issues related to special legislation. Depending on the location, an obstacle approval pursuant to the Aviation Act, a water permit pursuant to the Water Act or an environmental permit pursuant to the Environmental Protection Act may be required for the construction of a wind power plant.

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 information.

You have attached the following Web links/URLs to this answer.

<u>SmartSea project</u> - SmartSea - "Gulf of Bothnia as Resource for Sustainable Growth", is part of the "Climate-Neutral and Resource-Scarce Finland"-program, funded by the Strategic Research Council of Academy of Finland. Provides science-based guidance and new innovations for the sustainable use of the Finland's marine resources. In SmartSea, the integrated value of nature will be assessed and discussed with the different stakeholders. In the future, this helps planners to do decisions that are efficient, and accepted by the society.

Marine Spatial Planning of offshore wind farms: environmental values and costs

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

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

	Status relative to previous years [Increasing, Decreasing, Staying the same, Unknown, Not Applicable]	2. Nature of the evidence
Tidal lagoon/barrage	NA	
Tidal energy	NA	
Wave power	NA	
Wind energy	Unknown	Wind energy constructions are increasing, however level of pressure to harbour porpoise in unknown.

You have attached the following Web links/URLs to this answer.

<u>Wind power project pipeline 1/2021</u> - According to FWPA's annual survey of wind power projects, by January 2021, wind power projects worth about 21,300 megawatts (MW) had been published in Finland. The share of projects planned for the sea is about 2.800 MW.

5. Cetacean Watching Industry

AIM: to determine if the developing cetacean watching industry poses a threat to small cetaceans. Relevant Resolutions: 8.9. 6.1. 5.4

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

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

Filling out this section accurately and completely will help to detect any indications of potential threats, allow timely mitigation action and enable Parties and Non-Party Range States to work towards a coordinated approach regarding the development of cetacean watching guidelines in the Agreement Area. Note: We are only addressing commercial cetacean watching activities which take place from vessels and include viewing of small cetacean species. Operators are defined as those offering trips with a **primary focus:** they advertise specifically with the aim to see small cetaceans, or a **secondary focus:** they advertise either for other taxa, such as birds or seals, or large cetaceans, or more general for wildlife, but mention the opportunity to see small cetaceans.

5.1. Do you have any commercial small cetacean watching industry operation in your country? ☑ No. Go to Ouestion 5.3.

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

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

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

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

No

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? ☑ №

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

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

☑ No

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

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

Please provide details in this table - download and then attach it using the blue link button below.

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

✓ No

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

☑ Not Applicable. Comments:

>>> Harbour porpoise are the only cetaceans in Finnish marine areas, but low abundance doesn't allow whale watching industry.

6. Recreational Sea Use

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

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

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

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

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

☑ Yes. Please provide information below.

visitor centres are not usually counted.

Provide the type of information (e.g. number of licensed recreational vessels per region, tourist number per region, other) and web link or other relevant link to the data (where can this information be found) >>> State-owned forests and waters across Finland (inc. National Parks, State hiking areas and other suitable areas for recreation) offer good opportunities for recreation and a wide range of activities. The "Everyman's rights" in Finland are extensive. However, some activities require a permit or permission.

The amount of visitors in these sites (managed by Metsähallitus) during 2019 and 2020 (inc. terrestrial sites):
For marine sites, there are a higher amount of visitors, because those who came by boat and don't visit e.g.

You have attached the following Web links/URLs to this answer.

<u>Visitation Numbers</u> - Metsähallitus Parks & Wildlife Finland collects visitation numbers of the most popular state-owned protected and hiking areas in its administration. The data is collected mostly with electronic counters counting users of trails and hiking facilities.

<u>Open data for watercrafts</u> - Open data for watercrafts (boats and other small vessels) available as information products in Traficom's transaction service.

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

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

✓ Yes. Please provide information below.

Provide per region (Annex A): type of information (e.g. maps, GIS, reports), whether the data is available online, and link to data, or comment on unavailability.

You have attached the following Web links/URLs to this answer.

http://

<u>Outdoors in Finland</u> - Finland has nine provincial associations for recreation area activities, all of which exist to safeguard and develop the area and its free access to recreation and camping opportunities, as well as to take care of the natural landscape and unique character of their province. In order to promote recreational use, these associations purchase or lease areas, or acquire usage rights, and attend to their care and construction.

<u>Visitation Numbers</u> - The Visitation Numbers in 2020 of National Parks, National Hiking Areas and Other Protected and Hiking Areas of Recreational Importance. All Areas Managed by Metsähallitus.

<u>Maritime Spatial Plan 2030</u> - The plan indicates connections and areas of significance and with potential. The markings in the plan are not intended to reserve areas for a particular purpose and should not be interpreted as such. Operations may also take place other than in the areas identified in the plan.

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

☑ Yes. Please provide information below.

Per date, please provide: the Area (Annex A), context of incidence (e.g. what kind of recretional activity), outcome for (a) the animal or (b) human, legal procedures/court proceedings/convictions, and link to websites or documentation of the incident.

>>> In summer 2020, three bottlenose dolphins visited southern coast of Finland. In the beginning minor harassment occurred. Authorities acted rapidly and disturbance was stopped.

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

✓ No

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

✓ No

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

☑ Unknown

Please provide the nature of the evidence and describe per species (Annex B) where applicable: >>> The are no exact information on sea uses, but the assumption is that also sea use has increased, partly due to the COVID-19.

You have attached the following Web links/URLs to this answer.

<u>Visitation Numbers</u> - In 2020, there were nearly 4 million visits to Finnish national parks in 2020, which means a 23% growth over the previous year. The total number of visits to all Parks & Wildlife Finland's areas and nature centres was nearly 9,2 million.

7. Other Sources of Disturbance

AIM: to identify new sources of disturbance that could be a threat to small cetaceans. Relevant Resolutions: 8.9, 6.1

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

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

Any incidents of disturbance to small cetaceans not covered in Sections B5 or B6. \square Unknown

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 (Rev.MOP9), 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.

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

Respondents may select multiple options. $\ \square$ HELCOM

You have attached the following Web links/URLs to this answer.

<u>Sea-Dumped Chemical Munitionsal Munitions</u> - About 40,000 tonnes of chemical munitions were dumped into the Baltic Sea after the Second World War. It is estimated that these chemical munitions contained some 15,000 tonnes of chemical warfare agents (this figure does not take into account the dilution and degradation which have taken place). Overview map of known and suspected dumpsites of chemical warfare materials in the Helsinki Convention Area. Reported encounters with chemical warfare materials and emergency relocation areas are also indicated. Click image to enlarge. The data used in the map can be downloaded from the HELCOM Data and Map Data Service.

8.3. Have there been any other instances/issues related to the issue of unexploded ordnance during the reporting period in your country?

☑ No

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

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

>>> Finnish Navy is responsible of management of unexploded ordnance. Information is mostly restricted.

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 relevant information.

You have attached the following Web links/URLs to this answer.

 $\underline{\mathsf{DAIMON}\ 2}$ - The DAIMON 2 offers training in using the new tools and develops them further into standard operating procedures for the environmental impact assessment.

<u>DAIMON project</u> - Decision Aid for Marine Munitions: Practical Application is an international applied-science project consisting of partners from Poland, Germany, Sweden, Finland and Norway collaborating with experts worldwide, united by the goal of solving the problem of underwater munitions. It has budget of 900.000 EUR and is part-financed by the EU INTERREG Baltic Sea Region Programme 2014-2020.

8.6. Is the perceived level of pressure from unexploded ordnance in your country increasing, decreasing, staying the same, or unknown?

☑ Unknown

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 wellestablished 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.

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

 $\ensuremath{\square}$ Yes. Please provide information below.

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

- >>> According the MSFD, the Finnish Monitoring Programme for 2021–2026, includes three sub-programs that collect information on beach debris, water column and bottom sediment the quantity and quality of microparticles of human origin. The program also includes monitoring of reported waste volumes in accordance with environmental permits
- * Quantity and quality of macro waste: The sub-program monitors the amount and quality of visible debris accumulating on beaches. The aim is

to find out the degree, trends and causes of shoreline littering, ie the pressures causing littering in different areas. Monitoring is carried out through a citizen monitoring network. Seabed debris monitoring is being developed

Quantity and quality of microscopic debris: The sub-program monitors the occurrence of human origin on the surface of free water and in bottom sediment

the quantity and quality of the microparticles. The aim is to elucidate the regional nature of microparticles of human origin occurrence

Quantities of waste: The sub-program collects information on the amounts of waste reported according to environmental permits, e.g. ports.

9.2. Are these data publicly available?

Please provide web link.
☑ No

9.4. Are there any mitigation measures in place?

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

9.5. How is marine debris managed?

Include relevant regulations/guidelines and the year or implementation, current and planned. >>> Marine litter is subject to a number of national laws e.g. Finnish Waste Act, (1072/1993, and regulations, in addition to which various international environmental agreements prevent litter from entering the sea. As most litter is known to originate on land, land-based legislation has a major impact on the littering of the marine environment.

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).

- >>> There are several ongoing projects concerning marine litter:
- Muovit merilintujen pesämateriaaleissa (MUPPE)
- Biohajoavien muovipolymeerien biohajoavuus valtameren rannikkovesissä hajottajayhteisöt ja -entsyymit (BIPOD)
- Pohjoiset meriroskat tutkimus- ja sidosryhmäyhteistyön kehittäminen Itämerellä ja arktisella alueella (POMERO)
- Mikromuovit ja niiden vaikutukset Itämeren pohjasedimenteissä
- Tekonurmikenttien SBR-rouhepäästöjen arviointi ja ympäristövaikutusten tarkastelu (TEKONURMI) as well as completed projects:
- Suomen merialueen mikroroskaseurannan toteuttaminen (SUMMIT)
- Mikromuovit Suomen vesistöissä mahdollisten uhkien selvitys (MIF)
- Uusien biohajoavien materiaalien hajoaminen ja ympäristöriskien arviointi Itämeren meriympäristössä

(UBINAM).

- · RoskatPois!
- Meriroska-hanke.
- Muovien ja niihin liittyvien haitallisten aineiden kulkeutuminen rakennetusta ympäristöstä mereen
- Muovijätteen reitit Itämereen (BLASTIC)
- Jätevedenpuhdistamoiden merkitys mikroskooppisen muoviroskan päästölähteenä
- Pro gradu -tutkielmat

There are lot of proposed actions/measures to prevent and collect litter before it enters to the sea. Lot of initiatives e.g. Zero Waste Finland (https://zwf.fi/) and Satakolyt initiative https://satakolkyt.fi/en/, an interactive map that encourages city dwellers to clean up the entire 130 km long shoreline of the Baltic Sea in Helsinki. The uncleaned shoreline is shown in red on the map. Anyone can become a savior of the Baltic Sea and announce on the map that they are organizing their own shore

You have attached the following Web links/URLs to this answer.

http://

Scientific publication

<u>Links to marine litter projects</u> - SYKE (Finnish Environment Institute) investigates the amount, distribution and effects of marine litter in the Baltic Sea, as well as the sources and routes of litter to the sea as well as, also developing measures to reduce littering. SYKE is specialize in microplastic research.

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

☑ Unknown

10. Pollution and Hazardous Substances (incl. microplastics)

AIM: to illustrate progress on understanding, monitoring and mitigating impacts of important current and emerging pollution-related hazards on small cetaceans. during the reporting period Relevant Resolutions: 8.9, 8.8, **8.7**, 8.4 (Rev.MOP9), 8.3, **7.4**, 7.1, 6.1, 5.7

Marine environments have been subject to a wide range of different types of pollution over the last decades. Top predators, such as small cetaceans that feed on higher trophic prey, tend to accumulate many of these potentially hazardous substances. There are a number of contaminants and pathogens that are known, or suspected, to have impacts on small cetacean health, immune status or reproduction. These include, for example: polychlorinated biphenyls (PCBs) and other persistent organic pollutants (POPs), oil pollution (polycyclic aromatic hydrocarbons), toxins from harmful algal blooms (HABs), sewage, radionuclides, toxic elements, tri-butyl tin (TBT), morbillivirus, and Brucella. In addition, micro- and nanoplastics are also present in marine environment and their impacts are presently poorly understood. Monitoring can be done using body tissue from small cetaceans obtained from live animals through biopsies, or from dead animals that are generally found on the shore. Necropsies allow the sampling of different types of tissue such as blubber, muscle, kidney or liver and these can be analyzed subsequently.

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

Note:Includes microplastics.Macroplastics and discarded fishing gear are covered under Section C 9 Marine Debris.

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

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

☑ No. Go to Question 10.7.

10.7. Does your country determine microplastics in small cetaceans?

 \square No. Go to Question 10.9.

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

✓ No

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

☑ Unknown

11. Ship Strikes

AIM: understanding the potential risk of ship strike as a cause of injury/death in small cetaceans. Relevant Resolutions: 8.9, 8.2, 8.1 (Rev.MOP9), 6.1, 5.4

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

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

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

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

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

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

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

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

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

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

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

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

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

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

 $\ensuremath{\square}$ No

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

✓ No

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

 $\qquad \qquad \square \ \, Unknown$

☑ Not Applicable. Comments:

>>> The amount of small cetaceans in the Finnish marine areas are so few, that there has not been any ship

strikes and the probability for a ship strike is very low.

12. Climate Change (incl. ocean acidification)

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

Relevant Resolutions: 8.9, 8.4 (Rev.MOP9), 8.3, 7.4, 7.1, 6.1, 5.7

It is certain that climate change is altering the habitat of cetaceans. However, our understanding of how the predicted changes will impact different species and populations can be further developed by identifying issues and trends through reporting, CMS[1] highlights the importance of addressing potential issues through the engagement of (1) researchers to better understand the underlying processes, as well as (2) conservation managers and policy makers to monitor changes and to mitigate negative impacts. Focus should be given to understanding tangible climate change effects relevant to cetaceans, such as changing ocean temperatures, prey depletion / prey range shifts, ocean acidification, increased frequency and intensity of ocean storms, changes in sea ice and weakening of the North Atlantic Drift. Such occurrences require that we gather evidence on the existence and nature of climate change effects on small cetaceans and evaluate current monitoring programmes and mitigation measures. This section aims to provide an overview of what kind of activities are already ongoing in the member states to address climate change. The focus is on those actions specifically regarding cetaceans as well as the most likely impacts on their habitat and prey. Climate change possibly represents one of the most important future threat to the status of cetaceans in the ASCOBANS region. Direct effects may arise due to ocean warming, resulting in distribution shifts (generally northward) so that the animals continue to occupy waters with temperature regimes compatible with their thermal niches. Key indirect effects will result from changes in prey distribution and abundance due to ocean warming, ocean acidification and changes in ocean current systems.

[1]CMS Resolution 12.21on Climate Change and Migratory Species.

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

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

☑ No. Go to Ouestion 12.3.

12.4. Have there been any instances/issues related to identified trends in small cetacean populations as a result of climate change in your country during the reporting period? ☑ №

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

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

AIM: human activities in the Agreement Area have the potential to impact upon small cetaceans. Tracking those activities that cause physical habitat change and improving our understanding of their relative impacts will help shape any necessary mitigation action required.

Relevant Resolutions: **8.11** (Rev.MOP9), 8.9, 8.6, 8.4 (Rev.MOP9), 8.3, 7.1, 6.2, 6.1, 5.7

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

The collation of this information will contribute to the development of risk maps showing the spatial and temporal (by season) distribution of activities that have an impact on small cetaceans, including information provided in National Reports, taking into account the work done by other organizations. Note: In the term "physical habitat change", we include a) coastal/marine construction – artificial islands, harbours, bridges, oil/gas platforms, wind turbines, tidal turbines; and b) seabed damage – dredging, bottom trawling.

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

Many range states are mapping human activities to fulfil obligations under the EU Maritime Spatial Planning Directive,

MSFD, OSPAR, and HELCOM; this information is relevant (though often not readily accessible) to ASCOBANS in understanding the extent and trends of human activities potentially impacting small cetaceans.

Please provide per region (Annex A): the type of information (e.g. maps, GIS, reports), whether the data is available online, and web links to data, or comment on unavailability.

>>> Finnish Maritime Spatial Plan gives some indications where there possible constructions e.g. windparks. In the VELMU map service includes also information on human activities and pressures in the Finnish marine areas.

You have attached the following Web links/URLs to this answer.

<u>VELMU mapservice</u> - VELMU programme maps biodiversity of the Finnish marine environment. The inventory results can be utilised in the VELMU Map Service. The VELMU map brings together the inventory results and combines them with other data. In the map service you can, among others, view and print point data and map layers describing species, habitats and environmental variables. The map service is constantly developed and data from VELMU partners is also added

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

If you select 'Yes', please also provide web links if available. $\ensuremath{\square}$ No

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

✓ No

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

☑ Unknown

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 9.1, 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.

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

National plan(s) and processes in force:

>>> The Maritime Spatial Plan 2030 covering Finland's territorial waters and exclusive economic zone is complete. The administrative authorities of coastal regional councils approved the plan between November and December 2020. The councils of coastal regions have prepared the maritime spatial plan in three different parts:

Gulf of Finland: Helsinki-Uusimaa Regional Council and Regional Council of Kymenlaakso Archipelago Sea and southern Bothnian Sea: Regional Council of Southwest Finland and Regional Council of Satakunta

Northern Bothnian Sea, Quark and Bothnian Bay: Regional Council of Ostrobothnia, Regional Council of Central Ostrobothnia, Council of Oulu Region and Regional Council of Lapland

You have attached the following Web links/URLs to this answer.

http://

<u>Marine Spatial Planning in Finland</u> - The Maritime Spatial Plan 2030 covering Finland's territorial waters and exclusive economic zone is complete. The administrative authorities of coastal regional councils approved the plan between November and December 2020. The councils of coastal regions have prepared the maritime spatial plan in three different parts. The Maritime Spatial Plan 2030 for Finland is in a digital form on the internet

Further information regarding national plans, including links to online resources and maps where available:

You have attached the following Web links/URLs to this answer.

Marine Spatial Plan map

Further information regarding transboundary plans, including links to online resources and maps where available:

>>> HELCOM-VASAB MSP WG has developed guidance on transboundary cooperation.

You have attached the following Web links/URLs to this answer.

The Guidelines on transboundary consultations, public participation and co-operation— Consultations between MSP authorities of neighbouring countries and/or those countries directly affected by MSP and the related public participation process that should take place concerning transboundary aspects during the process of drafting a maritime spatial plan. cooperation between MSP authorities at pan-Baltic scale on issues affecting most or all of the Baltic Sea and/or the level involving most or all BSR countries as well as the process foreseen to ensure effective stakeholder engagement at a more strategic level. The Guidelines on transboundary consultations, public participation and co-operation have been prepared and agreed on by the HELCOM-VASAB MSP Working Group and were adopted by the 72nd meeting of VASAB CSPD/BSR on 8 June 2016. The Guidelines were approved by HELCOM HOD 50-2016 on 15-16 June 2016.

<u>Maritime Spatial Planning</u> - The Joint HELCOM-VASAB Maritime Spatial Planning Working Group has worked since 2010 for regionally coherent regional Maritime Spatial Planning (MSP) processes in the Baltic Sea. The Baltic Sea Region MSP Data Expert Sub-group works under HELCOM-VASAB MSP WG by supporting data, information and evidence exchange for MSP processes with regard to cross-border/transboundary planning issues.

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

✓ No

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.

>>> Work under MSP has been very active in Finland during the last few years. More information on the work can be found from the web links.

You have attached the following Web links/URLs to this answer.

http://

http://

http://

<u>Scenarios for maritme areas 2050</u> - Scenarios for the future of the maritime area and their impact assesment were created for maritime spatial planning. The scenarios presented here are descriptions of the possible and alternative futures of the operating environment in Finnish maritime areas until 2050.

E. Area-based Conservation / Marine Protected Areas

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

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

Relevant Resolutions: 5.7

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

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

criteria.

It is of particular interest to ASCOBANS to obtain an overview of the current scale of marine protected areas and to review best practice approaches to management of marine protected areas, in order to make recommendations to Parties.

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

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

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

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