



## SUMMARY COMPILATION OF THE 2021 NATIONAL REPORTS SUBMITTED BY ASCOBANS PARTIES

This information document compiles, in a summary format, the responses given to the questions in the ASCOBANS National Report Form 2021. The National Reports compiled here are those submitted in time for AC27: [Belgium](#), [Denmark](#), [Finland](#), [France](#), [Germany](#), [Lithuania](#), [The Netherlands](#), [Poland](#), and [United Kingdom](#). Please refer to these full reports for detailed information.

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## High-level Summary of Key Messages

In your country, for 2021 (Year 2), what does this report reveal about:

### 1. The most successful aspects of implementation of the Agreement?

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
<p>1) A well-established strandings network.</p> <p>2) Ongoing consultations with the military about mitigation measures in case of the destruction of UxO.</p>	<p>1) The fishery by-catch estimate based on camera monitoring are published, providing an important input in the management of the Belt Sea population of porpoises.</p> <p>2) A pilot study examining harbour porpoise stomach content for plastic did not indicate that plastic to be a problem for porpoises.</p> <p>3) PAM studies in six Danish Natura 2000 sites show an increase in porpoise detections since 2012. However, MiniSCANS-II in 2020 showed a (not significant) decrease from approx. 42,000 in 2016 to 17,000 porpoises. To be examined further during SCANS-IV in 2022.</p>	<p>1) Acoustic monitoring continues - Harbour porpoise included in the Finish Marine Strategy in the PoM and in the monitoring plan as well as in the Finish PAF (Prioritized Action Framework) - Finland still participates in the SAMBAH II process</p>	-	<p>1) The support of more or less all ASCOBANS States against the mass killing of over 1400 White sided dolphins at the Faroe Islands was a good proof of a joint protection spirit.</p> <p>2) The preparation of an UN convention to avoid and reduce marine plastic garbage in 2021 and before (and adopted at the UNEA in 2022) is an important step to diminish risks for cetaceans too, as autopsies reveal they already suffer considerably by plastic garbage in their maws) stomachs).</p> <p>3) Negotiation of Management plans for the German MPAs.</p>	<p>The public awareness and interest to small cetaceans (mainly harbour porpoise) has significantly increased during the period when Lithuania has been Party to ASCOBANS.</p>	<p>1) Use of the updated Conservation Plan for the Harbour Porpoise in The Netherlands to guide policy and research.</p> <p>2) Continuation and formalisation (e.g., WOT - statutory research tasks) of monitoring tasks.</p> <p>3) More holistic analyses of different national and international data sets at both national and international levels (for example from strandings as well as survey databases).</p> <p>4) Development of an EU proposal with multiple stakeholders and parties to assess bycatch of cetaceans in the North Sea.</p>	<p>1) A number of long-term, educational campaigns conducted.</p> <p>2) Establishing the stranding respond scheme by HMS and WWF within the external project. Collection of stranded carcasses for post-mortem analysis by the HMS.</p> <p>3) Establishment of the porpoise monitoring programme (in accordance with the MSFD) and marine species and habitats (in accordance with the Habitats Directive). Harmonisation of the monitoring programme at the Baltic Sea Region level with the HELCOM States Parties (fulfilment of the provisions of the MSFD).</p> <p>4) Ongoing work on the preparation of conservation plans for marine Natura 2000 sites, including those where porpoise is a conservation concern.</p> <p>5) Ongoing dialogue with the fishing community on the protection of the Baltic Sea ecosystem, including the porpoise.</p> <p>6) Started in 2012 and continuing to this day a project to remove lost fishing nets, popularisation of the problem of lost nets in regional and also global level.</p>		<p>1) The UK continues to implement several dedicated by-catch monitoring schemes and mitigation methods to keep by-catch stable or decreasing for the reported species.</p> <p>2) Several marine debris monitoring programmes helping to gather more information on the impact on cetaceans in UK waters.</p> <p>3) The continuation of cetacean stranding monitoring programmes provides invaluable information on the health status of cetaceans in UK waters.</p>

**2. The greatest challenges in implementing the Agreement?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
<p>1) The overlap between the many different fora that require similar information. 2) The overlapping analyses of data that are submitted in different fora, and assessments.</p>	<p>1) It is a slow process to develop and implement indicators of the EU MSFD. Once implemented, these will hopefully provide a framework that will ensure progress in protecting this species. 2) The lack of sufficient information on bycatch covering the Baltic population makes it impossible to assess the treat level and decide on mitigations.</p>	<p>The ICES advice on emergency actions for harbour porpoise in the Baltic Sea has caused some issues in Finland.</p>	<p>Small cetaceans' bycatch in the Bay of Biscay.</p>	<p>Reducing bycatch and a sufficient noise protection (in particular during the construction of marine wind energy plants) will stay the greatest challenges in German waters.</p>	<p>1) Lack of human resources, especially for researchers. 2) lack of financial resources. 3) lack of infrastructure.</p>	<p>1) Long-term funding of monitoring or new research projects. 2) Acquiring offshore animals (e.g. through bycatches) for post mortem exams. 3) Methods for assessing cumulative impacts. 4) Understanding the ecological role of the Harbour Porpoise in Dutch waters (and beyond).</p>	<p>1) Deterioration of the Baltic Sea both in terms of species structure and increasing dead, anaerobic areas on its bottom. 2) Increase of human pressure in marine areas, including expansion of maritime transport, recreation, etc. 3) Taking into account the cumulative effect of anthropopressure in the Baltic Sea in connection with the increasing number of new investments and ventures. 4) Biodiversity loss and fishing resources depletion what may have also significant impact on cetaceans in the future and their food resources.</p>		<p>For this reporting period, Covid-19 has had significant impacts, both in terms of carrying out planned, and funding new projects.</p>

**3. The main priorities for future implementation of the Agreement?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
<p>1) Streamlining the work in different international fora in order to avoid the duplication of work. 2) Continuation of the work on the mitigation of underwater noise, using the best available technology, and avoiding exposure to</p>	<p>Ensure funding for SAMBAH-II. It is essential that we gain more information on this critically endangered population of harbour porpoises, so that management can be implemented</p>	<p>If SAMBAH II gets funding, it will implement majority of the goals of the Agreement in Finland.</p>	<p>Same as the greatest challenge.</p>	<p>Listing the Baltic proper population of the harbour porpoise in CMS Annex I in the close future and in pursuance the resulting nature protection necessities will be a challenge for the further future.</p>	<p>1) To involve the Lithuanian Sea Museum in the activities when the Baltic Sea Animal Rehabilitation Center is built, to strive for the collection of information and the necessary research on the harbour porpoise. 2) Obtain harbour porpoise detection data conducting the Environmental Impact Assessment Programme in the planned wind farm territory. 3)</p>	<p>1) International cooperation with all stakeholders /parties involved on assessing bycatch for the North Sea harbour porpoise. 2) Development of alternative methodologies to make monitoring cost-effective and multi-targeted (e.g. High Definition aerial</p>	<p>1) Save Baltic porpoise populations by improving protection in areas of their existence, monitoring fishery, and reducing and mitigating pressures on Baltic harbour porpoises. 2) Continuation of activities carried out so far, together with the promotion of pro-ecological practices</p>		<p>1) Further research is needed into resource depletion and the impact this has on cetaceans. 2) Continued focus on improving the existing bycatch monitoring and mitigation. 3) Exploration of scale of impacts related to marine debris on cetacean species and options</p>

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
underwater noise of cetaceans during construction works.	to project the population.				Obtain data on the underwater noise in Lithuania Baltic Sea territory by the Environment Protection Agency.	surveys, fishery monitoring, PAM, tagging).	throughout the country, which affects the quality of the waters feeding the Baltic Sea.		for mitigation measures for marine debris.

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

**A. Fisheries-related threats**

**1. Bycatch**

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

Method	BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Dedicated observer schemes				✓			✓	✓		✓
Fisheries observes		✓		✓	✓		✓	✓		
Remote Electronic Monitoring		✓		✓						
Self-reporting by fishermen			✓	✓	✓	✓	✓			✓
Pathological investigation				✓	✓		✓			✓
Assessment at stranding site	✓			✓						✓

**1.1. (continued)**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
No bycatch monitoring as very few fishermen engaged in static gear fisheries (1 or 2). Only information from stranded animals, with no information about the fisheries involved.	1.1% coverage in demersal seine; 1.5% coverage in longline fisheries; 0.6% coverage in Otter trawl.	Self-reporting by fishermen as part of the logbook or/ and mandatory reporting to Natural Resources Institute Finland <a href="#">bycatch reporting system</a> according to	<i>Dedicated observer schemes</i> in Bay of Biscay: 1 Dec-30 Apr, 5% gillnets and pelagic trawlers. <i>Fisheries observes</i> : All year: 1% gillnets and trawlers. Data transmitted to WGBYC for bycatch estimates at ecoregion level every year. <i>Self-reporting by fishermen</i> : systematic reporting became	Pathological investigation: (69% of animals in 2021, suspected bycatch based on pathological signs of stranded animals).  Lower saxony (LS): Fisheries	All by-caught animals must be recorded in fishing logbooks.	<i>Dedicated observer schemes</i> : designed to record bycatch events for a sample of the Dutch fishery that uses static gear. <i>Pathological investigation</i> : Conducted for	WWF Blue Patrol patrolling beaches and observers.  Fisheries observers: below 1% coverage of the gillnet fishing effort. It is also obligatory (under national		Dedicated observer schemes: 100%, nets. Self-reporting fishermen: (Licensed vessels must report bycatch events within 48 hours via the <a href="#">MMO reporting form</a> . Self-reporting efforts also carried out via an app that been developed under the CCUK project for fishermen. Also carried

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Assessment at stranding site: 100%.		the Fishery legislation 62 §.	mandatory in 2019, but is poorly implemented. <i>REM</i> : Experimental program in Bay of Biscay 5% gillnets. A feasibility study was carried out in 2021 and extended to 15 new vessels in 2022. National bycatch estimates are provided annually by reverse drift modelling methodology applied on CD and HP strandings.	use beam bottom trawl nets. No bycatch has been reported. Rarely used fyke nets (non-commercial fisheries) are equipped with protection grids.		about 50 stranded HP and other small cetaceans per year. Bycatch is one of the causes of deaths that is registered.	legislation) to report sea mammal or a bird bycatch in the logbook.		out by catch sampling observers (fisheries associated with commercial species discards) and validated electronic monitoring (EM). Additional and more detailed data on UK strandings and necropsies is available in the relevant annual reports (see Section IV, 1.10).

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

Species	BE	DK	FI	FR	DE	LT	NL	PL	SE	UK	Total
CD – Short-beaked Common Dolphin				710						11	721
HP – Harbour Porpoise		22		101	16		✓			7	146+
KW – Killer Whale										1	1
SD – Striped Dolphin				10							10
BD – Bottlenose Dolphin				12							12
RD – Risso’s Dolphin				1							1
Non-identified cetacean				32							32
Other								✓		✓	?
<b>Total</b>	0	22	0	866	16	0	?	?		19	923+

1.2. (continued)

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
N/A	Recorded using GN gear type by video-based electronic monitoring.	None during the report period.	Most recorded from strandings (most common species stranded: CD). Most in area 27.8.a. Self-reporting by fishermen: species most affected: CD, mostly in set gillnets. Most in area 27.8.a.	Most (N=11 HP) recorded in the Baltic West of Bornholm were suspected of bycatch, based on pathological investigations of stranded animals.	N/A	-	None from the list.		For “overall sampling effort”, the full effort across all monitoring methods and areas is provided, not just sampling effort for the specific métiers with positive bycatch. SMASS diagnosed the KW as an incidence of ‘Entanglement’. Definition for this cause of death given in UK annual reports below. Entanglement denotes evidence of entanglement in rope (creel etc.) or discarded fishing gear/marine litter.

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
1 HP. Observation of bycatch in an illegally set beach trammel net.	No data.	None during the reporting period.	N/A	0. In the recreational fishery in Schleswig-Holstein the use of gillnets or other fishing gear with an impact on small cetaceans is not allowed. Therefore, bycatch of small cetaceans is not an issue.	N/A	N/A	Other: none from the list		1 CD using rod and line. A live released bycatch was reported from a scientific fish tagging trial.

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
No.	No.	No.	Yes. Since 2016, it was observed a periods of multiple stranding events typically from late January to mid-March every year of the reporting period. This year is observed a short pic of strandings in end of February.	No.	No.	No.	No.		No.

**1.5. Are there any mitigation measures in place?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes. Prohibition of recreational use of gill- and trammelnets at sea (since 2001) and on the beach (since 2015) have been effective. Slight adaptations to fyke nets used on the beach for recreational purposes, predominantly to avoid bycatch of seals since 2022 have not produced results yet.	Yes. Since 2004 mandatory use of acoustic deterrents in certain gill net fisheries – for vessels >12 m. No specific studies have been concluded. Since 2022 Seasonal closure (1 Nov–31 Jan) in Arkona Basin for gill net fisheries in designated N2000 site (Adler Grund & Rønne Banke), supplemented with mandatory use of pingers in the area the rest of the year – for all vessel lengths. (Reg entry into force on 1 June 2022).	No.	Yes. Acoustic deterrent devices on PTM/PTB on Northern Bay of Biscay. <a href="#">Rapport PIC</a> (pas de publication scientifique): efficacy of 65%. Acoustic deterrent devices on gillnets on The Channel.	Yes. In the Southern North Sea: Gear modification since 2004 & closures of gillnets in parts of the coastal area since 2013. In the Belt Sea: obligatory & voluntary pinger use in nets, and reduction of net length during summer months on voluntary basis in Schleswig-Holstein (SH) coastal gillnet fisheries since 2013. Porpoise Alert Pingers on voluntary basis in SH coastal gillnet fisheries since 2016. The mitigation measures have been presumably effective as there has been no assessment project so far. Except for the pinger use, which has been no data.	Yes. In coastal fishery fishermen use “safe” trap-nets (FIX - selective gears) equipped with entrance protection (cover) – physical barrier designed from bigger mesh-sized net to avoid bycatch of sea mammals or other protected species. Mitigation measures have been effective.	Yes. The use of pingers in bottom-set gillnets in the Northern Sea is voluntary and not monitored. In certain coastal N2000 sites there are time area closures in place and mandatory use of pingers.	Yes. In accordance with the EC Delegated regulation no. 2022/ 303 from 15 Dec 2021, Poland is obliged to implement 3 months closure (Nov-Jan) for static nets for the entire N2K site Ostoja na Zatoce Pomorskiej as well as marine part of the N2K site Wolin I Uznam, in addition, whole year static net closure for the Southern Middle Bank adjacent to the Swedish border and an obligation for the whole year for pinger use on static nets for the entire Puck Bay. Fishermen should equip their nets with pingers until 1 June 2022.		Yes. ADDs since 2014 in the Celtic Sea, Northern North Sea, Northern South Sea and Channel. Mitigation has been effective in all areas.

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
No.	Yes. A decrease in the Danish gillnet effort has been registered over the last many years. E.g. 2010-2021 the gillnet effort is reduced by 39%.	Unknown / N/A	No / Unknown/ N/A. At the spatial and temporal resolution of mandatory data calls (ICES), it seems that no changes in fishing effort were detected since 2013. NB: changes in fishing practices, in size of fishing gears or in fishing effort at smaller scale couldn't be detected through these data.	Yes. Baltic Sea: reduction of fishing effort in gill net and trammel net fisheries targeting cod and herring due to quota reductions.  Schleswig-Holstein: detailed information on fishing effort, especially on small-scale gillnet fisheries, is not available for Schleswig-Holstein. However, there is a general downward trend in the gillnet fishing fleet and fishing effort in Germany. For example, the small scale coastal fleet <10m has been reduced from 1766 vessels (year 2009) to 631 vessels (year 2020). Lower Saxony: changes in fishing effort on brown shrimp and flatfish which took place in the last years (but may not be relevant as no bycatch reported for years in coastal fisheries in Lower Saxony).	No	Unknown N/A. Gillnets have stabilised around about 11 vessels since 2019.	Yes. Baltic Sea resources are depleted.		Yes. Netting effort appears to have decreased in recent years. Impacts on fisheries due to the Covid-19 pandemic may have occurred during 2021 but are not known yet as 2021 effort data not stable until later in the year and will not be subject to full analysis until after that.

**1.7. Relevant new research/work/collaboration on bycatch in your country.**

BE	No dedicated research other than the assessment of causes of death in strandings schemes.
DK	<a href="#">Bycatch of marine mammals and seabirds: Occurrence and mitigation</a> ; <a href="#">Miljøskånsomhed og økologisk bæredygtighed i dansk fiskeri</a>
FI	None.
FR	Since late 2020 it has been mandatory to equip pelagic and demersal trawls in pairs in the Bay of Biscay with ADDs (pinger) on a year-round basis. In 2021, the control objective was 25% of the fleet concerned. Projects: <ul style="list-style-type: none"> <li>- LICADO: aims at developing new pingers (directional, interactive) for PTM, exploring technical and operational measures for netters (pingers, reflectors).</li> <li>- DOLPHINFREE: aims to develop a pinger that emits a comprehensible and interpretable signal to signal the presence of the net and the associated mortality risk. It also aims to develop an energy generator to increase the autonomy of the device. Tests on gillnets in 2022.</li> <li>- PIFIL (Oct 2021-Sept 2022, following LICADO project): aims to develop a pinger that can be attached to the ship's hull and triggered during setting process. 20 gillnetters have been equipped.</li> <li>- CetAMBICion: launched in March 2021, aims not only to improve knowledge but also to propose measures, including new joint recommendations, along five lines.</li> </ul>
DE	<a href="#">Synthetic harbour porpoise communication signals emitted by acoustic alerting device (Porpoise Alert, PAL) significantly reduce their bycatch in western Baltic gillnet fisheries (2020)</a> ; <a href="#">"Boats don't fish, people do" - how fishers' agency can inform fisheries-management on bycatch mitigation of marine mammals and sea birds (2020)</a> ; <a href="#">Determination of optimal acoustic passive reflectors to reduce bycatch of odontocetes in gillnets (2020)</a> ; <a href="#">Using acoustically visible gillnets to reduce bycatch of a small cetacean: first pilot trials in a commercial fishery (2021)</a> ; PhD Thesis "Gillnet modifications to reduce bycatch of harbor porpoises" (2021); STELLA project: <a href="#">'Gill net fisheries: Development of alternative management approaches'</a> .

<b>LT</b>	Baltic Sea “Member States (BALTFISH) submitted to the Commission two joint recommendations for reducing incidental catches of harbour porpoises in some areas of the Baltic Sea, following which the Commission adopted Delegated Regulation (EU) 2022/303. Work also continues in the HELCOM working groups.
<b>NL</b>	The initiative “CIBBRiNA” started in 2020: project that aims to address the most urgent bycatch issues for cetaceans and other ETP species in the North Sea. It is led by the Netherlands (LNV) and includes a consortium of 49 beneficiary partners, 9 associated partners, 20 organisations in the Stakeholder Advisory Board and numerous smaller organisations from 14 countries. The proposal has been submitted to the LIFE call of the EC. An update on the status of the proposal will likely be available during the AC meeting.
<b>PL</b>	National Marine Fisheries Research Institute (MIR-PIB) in Poland joined EU LIFE application organized under NL leadership (project CIBBRINA) on bycatch mitigation and prevention. Within this project, Poland is especially interested in the development of effective tracking systems for small vessels (below 12 m).
<b>SE</b>	
<b>UK</b>	<ul style="list-style-type: none"> <li>- Bycatch Monitoring Programme: the main source of broadscale bycatch data collection.</li> <li>- Catch sampling programme protocols are improving with regard to bycatch recording and reporting.</li> <li>- Marine Management Organisation: implemented a mandatory bycatch reporting requirement in response to the US Marine Mammal Protection Act.</li> <li>- Clean Catch UK: includes 8 inshore netting vessels self-reporting their cetacean bycatch, using a new wildlife bycatch reporting app, a proportion of which are validated by REM; has developed a novel mitigation device, a Passive Acoustic Reflector (at sea trials by 12 inshore netting vessels will begin in the Summer 2022).</li> <li>- The ‘Hauling Up Solutions 2’ workshop in March 2022 explored the role of gear modification and alternative gears in reducing, and where possible, eliminating cetacean bycatch. (Recommendations will be published in the Summer 2022.)</li> <li>- Insight360, a new R&amp;D consortium, with a primary focus on the catching sector.</li> <li>- Funding granted from UK Government (Defra) for a scoping study by the UK strandings programmes, to assess the welfare impacts of bycatch and entanglement through analysis of necropsy data.</li> <li>- Other publications listed: <a href="#">ICES WGBYC report 2021</a>; ICES WKMOMA 2021; Seafish Ecological Risk Assessment for Southwest Fisheries 2021; Understanding the scale and impacts of marine animal entanglement in the Scottish creel fishery; and UK Bycatch Monitoring Programme Report for 2019.</li> </ul>

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

<b>BE</b>	<b>DK</b>	<b>FI</b>	<b>FR</b>	<b>DE</b>	<b>LT</b>	<b>NL</b>	<b>PL</b>	<b>SE</b>	<b>UK</b>
Unknown (HP). Since 2015 very few animals caught in recreational beach gill- and trammel net. Very few professional fishermen using static gear, with most static nets set outside 12 nm from foreign fishermen.	Decreasing (HP). As the gillnet effort has decreased over the years so will the level of bycatch. Only, however, if the gillnet fishing patterns stays the same. E.g. no change in the mesh sizes used.	Unknown.	CD: staying the same (evidence: strandings). HP: staying the same (evidence: strandings). BD: unknown. SD: unknown.	Unknown. In general: based on the decreasing fishing effort due to the cod ban, a decrease in bycatch is assumed; no systematic assessments of bycatch is conducted.	Staying the same.	Staying the same. Unknown. Based on monitoring as described in 1.1. However, improvements could be done to the monitoring programme, e.g. REM. This should be implemented on a regional scale.	Unknown.		Decreasing. Staying the same (CD). Both the proportion of strandings examined the post-mortem and unpublished analysis based on dedicated bycatch observer data indicates that common dolphin bycatch levels in net fisheries are fairly stable over the period 2012-2019.

**A. Fisheries-related threats**

**2. Resource Depletion**

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
No. Long-term depletions available in reports by ICES and OSPAR.	Yes. Cod and Herring have been identified as important food objects for adult porpoises in DK waters. Cod: the depletion is mainly in Southern North Sea and the English Channel. For the two species combined the two stocks has mainly declined.	-	A research project has been launched in 2022 (DELMOGES) to answer the link between the presence of dolphins, incidental catches and small pelagics.	Yes. Western Baltic: spawning stock biomasses as well as reproduction rates of spring spawning herring and cod are on low levels. Lower Saxony: no notable depletions.	Yes.	No.	Baltic Sea fishing resources are serious depleted. Both cod stocks in the Baltic Sea has collapsed in 2019. Also western herring is seriously depleted. In addition, even though salmon population is not in a very bad shape, its fishing quota has been significantly reduced in order to protect natural salmon populations in the Baltic Sea. Flatfishes and sprat are in better condition but also requires protective measures.		-

**2.2. Where are these depletions in national waters occurring?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
N/A	Kattegat, Southern North Sea	-	-	Belt Sea and Baltic West of Bornholm	Norwegian Sea, Eastern Gotland Basin, Gdansk Basin, Southern Central Baltic - East	N/A	Eastern Gotland Basin, Gdansk Basin Bornholm Basin, Arkona Basin, Baltic West of Bornholm, Southern Central Baltic - West, Southern Central Baltic - East		-

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
N/A	TAC regulation annually for fishing mortality.	-	-	Quota reductions in 2021 for Western Baltic cod and spring spawning herring. No direct fishery on cod (all gears) and herring (trawls) in 2022. Relevant driver: environmental condition, fishing mortality.	All stocks in the Baltic Sea are regulated on the basis of ICES advice on fishing opportunities.	-	TAC/Quota has been significantly reduced for most of the commercially exploited fish species. Since 2019 it is not allowed to carry out direct fishing for cod, directed fisheries for salmon has been banned for Central Baltic. Discussion on possible banning of eel catches is ongoing with BALTFISH. Other measures include work on selective gears with the aim to limit by-catch of cod when fishing for flatfishes.		-

**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)?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes. Circumstantial evidence from necropsies. For the last decade an increasing number of porpoises is diagnosed with death due to emaciation without other pathological processes as usually observed during necropsy (infectious diseases, parasitosis). An average of 10% of porpoises that are necropsied are suffering of emaciation and the most relevant explanation for such process is starvation. However, data need to be put together and factors possibly causing a bias (e.g. a reduction in animals that died due to bycatch) should be investigated. There is currently no link with any information about resource depletion.	No. Denmark is collecting samples of fat tissue from all marine mammals but at present there is insufficient data to analysis an actual impact of environmental impacts.	-	No.	No.	No.	Yes. Starvation is a cause of death that has been found for harbour porpoises that have stranded, in particular juvenile animals. However, it is not known if the cause of malnutrition is linked to resource depletion. See <a href="https://ede-pot.wur.nl/567080">https://ede-pot.wur.nl/567080</a> , English summary page 11.	No.		Yes. Evidence of starvation in several stranded cetaceans through necropsies performed under the strandings monitoring programme. However, it is not possible to confidently link this with resource depletion, as there are multiple drivers for nutritional loss e.g. disease, maternal separation etc.

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
No	Yes. The Department of Biology at University of Southern Denmark are conducting such studies using drones. For more information contact Magnus Wahlberg.	-	No	No	No	Yes	-		Yes. Body condition (e.g. nutritional condition, blubber thickness etc) is recorded for cetaceans investigated under post-mortem, although as in 2.4, there are multiple potential causes of nutritional loss such as disease, maternal separation etc. Some regional high-level assessment of body condition via aerial imagery and drone footage is also recorded, but not yet applied in a systematic way.

**2.6. Relevant new research/work/collaboration on resource depletion in your country.**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Monitoring in the frame of the CFP – DCF-MAP.	ICES advise provides annual stock status, see e.g. <a href="#">ICES advice 2021</a> .	-	In 2022, launch of research programme DELMOGES	No new research work in 2021.	Lithuania is a member of ICES. The most important research relevant to Lithuania on stock depletion and state is provided in the scientific report: <a href="#">DU CIEM, S.C.I.E.N.T.I.F.I.Q.U.E.S., 2021. BALTIC FISHERIES ASSESSMENT WORKING GROUP (WGBFAS)</a> . Survey on fish community in the coastal waters of the Baltic Sea in 2021 and assessment of the ecological status based on fish indicators.	-	Regular fisheries monitoring has been carried out within Data Collection Framework to assess the status of major commercially exploited fish stocks in the Baltic Sea. In addition, during reporting period, a complex, regular monitoring of pollutants, pressures and presence of different species of coastal fish, including their population status, has been carried out for the Puck Bay – area important for HP.		-

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
N/A. See reports from <a href="#">ICES</a> and <a href="#">OSPAR</a> , and monitoring in the frame of the CFP.	Unknown (HP). Some stocks have increased while others have decreased and how it affects the HP population is unknown as porpoises can eat allot of other non-commercial species.	-	Unknown.	Unknown. N/A. Staying the same: Lower Saxony: personal perception, Fish Monitoring Programs, ICES Stock survey.	Decreasing. The most important stocks in the Baltic Sea for Lithuania are: Eastern cod, Central Baltic herring, Baltic sprat. The fishery targeting Eastern cod (fishing fleet operating with bottom trawls) is prohibited with some exemptions from 2020 until 2022, because bad state of the stock. Baltic sprat and Central Baltic herring stocks relatively stable but fishery targeting these stocks (fishing fleet operating pelagic trawls) was shifted to the northern part of the Baltic (because bigger concentration of biomass) where the bycatch of HP probability is very low.	Unknown.	Unknown.		-

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

**9. Marine Debris (ingestion and entanglement)**

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes.		Yes.							

**9.1. (continued)**

<b>BE</b>	Monitoring in the framework of OSPAR.
<b>DK</b>	We are monitoring the content of waste in dead fulmars. The number of birds are very different from year to year with a very low number in 2021. We are also monitoring waste on beaches. In 2021, DK conducted a survey on marine plastic in sea mammals (Aarhus University).
<b>FI</b>	According to 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 reports waste volumes in accordance with environmental permits. <ul style="list-style-type: none"> <li>- 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. Monitoring is carried out through a citizen monitoring network. Seabed debris monitoring is being developed.</li> <li>- 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.</li> <li>- Quantities of waste: The sub-program collects information on the amounts of waste reported according to the environmental permits, e.g. ports.</li> </ul>
<b>FR</b>	MSFD/OSPAR beach surveys: CEDRE, Brest. Sea floor litter: trawl survey, fisheries survey (International Bottom Trawl Surveys, IBTS) by R/V Thalassa. Ifremer: Microplastics at surface: regular monitoring (MSFD related), though IBTS cruises: IFREMER visual surveys of floating marine litter from vessel and aircraft megafauna surveys conducted by Pelagis (SAMM-2; SPEE; Megascope; ...). Litter ingested by sea turtles (OSPAR Common Indicator and MSFD D10C3)+ sea turtle entanglement in debris (MSFD D10C4) : standard monitoring of quantities and effects on live and dead specimens by stranding networks and rescue centres.

<b>DE</b>	<ul style="list-style-type: none"> <li>- According to MSFD (2008/56/EC), Germany has established long-term monitoring for beach litter, seafloor litter and for the North Sea in addition for plastic particles in the stomachs of Northern fulmars. In addition, by means of various R&amp;D projects, new monitoring approaches and methods have been developed and tested for: beach micro and meso litter, remote sensing of floating litter, plastic material and entanglement in seabirds breeding colonies, lost angling gear, microplastics in feces and rectum of marine mammals, plastic fragments and particles in fish and mussels, sampling of microplastics in the water column. The final reports will be available on the Federal Ministry Agency <a href="#">website</a>. Several further scientific publications with results of these R&amp;D projects.</li> <li>- Assessment and implementation of long-term monitoring of pollution of diverse marine compartments and biota with marine litter.</li> <li>- Coherent monitoring of the pollution of marine and coastal waters and of the ecological consequences with a further focus on in-depth identification of sources.</li> <li>- Entanglement and ingestion of marine debris is recorded during necropsies. Furthermore, lesions are noted and recorded if they can be clearly assigned.</li> <li>- Within the framework of the project "Fishing for Litter" – a cooperative project between Lower Saxony, Schleswig-Holstein, NABU and Fishermen, the collected waste is sorted and documented to collect important information on the composition and origin of the waste.</li> </ul>
<b>LT</b>	<p>Macro-debris monitoring is carried out on beaches and on the seabed.</p>
<b>NL</b>	<ul style="list-style-type: none"> <li>- OSPAR Litter Monitoring Programme of beach litter: Data on the amount of litter on a given stretch of coastline is recorded at item level. Items to be recorded are predefined by the Guideline for Monitoring Marine Litter on the Beaches in the OSPAR Maritime Area (OSPAR Agreement 2010-02).</li> <li>- OSPAR Plastic particles in Fulmar stomachs in the North Sea: Two types of plastic categories are distinguished in the OSPAR Common Indicator. Industrial plastic pellets are separated from consumer debris such as sheets, foams, threadlike materials and hard fragments. For each of these categories the number of particles and mass is recorded. The final assessment is based only on the total weight of plastics in stomachs, but industrial and consumer waste plastics have different sources and as such provide very useful information for interpreting the monitoring data.</li> <li>- Dutch seafloor litter monitoring in the North Sea: monitoring programme developed to evaluate the state of marine waters (GES) within the MSFD for the Marine Litter descriptor. The Dutch monitoring program for this descriptor includes collection of data on the presence, abundance and distribution of macro litter on the seafloor. The data on seafloor litter must be collected during statutory task fish surveys using a standardised GOV Grand Ouverture vertical) fishing net as part of the International Bottom Trawl Survey (IBTS), which is carried out yearly in the North Sea. The results are uploaded to the ICES DATRAS database, and are used in OSPAR assessments of seafloor litter in the North Sea (Volwater and van Hal 2020).</li> </ul>
<b>PL</b>	<p>Monitoring on marine litter under the State Monitoring Programme is conducted since 2015 in Poland as a pilot monitoring between 2015-2017, and in regular basis since 2018. Monitoring covers beach litter, litter deposited on the sea floor and micro-litter in water and surface sediment. Data is collected according to guidance developed by Technical Group on Marine Litter (TG ML) acting under the joint Research Center (JRC) of the European Union in collaboration with the EU Initiative EMODNET Chemistry.</p>
<b>SE</b>	
<b>UK</b>	<ul style="list-style-type: none"> <li>- Benthic litter: Center for Environment, Fisheries and Aquaculture Science (Cefas) coordinate and undertake benthic trawl surveys within UK EEZ, which captures benthic litter data. For each trawl survey, various data are recorded. After each tow, fish were sorted, then all litter items were manually picked from the entire net, and classified according to the Cefas classification system.</li> <li>- Beach litter: Abundance of beach litter relies on data collected on a 100 m stretch of coastline during the annual Marine Conservation Society's Great British Beach Clean, which takes place annually on beaches Northern Ireland by Keep Northern Ireland Beautiful.</li> <li>- Floating litter: Floating litter is assessed through necropsy examinations of corpses of dead beached birds. At dissection, in addition to the date, the discovery location is specified. Industrial pellets are separated from consumer debris.</li> <li>- Marine debris ingestion/ entanglement: As part of its contract with UK government, the UK strandings programme routinely records and summarizes evidence of marine debris ingestion and/or entanglement found in UK stranded cetaceans which were subjected to post-mortem examination. The Scottish Marine Animal Stranding Scheme (SMASS) has developed an app which records levels of litter noted on surveyed sections of coastline. Abandoned, Lost or Discarded fishing gear is also being assessed via an ongoing project currently in its second phase.</li> </ul>

**9.2. Are these data publicly available?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes. <a href="#">OSPAR website</a> , OSPAR reports; <a href="https://odnature.naturalsciences.be/msfd/nl/assessments/2018/page-d10">https://odnature.naturalsciences.be/msfd/nl/assessments/2018/page-d10</a>	Yes. Monitoring of waste in general: Contact person: <a href="#">Jakob Strand</a> , Aarhus University. Marine mammals: <a href="https://dce.au.dk/udgivelser/tr/nr-200-249">https://dce.au.dk/udgivelser/tr/nr-200-249</a> (no 230)	No.	Yes. On request to data collector/providers <a href="#">DALI Ifremer</a>	No.	Yes.	Yes. <a href="#">Strandingsonderzoek</a>	Yes.		Yes. <a href="#">Abandoned/Lost/Discarded Fishing Gear</a> – Evidence review of abandoned, lost or otherwise discarded fishing gear. Data generated from Cefas benthic trawl surveys are available to download from the ICES hosted <a href="#">Trawl Surveys DATRAS Portal</a> .

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
-	-	-	CWB: 16 kg of plastic debris in stomach (Northern BoB).	In 2021 no cetaceans were found being impacted by marine debris.	-	None	None		In 2021: 1 CD in the Celtic Sea (Non-fatal and incidental ingestion (small fragment of red plastic cardiac stomach). 1 CD in the Channel (Non-fatal and incidental ingestion (two small plastic nurdles (~2 mm diameter) cardiac stomach).

**9.4. Are there any mitigation measures in place?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
There are a lot of ongoing national measures in place to reduce marine litter, ranging from reducing the use of plastics at the source, to beach cleanup campaigns, fishing for litter campaigns (fishermen) and the cleanup of a selection of shipwrecks. Some measures have been effective. <a href="#">Other information</a> .	Yes. General waste management incl. no open landfills etc. since 1990s. Measure has been effective. No special fee system in harbours since 2015. Measure has been effective as all waste from ships can be delivered at harbours without any additional costs.	No.	-	Yes. OSPAR Recommendations on: 1) Fishing for litter (2010/19), 2) Reduction of plastic pellet loss into the marine environment (2021/06), 3) Sustainable Education Programmes for Fishers (2019/01). Since 2010, 2019, 2021 in the Southern North Sea. Measures have been effective. Ongoing implementation of the following Directives: 1) Marine Strategy Framework Directive (2008/56/EC), 2) Directive on the reduction of the impact of certain plastic products on the environment (Single Use Plastics Directive – 2019/904/EC), 3) Directive on port reception facilities for the delivery of waste (2019/883/EC). Measures have been effective. Fishing for litter since 2004 in the Southern North Sea. It has been effective.	Yes. Dissemination of information on the damage caused by marine debris and appropriate behaviour in the marine environment. Promoting environmental education campaigns, conducting research and filling existing knowledge gaps, especially with regard to micro-waste. It is proposed that the use of single-use plastics should be kept to a minimum at major events on the seashores. It is proposed that litter containers adapted to the marine environment be used.	No. While there are no specific measures to mitigate marine debris as it relates to small cetaceans, a reduction in plastic pollution is part of the <a href="#">OSPAR Regional Action Plan</a> .	-		No.

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
<p>Action plan on marine litter by the government can be consulted <a href="#">here</a>.</p>	<p>Ministry for Food, Agriculture and Fisheries has organized and financed a project, where the main focus was on collecting lost and abandoned fishing gear in Limfjorden. The project started in June 2021 and ended in March 2022. Further, The Danish Fisheries Agency received a report from the National Institute of Aquatic Resources in March 2022 (<a href="#">Ghost Nets in Danish Waters</a>) In addition, DKK 9 million has been granted to strengthen the efforts against marine waste, where the main focus will be on collecting and preventing the so called ghost nets. Finally, new measures</p>	<p><a href="#">Finnish waste legislation</a> covers all wastes (except certain types such as radioactive wastes, covered in separate laws). Finnish waste legislation is largely based on EU legislation, but in some cases includes stricter standards and limits than those applied in the EU as a whole. Finland also has legislation on some issues related to wastes that have not yet been covered by EU legislation. The negative environmental impacts are also addressed in the legislation on environmental protection. The updated Programme of Measures of the Marine Strategy Finland 2022-2027 aims to improve the status of the marine environment and reduce pressures on it. The programme of measures gives an overview of the measures taken so far for improving the</p>	<p>Several laws that ban a list of single use plastics items: The legislation for Reclaiming biodiversity, nature and landscapes law (2016) has set up a ban for microbeads in cosmetics for 2018 and a ban for cotton-buds in 2020; the legislation for trade relations balance in the agricultural sector and healthy and sustainable diet (EGAlim, 2018) has planned a ban on plastic stirrers and straws in 2020, and a ban of food containers in collective catering for 2025; the legislation against waste and for a circular economy (2020) has defined a goal of zero single-use plastic by 2040, with targets for deposits, recycling and reuse.</p> <p>MSFD: the 1st cycle has been implemented since 2016, with various measures to prevent marine litter: Mobilizing of extended producer responsibility chains; Making an inventory of existing actions and experiences regarding river basins (study from the CEREMA); Evaluating the river inputs; Identifying new fishing gears that intend to prevent impacts in the marine environment; Identifying areas of accumulation of marine litter; Identifying relevant methods and good practices to collect macro-waste that can be immersed during dredging operations.</p> <p>Roadmap “zero plastic waste at sea”: defined in 2019, has planned 35 actions to prevent marine litter, structured in 4 main lines of actions: 1) The prevention of land-based plastic pollution; 2) The fight against litter in water-courses, sewage, storm water; 3) The fight against plastic waste on the coast and at sea; 4) Awareness-raising, information and education of the public through the associative network, a collaborative platform and a national</p>	-	<p>Abatement measures shall be periodically reviewed and updated. There is also a value for beach litter that defines good environmental status.</p>	<p>See above.</p>	<p>In the national waste management plan 2022, issues related to marine litter and sources of its formation, quantities produced and managed, objectives and directions of activities are described in chapters 2.4.5, 3.4.5, 4.4.5 and 5.4.5.</p> <p><a href="https://sip.lex.pl/akty-prawne/mp-monitor-polski/krajowy-plan-gospodarki-odpadami-2022-18334576">https://sip.lex.pl/akty-prawne/mp-monitor-polski/krajowy-plan-gospodarki-odpadami-2022-18334576</a></p>	<p>There are various litter strategies published, aiming to reduce waste entering the environment e.g. <a href="#">Strategy for England, Marine Litter</a>. This has resulted in changes such as plastic bag charges and ban on use of microbeads.</p>	

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
	are planned for recreational fishermen, where they will be required to report lost fishing gear.	status of the marine environment. It also sets out 63 new measures, which includes 11 measures to reduce debris both in land and sea.	charter. The Ministry is developing the national charter “Beaches without plastic waste”. Coastal municipalities are invited to sign this charter in order to implement 15 concrete actions of awareness raising, clean-up and prevention of marine litter on their beaches.						

**9.6. Relevant new research/work/collaboration on marine debris in your country.**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
<p>Overview of research into marine litter and microplastics: <a href="#">Overzicht van het onderzoeksland-schap en de wetenschappelijke informatie inzake (marien) zwerfvuil en microplastics in België</a>; <a href="#">Beleidsinformerende Nota: Overzicht van het onderzoeksland-schap en de wetenschappelijke informatie inzake (marien) zwerfvuil en microplastics in België</a>.</p>	-	<p>There are a several ongoing projects concerning marine litter such as MUPPE, BIPOD, POMERO; completed projects SUMMIT, MIF, UBINAM. There are lots of proposed actions/ measures and collect litter before it enters the sea. e.g., <a href="#">Zero Waste Finland</a> and ‘Satakolyt’ initiative, an interactive map that encourages city dwellers to clean up the entire 130km long shoreline of the Baltic Sea in Helsinki. Anyone can become a saviour of the Baltic Sea and announce on the map that they are organizing their own shore.</p>	<p>The PNMI will be involved in the Preventing Plastic Pollution (PPP) project: an INTERREG MANCHE France–England that focuses on plastic pollution by developing approaches geared towards rural &amp; coastal waters. French organisations are involved in 2 Interreg project dealing with marine litter in the framework of MSFD and OSPAR RAP: ‘Clean Atlantic’ focused on macrolitter and ‘OceanWise’ focused on expanded / extruded polystyrene EPS/XPS and alternatives (Cedre, University of Southern Brittany Lorient, SeaBird). A national research consortium dedicated on the fate of plastic in marine environment (Groupement de recherche GdR <a href="#">“Polymères et Océans”</a> has recently been created by the French national research center – CNRS).</p>	<p><a href="#">Round Table Marine Litter</a>; <a href="#">FONA – Plastics in the Environment</a>; <a href="#">Information webpage including education material from EUCC (in German) – The Coastal Union Germany e.V. (EUCC-D)</a>. Information brochure <a href="#">“Weniger Müll- Mehr Strand – Eine Meeremüllbrüche für die Ostsee”</a>. 6 additional scientific publications listed.</p>	<p>The Marine Research Institute of Klaipeda University is actively investigating the problem, therefore there is a focus group on this topic. The Institute currently has two national projects: 1) “Renewal of the Program of Measures and Measures to Achieve a Good State of the Baltic Sea Environment in Lithuania”; 2) “Marine litter monitoring”. Service contract for the preparation of guidelines for marine litter and one international project ‘Estimation, monitoring and reduction of plastic pollutants in the Latvian-Lithuanian coastal area via innovative tools and awareness raising’ (ESMIC) / Assessment, monitoring and reduction of plastic pollution in Latvia – Applying innovative measures and awareness raising at the Lithuanian seaside.</p>	-	-		<p>Data on marine debris ingestion in UK stranded cetaceans examined by CSIP/SMASS will be published in annual report appendices. Scottish Marine Animal Strandings Scheme Annual Report 2021 (in press). Cetacean Strandings Investigation Programme Annual Report, 2021 (in press).</p>

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Not applicable. We hardly ever find small cetaceans impacted by marine debris.	Unknown. But according to the report from Aarhus University the level is quite low in mammals.	Unknown.	Unknown.	Unknown. Please compare results of <a href="#">Marine debris in harbour porpoises and seals from German waters (2017)</a> .	Staying the same. State monitoring of the Baltic Sea and the Curonian Lagoon.	Staying the same. Marine debris do not seem to be a particular threat to harbour porpoises, based on the post mortem exams conducted. For several indicators (national and OSPAR) decreased values of litter have been demonstrated, but for some no decrease is shown.	Unknown.		Unknown. A very low incidence of marine debris ingestion and marine debris entanglement is recorded from necropsies of UK stranded small cetaceans with all cases during the reporting period representing non-fatal and incidental observations.

**Section III: Surveys and Research**

**A. Biological Information (per species)**

**1. Abundance estimates**

**1.1. Did your country conduct national dedicated surveys on abundance and distribution during the reporting period?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes. The National monitoring project in Belgian waters in 2021 (done yearly) on all marine mammals. The method used was Line transect + vertical imagery (strip transect). The animal abundance in June: 0,81 (0,52- 1,28) harbour porpoises/km <sup>2</sup> ; September: 0,78 (0,44-1,35) harbour porpoises/km <sup>2</sup> . Relevant information: <a href="http://www.marinemammals.be/reports">www.marinemammals.be/reports</a>	Yes. National monitoring of HP in July 2021 using aerial survey-line transect in Skagerrak and Southern North Sea. In general, the abundance estimated based on these surveys is stable in the Southern North Sea and decreasing in Skagerrak. In the Belt Seas national monitoring is conducted all year using passive acoustic monitoring on HP. In the Belt Seas, six Natura 2000 sites are monitoring and the detection rate in all 6 have increased since the beginning of the monitoring program in 2011.	Yes	Yes. Project SAMM-2: Using line transects in the winter/2021 on Bay of Biscay area for HP (abundance: 3416); BD (abundance: 8532) and CD (abundance: 186722). On Channel area for HP (abundance: 12685); BD (abundance: 4329); CD (abundance: 8911). Project SPEE-3: Using line transects on Central shelf Bay of Biscay: in progress. Comment: figures for CD apply for the complex Common/Striped dolphin. 100% CD in the Channel; 96% CD in BoB shelf; 85% CD in oceanic BoB.	Yes. Top Marine (National Monitoring) using line transect distance sampling in the North Sea in May 2021 obtained 7.836 (95%CI: 4144-12838) HP. In August 2021 identified 13.862 (95%CI: 7338-22037) HP. In the Baltic Sea in June 2021 identified 2.209 (95%CI: 773-3653) HP.  Using passive acoustic monitoring in the German Baltic Sea from Jan-Dec 2021 had no results.	No.	No.	-		No.

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Monitoring of HP using PAM to investigate the effects of offshore windfarms (operational phase).	-	-	<p>The Pelagis observatory conducted aerial observations to estimate the abundance and the distribution area of the CD population during the winter period (SAMM 2 campaign). <a href="#">SAMM2 final report</a> has been published.</p> <p>The observations took place from 11/01 to 25/03/2021 covering all the transects on the map. It is in total the realization of 208 hours of flight in 70 days on 25 000 km. 8,170 individuals were observed corresponding to 11 different species of marine mammals. 33 dead animals drifting were also counted during the overflights.</p> <p>Between now and the end of the year, the flight data collected will be analyzed: first, to evaluate the distribution area, then to estimate the abundance of the populations. The results will be compared to the 2011-2012 overflight campaign (Samm I), allowing to assess the evolution of the common dolphin population in the Bay of Biscay.</p> <p>STORMM digital support for visual observation, especially for distinguishing between CD and SD.</p>	<a href="#">Small cetacean in a human high-use area: trends in harbor porpoise abundance in the North Sea over two decades.</a>	The EIA Programme for the 'Installation and Operation of the Offshore Wind Farm of up to 700 MW Installed Capacity in Lithuania's Marine Territory' was signed in Sept 2021. Organiser (developer) of the proposed economic activity: Ministry of Energy of the Republic of Lithuania. Developer of the EIA Programme: Public Institution Coastal Research and Planning institute. To assess the impact of a wind farm on sea mammals will be conducted an assessment for small cetaceans in the survey area.	-	-		<p><a href="#">Distribution maps of cetacean and sea-bird populations in the North-East Atlantic.</a></p> <p>Joint Cetacean Data Programme (JCDP) is in development, to house existing and future sea cetacean monitoring data for future analyses in lieu of more regular widescale survey effort. Covid impacted the collection of data during 2021.</p>

**1.3. Is the abundance of species in your country increasing, decreasing, staying the same or unknown?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Not applicable. It is highly variable vs. the survey month, with a higher density in March and April than in June and September, and annual fluctuations.	Staying the same for HP. Based on data from SCANS-II, MiniSCANS, SCANS-III and MIniSCANS- II it seems that the abundance is stable.	Unknown.	Staying the same: CD, BD (based on SAMM-1&2 survey). Increasing: HP (based on SAMM-1&2 survey).	Decreasing.	Unknown.	Staying the same. Dedicated national aerial surveys since 2010 do not show a trend. National multi-species aerial surveys suggest an increasing trend, whereas shore-based sea watching data and strandings data point at a decrease in the last years.	-		Unknown. Nature of evidence: for all species comes from Article 17 (2019) assessments. Assessments will be updated via the OSPAR QSR23 indicator assessments; following SCANS IV surveys in June/ July 2022; and through analysis of the JCDP collated dataset.

**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?**

	BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Age of sexual and physical maturity				✓						
Inter-birth intervals				✓						
Calf and adult mortality				✓						
Potential reproductive span/ capacity										
Longevity										
Diet	✓			✓	✓		✓			
Age and sex structure				✓	✓					
Other relevant factors		✓		✓						

**2.1. (continued)**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Diet: study on stomach content of HP.	Other: blubber thickness is measured on stranded or bycaught HP.		Diet: in progress for CD. Age distribution and sex ratio (CD). Other: temporal variation in vital rates and effect of covariates (CD).	Diet: Stomach content analysis of 61 HP. Age & sex structure: 58 investigated HP carcasses.		Diet: Stomach contents in HP.			

**B. Monitoring Programmes**

**3. Overview of current monitoring and survey schemes**

**3.1. Did your country have national monitoring programmes that enabled 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) during the reporting period?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes. Within MPAs for HP, the approach: line transect surveys and PAM (institution: RBINS; strandings scheme with other institutions involved). For wider seas, also line transect surveys	Yes. Within MPAs for HP - PAM. For wider seas, line transect surveys.	No.	Yes. Within MPAs: line transect surveys, photo-ID, strandings, PAM. Wider Seas: line transect surveys and strandings by	Yes (HP). For both within MPAs and wider Seas: Schleswig-Holstein: <a href="#">ITAW/TiHo</a> - line transects, strandings and PAM. Lower Saxony: <a href="#">National Park Authority Lower Saxony</a> - strandings. Mecklenburg-	No.	Yes.	Yes.		Yes. Within MPAs: The Cetacean Strandings Investigation Programme (CSIP) and Scottish Marine Animal Strandings Scheme (SMASS) monitored strandings of all small cetacean species. Wider Seas: CSIP and

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
and PAM (institution: RBINS; strandings scheme with other institutions involved; VLIZ Lifewatch network).	Institution: Aarhus University		OFB, Observatoire Pelagis.	Western Pomerania: German Oceanographic Museum, Stralsund - PAM and strandings.					SMASS monitored the strandings of all small cetacean species.

**3.2. Please provide the relevant information regarding aerial surveying activities.**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
2 surveys, Belgian waters covered, HP, June, September.	Results are mentioned under “abundance estimate”.	-	SAMM-2, SPEE-3. The Pelagis observatory conducted aerial observations to estimate the abundance and the distribution area of the common dolphin population during the winter period. The observations took place from 11/01 to 25/03/2021 covering all the transects on the map. It is in total the realization of 208 hours of flight in 70 days on 25 000 km. 8,170 individuals were observed corresponding to 11 different species of marine mammals. 33 dead animals drifting were also counted during the overflights.  Between now and the end of the year, the flight data collected will be analyzed: first, to evaluate the distribution area, then to estimate the abundance of the populations. The results will be compared to the 2011-2012 overflight campaign (Samm I), allowing to assess the evolution of the CD population in the Bay of Biscay.	6 surveys on HP covering German EEZ of the North Sea and Baltic Sea area between March-August.	N/A	WMR-aerial surveys marine mammals: monitoring scheme from annual summer surveys to three-annual summer and spring surveys, plus six-yearly SCANS surveys. Due to covid, no annual surveys in Dutch waters after 2019. SCANS-IV is due in 2022. MWTL-aerial surveys bird and marine mammals: monitoring scheme with annual surveys in a six periods a year.	HP has been monitored under the State Environmental Monitoring since 2015. Currently, the 2016-2018 results available. The results for 2021 will be available in the second half of 2022.		N/A

**3.3. Please provide the relevant information regarding Passive Acoustic Monitoring (PAM).**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
PAM using C-PoDs – assessment of the impact of operational wind farms; assessment of spatial and temporal changes in HP activity in throughout the Belgian part of the North Sea.	5 stations are deployed for a year in each of six Natura 2000 sites. The third full year of PAM in the 6 sites were completed in 2021.	PAM of HP is ongoing in southwestern offshore area of Finland since 2016, in 13 permanent positions. C-POD is used as instruments. Monitoring is ongoing.	N/A	Specific locations and timeframe of the HP using CPOD in the provided excel sheet. <a href="#">Positions PAM Baltic Sea</a>	N/A	PAM monitoring of the Borssele wind farms has taken place since the construction phase in 2019 /2020, and will continue to 2024/2025. This monitoring falls under the umbrella of the national overarching WOZEP programme, aimed at studying ecological effects of offshore windfarms.	The analysis of the PAM data showed a higher mean value of positive detection in the national monitoring than in SAMBAH project. Obtained the results prove the regular occurrence of HP in Polish sea areas. It has been shown that HP occur regularly at monitored research sites throughout the year.		N/A

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes. Aerial survey results shared for a wider assessment (a.o. for OSPAR QSR purposes).	No, but the methods are discussed and aligned as much as possible among neighbouring countries.	Yes. Ongoing direct discussion with Sweden, Denmark and Germany.	No.	No.	No.	Yes. The SCANS survey will be conducted in collaboration with all European countries bordering European shelf waters.	No.		No.

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
N/A	SCANS-IV in July 2022.	-	SCANS-IV 2022; CAPECET movement of CD within BoB in the context of bycatch; survey within MPA in BoB and Channel; Megascopie: routine monitoring from fish survey cruises Pelgas, EHVOE, CGFS, IBTS by Ifremer.	National monitoring program (surveys and acoustic monitoring) are continuing. SCANS IV survey is planned for July 2022 (coordinated by ITAW).	N/A	-	-		N/A

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
N/A	In the Belt Seas, 6 Natura 2000 sites are monitoring and the detection rate in all have increased since the beginning of the monitoring program in 2021.	HP occurs regularly in the monitoring area, but in very low numbers.	N/A	Results of Aerial Surveys and Passive Acoustic Monitoring Programs: <a href="#">Results Survey</a> , <a href="#">Sightings Maps Balt Sea</a> , <a href="#">Results PAM</a> .	N/A	-	-		N/A

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

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Health status monitoring since 1990, Dept of pathology, University of Liege: investigation of causes of death: necropsy, histopathology, and detection of selected pathogens	<a href="#">The use of marine waters of Skåne by harbour porpoises in time and space (2022)</a> ; <a href="#">Estimating the abundance of the critically endangered Baltic Proper harbour porpoise (Phocoena phocoena) population using passive acoustic monitoring (2022)</a> ; <a href="#">Heart rate and startle responses in diving, captive harbour porpoises (Phocoena phocoena) exposed to transient noise and sonar (2021)</a> ;	N/A	N/A	Mini SCANS by ITAW (DE), Aarhus University (DK), Naturhistoriska riksmuseet (SWE) 24 June 2020 - 10 July 2020. The aim: assessment of the Belt Sea population of HP using line-transect distance	N/A	1) The NZG Marine Mammals database is part of the Dutch Seabird Group (NZG). It includes collection of cetacean sightings but is not maintained anymore. 2) Sightings of cetaceans are entered in <a href="#">waarneming.nl</a> (observation.org). 3) Strandings (live and dead) are collated by NATURALIS in a <a href="#">database</a> that is linked to the <a href="#">waarneming.nl</a> . 4) Sea-watching data systematically collecting cetacean data are available <a href="#">here</a> . 5) The	-		See outputs under UK Stranding Programmes (Section IV, 1.10)

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
(Brucella sp, Morbillivirus, Influenza, Herpesvirus,...)	<a href="#">Echolocation activity of harbour porpoises, Phocoena phocoena, shows seasonal artificial reef attraction despite elevated noise levels close to oil and gas platforms</a> (2021); MiniSCANS-II: Aerial survey for harbour porpoises in the western Baltic Sea, Belt Sea, the Sound and Kattegat in 2020 (2021); “Bycatch of marine mammals and seabirds - Occurrence and mitigation” (2021), DTU Aqua Report no. 389-2021.			sampling methodology. Results: <a href="#">MiniSCANS-II: Aerial survey for harbour porpoises in the western Baltic Sea, Belt Sea, the Sound and Kattegat in 2020</a> .		Rugvin Foundation is a volunteer-based organization conducting cetacean surveys in the Southern North Sea and Eastern Scheldt and member of the Atlantic Research Coalition (ARC) European Cetacean Monitoring Coalition (ECMC). They also do photo identification work on harbour porpoises in the Eastern Scheldt. 6) Pilot project to investigate whether is possible to distinguish between calf and adult harbour porpoises based on their click characteristics. Eventually this could lead to development and/or improvement of an algorithm that can be applied to existing databases.			

## Section IV: Use of Strandings Records

### A. Stranding Networks and Strandings

#### 1.1. Is there a national stranding network in place?

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes. RBINS organises the collection of useful animals and provides them to veterinary surgeons (universities of Ghent and Liège) for investigation. Some animals are investigated on the spot and discarded. Samples are	Yes. The network is coordinated by Denmark’s museum of the sea in Esbjerg. Other collaborators are Copenhagen University, Aarhus University, Ministry of the Environment, the Nature Agency, DTU and Aalborg University.	No.	Yes. The French stranding network is co-ordinated by the Joint Service Unit <i>Observatoire Pelagis</i> , UAR 3462 University of La Rochelle/CNRS, dedicated to monitoring marine mammal and seabird populations and funded by the Ministry in charge of the environment and the French Agency for Biodiversity. It is constituted of around 400 trained volunteers distributed along the French coast who collect data	Yes.	No.	Yes. Naturalis: available at <a href="#">Walvisstrandingen.nl</a> (This website provides an overview of cetaceans stranded along the Dutch (North Sea) coast. It includes also partial and fossil strandings and live strandings.	No.		Yes. The collaborative Cetacean Strandings Investigation Programme (CSIP) and the Scottish Marine Animal Strandings Scheme (SMASS) are contracted to collect/ collate, analyze and report data on all cetacean strandings around the UK coast; and to understand post-mortem examinations on a proportion of stranded animals to learn more about the anthropogenic pressures these species face in UK waters. The CSIP is contracted by Defra and the Devolved Government of Wales to investigate strandings around the coast of Scotland. Partner organizations of the CSIP are the Institute of Zoology, Zoological Society of London (ZSL), the Natural History Museum (NHM), Marine Environmental Monitoring (MEM), Cornwall

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
distributed for further analyses.			according to a standardized observation and dissection protocol.						Wildlife Trust Marine Strandings Network (CWTMSN) and Cornwall Marine Pathology Team (CMPT).

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Whole coastline.	Whole coastline. If a marine mammal is found the Natura Agency should be contacted and they will make sure that the stranded animal is included in the network database.	N/A	Whole coastline.	Whole coastline.	-	Whole coastline. The stranding network has a coverage of the whole coastline. There are some areas, such as the Wadden Sea, that has likely lesser effort than other areas.	N/A		N/A

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes. On around 30% of the stranded HP, and almost 100% of other species.	Yes. DK has the funding to conduct 25 necropsies on HP each year. All larger whales are also necropsied.	N/A	Yes. The presence of epidermis and intact viscera in very fresh to slightly decomposed carcasses allowed the observers to carry out the full sampling protocol and therefore establish the cause of death, as defined in Van Canneyt et al.(2015), inspired by Geraci and Lounsbury(2005)). Necropsies are carried out on 5 to 10% of individuals found stranded.	Yes	-	Yes. Necropsies are carried out on at least 50 stranded HP per year. Other cetaceans are also necropsied on an ad-hoc basis.	N/A		Yes. All cetacean post-mortem investigations (including tissue sampling) in the UK during 2021 were conducted using standardized and systematic necropsy procedures. More details: ASCOBANS/ACCOBAMS 2019. “European Best Practice on Cetacean Post-mortem Investigation and Tissue Sampling”.

**1.4. Is there a database of strandings?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes.	Yes.	Yes.	Yes.	Yes.	No.	Yes.	Yes.		Yes.

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes. <a href="http://www.ma">www.ma</a>	No. It is updated by Denmark’s museum of the sea in Esbjerg.	Yes	Yes. Elementary data (species, date, location of stranding) are	Yes	N/A	Yes. Data on stranded cetaceans (dead & alive, and including fossils) can be found at	Data has been collected by Prof. Krzysztoaf Skóra Hel		No. The current <a href="#">CSIP web accessed relational database</a> facilitates the entry of data on UK stranded cetaceans, marine turtles, large bodied sharks and seals by partners within the

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
<a href="http://rine-mam-mals.be">rine-mam-mals.be</a> , up to date to 2020.	They also publish the annual data, but they are a few years behind. This means that the numbers reported here are from 2019.		freely available <a href="#">online</a> . More detailed data are sent <a href="#">on request</a> , following a data sharing agreement.			<a href="http://www.walvis-strandingen.nl">www.walvis-strandingen.nl</a> . It is hosted by Naturalis. Information on the necropsy results can be requested from the University of Utrecht.	Marine Station, University of Gdansk through external projects and statutory activities. Available through HELCOM/ASCOBANS database.		CSIP consortium. Although not currently public facing, project is underway to facilitate direct display and access to data by the public and other stakeholder (anticipated delivery 2023). Regional web accessible databases and offline databases are also held by the SMASS and the Cornwall Wildlife Trust Marine Strandings Network.

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

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Necropsies are performed at the Universities of Ghent and Liège.	-	For database, the Ministry of Environment is responsible. Live-strandings & collection of carcasses will be conducted in ad-hoc basis. <a href="#">The Finnish Food Authority</a> is responsible for conducting necropsies.	Joint Service Unit <a href="#">La Rochelle University /CNRS</a> responsible for responding live strandings, collection of carcasses, necropsies and stranding database.	Lower Saxony: Stranding database is done by the National Park Authority. Responding to live-strandings and collection of carcasses are performed by the Seehundstation Norddeich. Necropsies are performed by LAVES. Schleswig-Holstein: Responding to live-strandings and collection of carcasses are performed by SH: Institute for Terrestrial and Aquatic Wildlife Research, University of Veterinary Medicine Hannover and SH (within National Park): National Park Administration. Necropsies are performed by the SH: Institute for Terrestrial and Aquatic Wildlife Research, University of Veterinary Medicine Hannover. Stranding database is done by the SH: Institute for Terrestrial and Aquatic Wildlife Research, University of Veterinary Medicine Hannover and Schleswig-Holstein Ministry of Energy, Agriculture, the Environment, Nature and Digitalization (MELUND). Mecklenburg Western Pomerania: The Deutsches Meeresmuseum is responsible for responding to live-strandings, collection of carcasses, necropsies and stranding database.	The Lithuanian Sea Museum would be an authority for all above mentioned responsibilities (responding to live-strandings, collection of carcasses, necropsies, stranding database).	No new institutions.	-		In addition to institutions recorded in previous ASCOBANS reports, updated contact details are also given for SMASS (now hosted by/at the University of Glasgow): coordinates strandings investigation in Scotland; Cornwall Marine Pathology Team (moved from previous host University of Exeter) - coordinates strandings investigation (necropsies) in Cornwall, alongside CWTMSN (strandings data collection & coordination).

**1.7. Were cases photographed, measured or sampled even if not collected for necropsy during the reporting period?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes. Images available	Unknown.	No	Yes. Photographs are part of the	Yes.	No.	Yes. The volunteers working in the stranding	Yes.		Yes. Photographs from a majority of UK strandings events (including those not recovered for necropsy) are routinely sent to national and regional stranding network/s from members of public, local authorities, and other reporting

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
for >60% of stranded animals.			stranding protocol.			network collect photographs and measurements of stranded animals. These can be accessed at <a href="http://www.walvis-strandingen.nl">www.walvis-strandingen.nl</a> .			bodies. In addition, in Scotland, the SMASS strandings volunteer network collects photos, data and samples from a large number of non-necropsied animals. In Cornwall, the CWTMSN volunteer scheme routinely photographs and records morphometric data from non-necropsied animals, also conducted alongside its Bycatch Evidence Evaluation Protocol (BEEP) programme. In the rest of England and Wales, ad-hoc collection of samples takes place on rarer species, through contacts with volunteers from British Divers Marine Life Rescue (BDMLR) and other voluntary and statutory bodies.

**1.8. Were there recorded stranding events in your country during the reporting period?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes. Total of 78 HP, of which 74 were dead, 4 alive. All live stranded animals died quickly after stranding; some were transported to a rehab facility.	Yes. 56 stranded and 3 by-caught HP, all dead. 2 stranded WBD in the Southern Sea were found dead. 1 stranded Humpback whale in Skagen was found dead. 2 stranded LFPW were found dead.	No.	Yes. 1417 small cetaceans (of which 113 live stranded). In Northern BoB, most were CD: 719 stranded (678 dead, 42 alive, 5 found stranded dead after being seen stranded alive). 78 BND (38 dead, 40 alive, 6 found dead after being seen stranded alive); 58 HP, 24 SD, 5 LFPW, 1 RS. In The Channel, most were CD: 180 stranded (164 dead, 16 alive, 2 dead after being seen stranded alive). 186 HP (185 dead), 10 BND, 6 SD, 3 RS, 1 LFPW.	Yes. 401 HP dead stranded. Lower Saxony: 50 HP. Schleswig-Holstein: 190 HP in the Belt Sea + 89 HP in the Southern North Sea. 1 WBD in the Southern North Sea. 1 CD in the Belt Sea. Mecklenburg Western Pomerania: 72 HP in the Arkona Basin.	No	Yes. 2020: 433 HP (of these 21 alive), 1 BND. 2021: 714 HP (of these 12 alive), 1 BND, 1 WSD.	Yes. 2021: 2 dead stranded HP in the Eastern Gotland Basin. 14 dead stranded HP Bornholm Basin.		Yes. N=984 small cetaceans (903 dead strandings; 81 live strandings). Most were HP (483), CD (279). BND: large scale mass stranding recorded at Nigg Bay, Highland, Scotland on 14 <sup>th</sup> August 2021, accounting for all live stranded individuals. (n=57, 21 dead, 36 alive). Further details are available in the 2021 SMASS annual report. AWSD: mass stranding recorded at Bayhead, Stornoway, Western Isles, Scotland on 8 <sup>th</sup> August 2021, accounting for all live stranded individuals. (n=12, 3 dead, 9 alive). Further details are available in the 2021 SMASS annual report. Annual stranding figures above are given for the UK as a whole. Specific OSPAR regions not detailed as it would be too complex to provide a breakdown over the six regions across the UK. The UK strandings programme also records data on cetaceans found entangled in gear or floating dead at sea (n=34 small cetaceans, 2021). A number of indeterminate identity small cetacean species were also recorded during 2021 (data not presented above).

**1.9. Were any necropsies conducted during the reporting period?**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Yes. Standard protocol used; 30 HP necropsied, but for some animals that remained uncollected a probable cause of death is known; 30 animals with a known cause of death: 15 killed directly or indirectly by grey seal, 3 bycaught, 12 infectious disease or starvation.	Yes. 2019 data: 14 HP were necropsied but revealed no signs of serious infectious diseases and all were tested negative for morbillivirus.	No.	Yes. On 1417 small cetacean strandings, 61 animals were necropsied. <a href="#">Marine mammals stranding: guidelines for post-mortem investigations of cetaceans &amp; pinnipeds</a> . 33 CD (23 bycatch); 13 HP (7 bycatch); 10 BND (7 death due to stranding alive); 3 CBW (2 with pathological evidence, 1 traumatic cause due to gastric obstruction by macroplastics). 1 PW, 1 SD: pathological cause. On 1417 individuals, 1175 have been examined by a member of the network. The code of decomposition allowed an external examination on 36% of these animals. Among them, 291 CD were examined with 250 showing bycatch evidence (86%); 91 HP with 49 showing bycatch evidence (54%); 22 BND with 5 showing bycatch evidences (23%); 10 SD with 1 showing bycatch evidences (10%).	Yes. Lower Saxony: 3 carcasses, standardized protocol for the dissection of marine mammals of LAVES based on ITAW protocol. Cause of death identified: head trauma, endoparasitosis. Schleswig-Holstein: 289 carcasses were dissected according to Siebert et al. (2001), IJseldijk et al. (2019). Mecklenburg Western Pomerania: 58 carcasses were dissected using standardized protocol. The cause of death: suspected by-catch, parasitosis, unknown (n=41; 70.7% decomposition), age, birth related cause of death, pneumonia, tumor process. Many carcasses from 2021 are still stored frozen and are not investigated yet.	No.	Yes. The necropsies follow the protocol described in earlier reports. In 2021, 54 dead HP were examined: 35 males and 19 females, divided as 24 adults, 23 juveniles and 7 neonates. There were an additional three fetuses found. Most of the examined HP died as a result of infectious diseases (39%) and grey seal attacks (20%). Bycatch was the most likely cause of death for 7 HP (13%) and 5 other died following trauma of unclear origin (9%).	No.		Yes. Protocols: ASCOBANS/AC COBAMS 2019. "European Best Practice on Cetacean Post-mortem Investigation and Tissue Sampling". 102 carcasses necropsied in 2021 (all small cetacean species). Various causes of death and large number of samples collected. Further information and detail is available in CSIP and SMASS annual reports for the period.

**1.10. Other relevant new research/ work/ collaboration on strandings and stranding networks in your country.**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
-	N/A	Work under MSP has been very active in Finland during the last few years. <a href="#">Scenarios for maritime areas 2050</a> : These are descriptions of the possible and alternative futures of the operating environment in Finnish maritime areas until 2050.	Four sessions of necropsied (with teleneuropses organized by Etienne Levy from onehealth photography) were organized including veterinarians of the network, under the expertise of Thierry Jauniaux (Faculty of veterinary medicine, Liège, Belgium) and Sophie Labrut (LABOCEA, Ploufragan, France).	-	N/A	-	-		15 peer reviewed papers; 1 PhD thesis; 5 Reports (see <a href="#">UK 2021 NR</a> ).

**Section VII: Other Matters**

**A. Other information or comments important for the Agreement**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
-	-	N/A	-	After federal elections at the end of the year 2021, a new German Government was established. The new Ministry of Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) is under the lead of Minister Steffi Lemke, who had shown already in the former parliamentary period a special interest in marine conservation issues including cetacean/ harbour porpoises.	-	-	-		-

**B. Difficulties in implementing the Agreement**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
-	It is a slow process to develop and implement indicators of the EU MSFD. Once implemented, these will hopefully provide a framework, that will ensure progress in protecting this species. The lack of sufficient information on bycatch covering both the Baltic and the Belt Sea population makes it impossible to assess the treat level and decide on mitigations (not covered by subjects in this report).	N/A	-	No difficulties.	-	-	-		Covid has posed significant issues with implementation, both in terms of carrying out planned, and funding new projects.

**C. Burning Issues**

BE	DK	FI	FR	DE	LT	NL	PL	SE	UK
Negotiations ongoing within Belgium and with the Netherlands to find a suitable solution for the interventions in case of live stranded harbour porpoises and other small cetaceans.	Ensure funding for SAMBAH-II. It is essential that we gain more information on this critically endangered population of harbour porpoises, so that management can be implemented to project the population.	N/A	N/A	No burning issues.	-	-	-		-