REPORT OF THE 9TH MEETING OF THE ASCOBANS NORTH SEA GROUP

Online Meeting
20-21 January 2021

Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas

Contents

REPORT OF THE 9TH MEETING OF THE ASCOBANS NORTH SEA GROUP

1. Opening of the Meeting

1.1. Welcome and announcements

ASCOBANS Coordinator, Jenny Renell, welcomed everyone and honoured the recent passing of Robert Vagg, CMS English-language Editor and Report Writer. She then explained that this virtual meeting would be recorded and a report prepared post-meeting. She ran through the Online Meeting Protocol. The Chair, Peter Evans (Sea Watch Foundation), called the ninth meeting of the North Sea Group[1] (NSG) to order. He paid tribute to Robert Vagg and the participants marked his passing with a minute's silence.

1.2. Adoption of the Agenda

The agenda was adopted as presented in ASCOBANS/NSG9/Doc.1.2a (provisional agenda) and ASCOBANS/NSG9/Doc.1.2b (provisional annotated agenda and schedule), with the Secretariat noting that Agenda Item 4.4 should be the "Update from the Wadden Sea" and 4.5 should be "New Surveys."

2. Implementation Review: Bycatch estimations (Actions 2, 3 and 4)

2.1. Implementation of existing regulations on bycatch of cetaceans (Action 2)

The Chair introduced the item and conducted a tour-de-table to review what was happening in each country.

Jan Haelters (Belgium) said Belgium only has a few vessels. They had seen lower numbers of harbour porpoises stranded and diagnosed as being by-caught but this could also be due to lower numbers of harbour porpoises inshore. He highlighted bycatch of seals in the recreational fishery and some bycatch in professional fisheries close inshore.

Meike Scheidat (the Netherlands) noted that there are few small vessels (<15m) and so far, no reported bycatch. Patricia Brtnik (Germany) said that Germany only has a couple of small vessels in the North Sea and therefore there is limited observer coverage. There have been no bycatch reports since 2017. Signe Sveegaard (Denmark) said a report would be forwarded to the NSG shortly but that there are only few boats in the North Sea which are large enough to qualify for the observer scheme.

Sara Königson (Sweden) reported that there are only a few boats of >12m that need to have pingers so instead Sweden had a voluntary programme up to 2020, with 14 fishermen using pingers in cod and lumpsucker fishing. A South Baltic Sea implementation project is currently paused due to the cod fisheries ban in force mainly in the south of Sweden, and there is now evidence of decreased gillnet efforts. She showed a graph indicating a dramatic increase in seal damage linked to the decrease in effort in the south of Sweden.

Kelly Macleod (the United Kingdom) reported that the UK has implemented Council Regulation (EC) 812/2004 (measures concerning incidental catches of cetaceans), with 24-26 vessels in the UK required to use pingers. There is a high level of compliance, with UK authorities making regular

[1] Steering Group of the ASCOBANS Conservation Plan for Harbour Porpoises (*Phocoena phocoena L.)* in the North Sea (i.e. North Sea Plan).

inspections and monitoring, but 2020 data were not yet available. On questions from the Chair: Ms Macleod did not think that foreign vessels coming into UK waters are inspected for pinger use; and said it is too early to know how Brexit will affect measures and activities, but that in the short term the UK continues to operate according to the EU legislation for the purposes of the NSG and, at the national level, the cetacean monitoring programme is required to prepare an annual report and data will be contributed to the ICES data pool. Eunice Pinn (Seafish) confirmed regarding post-Brexit that all the current EU legislation has at this stage been rolled over as is.

2.2. Establishment of bycatch observation programmes (Action 3)

The Chair conducted a tour-de-table to ascertain what was happening in each country, noting some had already included a report on this item under agenda item 2.1.

Mr Haelters said Belgium does not have any observation programme on static gear fisheries. Ms Scheidat reiterated that there is inadequate monitoring of small vessels in the Netherlands. There had been some interviews carried out in an effort to monitor recreational gillnets given there have been some recordings of bycatch and it was not clear how best to monitor such gillnet fisheries given their small size. Anne-Marie Svoboda (the Netherlands) reported on a new international bycatch project, noting that a proposal aimed at LIFE funding will be circulated to interested countries and hoping that this will be discussed at the Joint Bycatch Wotking Group meeting in February 2021. Marije Siemensma (the Netherlands) emphasized the project is about working together with the NSG and focusing on how to monitor small-scale gillnet fisheries. The Chair and Fabian Ritter (Whale and Dolphin Conservation, WDC) emphasized the need for monitoring of small scale fisheries, not just bycatch but fishing effort more broadly. Ms Brtnik and Ms Sveegaard said Germany and Denmark respectively do not have any observer schemes for small scale fisheries in the North Sea.

Ms Königson reported on the continuing Data Collection Framework (DCF) observer schemes in Sweden relating to landings and discards of marine mammals and birds in gillnet fisheries. She regretted that there was little data for 2020 due to COVID regulations but reported on: ongoing observer schemes on trawl and pot fisheries; the 2017-19 dedicated programme for gillnet fisheries for sea mammals and birds; and a pilot voluntary camera project set up in 2020 with initially around 5 fishermen using cameras on small vessels in return for a small fee, noting there are now 11+ fishermen interested in participating.

Ms Macleod reported serious disruption of activities under the dedicated bycatch programme run by the Sea Mammal Research Unit in 2020 due to COVID. The contract for this monitoring ends in April 2021, and DEFRA is working on the continuation of the programme. On CEFAS-led monitoring work, which started in 2019, she reported on testing the efficacy of self-reporting by skippers on vessels in the English Channel, with 6 gillnetters under <10m using an app called SeaCatch to record their bycatch of mammals alongside CCTV cameras on the vessels. The UK had fisheries observers collecting bycatch data through the ongoing DCF scheme. There was evidence the skippers are using the app, but there are insufficient data as yet so it could be some time before reports are forthcoming.

Ms Königson reported that the Swedish camera project comparison of the camera data with fishermen's reports on bycatch demonstrated that they matched well whilst Ms Macleod flagged concerns that the presence of cameras may influence the fishermen's behaviour. Ms Siemensma suggested it is very much a question of trust and motivation. Ms Sveegaard highlighted a Danish report suggesting that 20% of the bycatch is missed as they drop out or are missed by the fishermen. Mark Simmonds (HSI) stressed the importance of independent verification, querying whether the data were trustworthy and might lose their veracity in the future. Ms Macleod said in a number of such discussions with fishermen and stakeholder groups in the UK, many were keen to cooperate. Several emphasized the value of building trust and developing measures to get fishermen more directly involved.

2.3. Regular evaluation of all fisheries with respect to extent of harbour porpoise bycatch (Action 4)

Mr Haelters reported minimal levels of bycatch in Belgium except those based on stranded animals. Members for the Netherlands, Germany, Denmark, Sweden and the UK said that the latest reporting figures had been sent to the International Council for the Exploration of the Sea (ICES) so were not available for this meeting. Ms Macleod had no updated estimates for the UK for 2020, although it would be possible in the long run to provide estimates as it is a long-term programme. The 2020 estimate would be different primarily because of the atypical fishing effort for that year.

2.4. Review of current pingers, development of alternative pingers and gear modifications (Action 5)

The Chair introduced this item, asking each country to report on current mitigation measures to reduce harbour porpoise bycatch.

Ms Siemensma reported that, given small vessel sizes, there is no pinger or gear modification requirement in the Dutch fisheries. The Chair suggested that under Regulation 2019/1241 a country is now free to choose the most appropriate pinger specifications, with Ms MacLeod later noting that in fact a new implementing regulation (2020/967) was introduced in July 2020 that reinstates the annexes to the previous regulations specifying the types of devices to be used.

Ms Brtnik provided updates from the STELLA project in the Baltic Sea, highlighting an initial publication with promising results from the use of different modifications, including gillnet acoustic visibility. Further publications are upcoming and a follow-up project (STELLA 2) was under discussion. On porpoise alerting devices (PAL), she referred to a publication summarising results from 2014-16. In spite of variable results, there have not been any modifications made to the PAL system, and an upcoming PAL monitoring project (with 2000+ devices applied in the Baltic Sea) will commence in Spring/Summer 2021. While welcoming the STELLA project, Mr Ritter regretted delays in political action. Ms Brtnik agreed that the progress has been slowed to wait for the results but said that for the central Baltic populations, consultations are in motion with ICES on new and strong measures.

Mr Haelters reported no mitigation measures for bycatch of harbour porpoises in Belgium as so few fishermen use gillnets. He highlighted, however, the large number of seals caught and wondered if there could be a combined action for seals and porpoises. Ms Sveegaard said that approximately 20 fishermen are obliged to use pingers in Danish waters, and DTU Aqua are currently testing measures for efficacy to review possible changes. On pingers, Ms Königson referred to the HELCOM ACTION project on pinger cost-benefit calculations that was carried out with DTU Aqua, as well as a 4-year review of the efficacy of other mitigation measures including experimental fisheries evaluating the efficacy of Future Ocean 70kHz and banana pingers; the STELLA project on pearls on gillnets; and a programme evaluating alternative fishing gears such as fyke nets.

Ms Macleod said that the UK continues to use Acoustic Deterrent devices (DDD-03L) on larger gillnet vessels in the North Sea. She also highlighted some trials on 3-5 vessels <10m length testing the use of Fishtek LEDs and two types of pingers, and their ability to reduce bycatch – a Fishtek 50-120 kHz pinger and the Future Ocean 70kHz, which were both marketed as seal-safe options. The trials had been disrupted by COVID. There were ongoing twine trials being run by the Sea Mammal Research Unit, and initial results show that the lighter twine gillnets have lower seal bycatch but are more likely to be damaged easily.

Fiona Read (WDC) presented on an ASCOBANS contracted study *Cost-benefit analysis for mitigation measures in fisheries with a high bycatch*, covering the entire range of ASCOBANS. Her overview here focused on the North Sea. She flagged little or no change to fishing practices and gears, and that the effectiveness and economic viability differs between gear types, fisheries and species. There had been successful trials in the North Sea, mainly by Denmark and the UK, which have demonstrated a 60-100% reduction of harbour porpoise bycatch depending on the area of the fishery and the pinger used. On pearls, initial results in the Black Sea have shown a reduction in the

bycatch of harbour porpoises, with early trials showing no impact on fishing technique except a tendency for nets to become tangled and there is no noise pollution or need for an energy source. On visually detected nets (LEDs), findings in Peru indicate that cetacean bycatch was reduced by 66-70%, and trials had started in the UK in 2019 with bottom-set gillnets off Cornwall. She had reviewed other modifications including: tie-downs; twine diameter (referring to the trials which started in the UK); time-area enclosures; and limiting fishing time, including night-time fishing; there have been trials in the US where time/area restrictions for certain net sizes have been shown to have potential. Presently, ADD is the only proven mitigation method for harbour porpoise bycatch in gillnets.

She then reported on alternative gear options, including jigging machines, long-lines, fish pots, and fish traps, pontoon traps, pound nets and fyke nets (LIFE gears).

Her conclusions and recommendations were that:

- Most of the mitigation measures and alternative gears have been tested but little work/data from real-life use in commercial fisheries;
- There is no 'one-size-fits 'all' approach;
- Any measures adopted need to reduce bycatch but also involve minimal gear operation and catch for target species; and
- Strong collaboration between ALL stakeholders is essential if countries are not implementing and complying with legal obligations; no mitigation measure will be sufficient.

Ms Read said the report was under peer review and would be circulated to the Joint Bycatch Working Group (JBWG) of ASCOBANS and ACCOBAMS for comments once ready. The Chair added that on request, the report could be sent to those NSG members as well who were not members of the JBWG.

Mr Ritter said that WDC feels that mitigation measures should be applied to area and time closures principally, and referred to ongoing research on porpoise behaviour around gillnets indicating that it seems the porpoises are aware of the nets and even use them as a barrier for fish, and, supported by Anita Gilles (Germany) who highlighted possible impairment of hearing, urged further studies on porpoise behaviour around gillnets. The Chair referred to work going on in the UK around this and said that there will be a presentation on this at the upcoming meeting of ICES WGBYC (Working Group on Bycatch of Protected Species).

Ms Scheidat recalled that when assessing the impact of LEDs, water depth and season were important factors given their effect on brightness. Ms Königson spoke of evidence for an increase in catch efficiency when lights are used in cod fishing. Ms Pinn noted a paper indicating that in deeper waters, the lights enhanced catch efficiency.

Regarding pingers, Ms Macleod noted that when the new Technical Conservation Measures Regulation (EU) 2019/1241 was introduced, annex 13 only specified the areas and gear where pingers were to be used; they lacked the specification of the *types* of pinger that were to be used. However, there was a new implementing Regulation (EU) 2020/967 in July 2020 which actually brought back those annexes that specified the types of devices to be used. That corrected the omission in the Technical Conservation Measures.

The Chair urged members to submit further remarks to Fiona Read so she could incorporate them in the final report.

2.5. Finalize a management procedure approach for determining maximum allowable bycatch limits (action 6)

The Chair noted this agenda item has been an international effort and called for comments, highlighting, for example, that the UK had produced a report[2] on the use of a Removals Limit Algorithm (RLA).

Ms Scheidat highlighted the challenging nature of discussions in ASCOBANS on allowable bycatch limits and mortality caused by anthropogenic activities. She queried how to advance things, acknowledging that there were more efforts focused on OSPAR activities. Sinéad Murphy (Ireland) noted ongoing work in different fora, and that OSPAR have the intention to develop a bycatch biodiversity indicator and may use these thresholds in other fora but ASCOBANS needed to decide what steps it should make. The Chair said that some may have seen the technical documents and annexes that came out of the OSPAR-HELCOM indicator workshop in Copenhagen (September 2019), where some of the questions related to how we approach any modelling we do in terms of conservation objectives and how to set those in terms of time frames and levels of uncertainty, noting that ASCOBANS may not necessarily take the same view to OSPAR as it is a conservation agreement.

In response to a question from Ms Gilles about how this overlapped with the ASCOBANS and ACCOBAMS Joint Bycatch WG, the Chair said that was likely to be the forum where it will be raised, and that the NSG would need to revisit this in the future.

3. Implementation Review: Research

3.1. Monitoring trends in distribution and abundance of harbour porpoises in the region (Action 7)

At the start of this item, Ms Sveegaard introduced new NSG member, Nynne Lemming (Denmark), and Ms Scheidat also introduced new member, Jip Vrooman (Netherlands).

The Chair asked for reporting from country representatives. Mr Haelters reported on aerial surveys in Belgium, saying that COVID restrictions in 2020 meant there were only two rather than four surveys per year. There was fairly low density of harbour porpoises recorded in June and September, and data had been sent to OSPAR for the Quality Status Report (QSR) 2023.

Ms Scheidat reported that the Netherlands conducts aerial surveys (following SCANS methodology) but that these were restricted in 2020. She reported on summer abundance figures for 2017-2019 and said they have a national database, and a regional database that includes data from Denmark, Germany, the UK and Belgium. There was currently no trend analysis for the regional database but the analysis of the national one shows a significant increase in population density from the 1990s to the 2000s, in parallel with sea birds and also in comparison to stranding figures. She proposed the NSG undertake a larger analysis of several countries together to analyse trends in distribution.

Mr Ritter suggested that the current strandings figures for the Netherlands were worrying as they indicated almost 1,000 strandings in the latest years. Ms Scheidat emphasised the initial low numbers of harbour porpoises in Dutch waters and that the strandings data could just reflect the increase in animals in coastal waters. The Netherlands and Belgium have seen more strandings than expected, and Mr Haelters highlighted the large number of killings or injuries leading to death by grey seals close to shore, suggesting a link between there being fewer porpoises close to shore and increasing number of grey seals inshore. Ms Scheidat emphasised the challenges of interpreting the data.

[2] https://data.jncc.gov.uk/data/8ac9a424-eda5-4062-957e-63d82d3e39cc/JNCC-Report-628-FINAL-WEB.pdf

Ms Gilles spoke about a publication (Nachtsheim et al., 2021)[3] on monitoring trends in abundance using line transect distance sampling in German waters with a closer look at three Special Areas of Conservation (SACs). There was now a wealth of data after almost 20 years of systematic data collection that can be used with new methods to allow a reliable estimate of the trend in abundance, and the data was used to do a Bayesian trend analysis. In the Sylt Outer Reef, a major reproduction site which had the highest densities in the German North Sea, the analysis revealed a worryingly high decrease. There were increases in the Borkum Reef Ground, but in the German North Sea there was an overall decline. The underlying causes for the observed trends were unknown and there was a lack of adequate data on anthropogenic stressors.

Ms Sveegaard called for similar monitoring in Dutch and Belgian waters. She asked whether there is a valid argument for whether Germany has their own population of porpoises with Ms Gilles saying policy is relevant to the porpoises that occur in German waters whether there is a population there or not. Mr Ritter highlighted marine protected areas (MPAs) in particular when talking about mobile marine mammals. Ms Gilles emphasised that the management plans only came into force in 2020. Ms Brtnik also noted that fishery management measures for the Germany's Exclusive Economic Zone (EEZ) were still under discussion.

Ms Gilles then presented the results of monitoring that Germany is carrying out in the Wadden Sea with four POD stations over the past nine years. She said that the Wadden Sea is widely used by porpoises with a year-round presence but there was high variability.

Ms Sveegaard presented on the two areas being monitored in Denmark with the latest published data being from 2019. It was difficult to use aerial surveys to monitor shallow areas and comparable data were only available from 2017 onwards. There was a declining trend but with many variations so there is a need for several data points.

Kylie Owen (Sweden) reported that there is no national monitoring of the North Sea population currently, but Sweden was involved in the MMANA application as a co-financier and expert support on indicator development. There was passive acoustic monitoring in the Kattegat Sea (Belt Sea population) and the programme was to be evaluated in 2021 which may lead to further monitoring in the Skagerrak Sea. The HELCOM BLUES project was starting shortly to test the North Sea population indicator for population trends in abundance on the Belt Sea population.

Ms Macleod reported that there has been no national or North Sea-wide survey or effort, but there has been work with the Joint Nature Conservation Committee (JNCC)/DHI modelling of harbour porpoise summer distribution for UK waters using data from 2012-2018. She could not share the data yet but would do so when possible. There were some obvious changes in distribution and abundance. The Joint Cetacean Database Programme (JCDP) was developing a portal and database to bring all types of data together using a JCDP-approved data standard and JNCC has contracted ICES in 2020 to build the portal and database with a plan to launch in spring 2022.

Mark Simmonds (HSI) suggested the NSG should have a process for flagging potential causes of concern such as the high strandings rate or reduction in porpoise density in a region as reported in these presentations even where it is not clear what the cause is. Consideration was given to how to have a more coordinated North Sea approach to address these issues and also agree at what point to be concerned, or perhaps agree levels at a management level. The Chair welcomed the efforts in Germany, the Netherlands and elsewhere comparing data sets and looking at different approaches, and suggested this could be addressed in the recommendations.

The Secretariat noted that the NSG is a forum where any emerging issues or concerns regarding harbour porpoises in the North Sea can be discussed. Parties, non-Party Range States, approved observer organisations and NSG members were recommended to inform the Chair and the

[3] https://www.ascobans.org/en/document/small-cetacean-human-high-use-area-trends-harbor-porpoise-abundance-north-sea-over-two

Secretariat, who can facilitate consultations within the NSG, primarily in their annual meetings but also intersessionally.

3.2. Review of the stock structure of harbour porpoises in the region (Action 8)

The Chair asked for updates on any progress since NSG8. He highlighted a paper[4] by Michael Fontaine's group on porpoises in the North Atlantic including also the North Sea. Ms Scheidat referred to a study related to this involving Fontaine and Ralph Tiedemann specifically looking at the Dutch population of harbour porpoises. Ms Sveegaard spoke about a recent unpublished joint DEPONS project (together with Ms Scheidat) tagging porpoises in the Wadden Sea, noting some observations of different porpoise behaviour which would be interesting to examine genetically.

The Chair noted the similarity of these results to those by Carlos de Luna et al. (2012)[5] who found differentiations between populations in the southwestern and eastern North Sea, and thought it would be good to be able to examine this further. Further sampling was needed particularly in the central and northern part of the North Sea where data are lacking. Given that the primary reason for looking at stock structure is management, Ms Scheidat said that perhaps these smaller resident and potentially culturally distinct populations or aggregations evidenced in studies by Ms Sveegaard and others should be carefully considered. The Chair said that there were other lines of evidence suggesting some local differentiation and it was important to get to the bottom of this.

3.3. Collection of incidental porpoise catch data through stranding networks (Action 9)

The Chair conducted a tour-de-table review from countries. Jan Haelters reported that the general trend was down (1970-2019), with 50 recorded strandings of harbour porpoises in Belgium in 2020, few bycatches and a high percentage killed by seals. They are able to assess cause of death following necropsy, and for almost every animal on the beach or in pictures, they can assess at least whether it has been killed by a grey seal. In 2020, there were more porpoises in the summer than previously, with an annual peak of strandings in March-April and September.

Ms Scheidat said that in 2019 there was a general downward trend in the Netherlands, and referred to a publication by Lonneke Ijsseldijk (University of Utrecht) et al. (2020)[6] analysing strandings of porpoises across the North Sea. A recent publication from the Dutch REM project analyses data of stranded porpoises which could be subjected to necropsy. Ms Svoboda explained that in the Dutch Updated Harbour Porpoise Conservation Plan 2020 there are some recommendations on improving the data on stranded porpoises that do not go for necropsy through an app.

Ms Brtnik reported Germany has an established monitoring programme for the Federal State of Schleswig-Holstein and there are opportunistic reporting of strandings in the Federal State of Lower Saxony. Ms Gilles presented an overview of the Schleswig-Holstein strandings network (1990-2020) in a graph indicating the numbers of strandings, noting there is no recorded by-catch in this area but there are some cases of suspected bycatch. There was no progress in developing a similar network in Lower Saxony.

Comparing strandings across the North Sea was proposed, but Ms Scheidat stressed the need to ensure that the samples are representative, and the Chair agreed, also referring to differences in methodology of determining bycatch or strandings.

[4] BenChehida, et al. (2021). No leading-edge effect in North Atlantic harbor porpoises: Evolutionary and conservation implications. https://doi.org/10.1111/eva.13227

[5] De Luna et al. (2012). Phenotypic and genetic divergence among harbour porpoise populations associated with habitat regions in the North Sea and adjacent seas. http://dx.doi.org/10.1111/j.1420-9101.2012.02461.x

[6] Ijsseldijk et al. (2020). Spatiotemporal mortality and demographic trends in a small cetacean: Strandings to inform conservation management. https://doi.org/10.1016/j.biocon.2020.108733

Denmark had no coordinated monitoring network, but Ms Lemming noted that part of her role was to initiate looking into this.

Ms Owen presented a report on an ongoing collaboration since 2008 between the Swedish National Veterinary Institute and the Swedish Museum of Natural History to examine health, biology and cause of death of harbour porpoises. Results had been compiled from 109 porpoises that died between 2006-2019 showing 98 stranded and 11 incidentally caught, and while diagnosis was challenging ultimately 24 of the 98 stranded porpoises were diagnosed as bycatch or probable bycatch, and 35 of the overall total of 109 were diagnosed as bycatch or probable bycatch.

Ms Macleod reported on ongoing work in the UK, with COVID disruption in 2020, with strandings of porpoise seeming to be slightly down in the first quarter of 2020. The most recent longer-term look at causes of death in harbour porpoise comes from a review of 2011-2017 data from across the UK, and reports on 537 post-mortem harbour porpoises shows the principal causes of death as infectious disease, followed by starvation, attack from bottlenose dolphins, and finally bycatch. On the future of the UK strandings network, there had been a further disruption in that the Scottish programme had been separated from the rest of the UK Cetacean Strandings Investigation Programme (CSIP), although there would still be sharing of data, with, however, the positive news of a further ten years of funding for the CSIP. The Chair inquired if it was possible to ask for the CSIP to report causes of death from the North Sea rather than by country (which combines west and east coasts) and she agreed that she would ask.

3.4. Investigation of the health nutritional status and diet of harbour porpoises (Action 10)

The Chair introduced this agenda item and asked for reporting from countries. Jan Haelters reported on a thesis[7] on stomach content analysis in 2020, saying that a summary was included in the Belgian national report to ASCOBANS and other interested fora. On necropsy results, they tried to collect around half of the stranded harbour porpoises, the rest being too decomposed; the results are still due.

In the Netherlands, information is obtained from animal post-mortem examinations, but the representativeness of the samples is not known. The Dutch harbour porpoise conservation plan has a chapter on a study on stable isotopes and fatty acids and longer-term diet, and they are looking into different aspects of diet to see if there are possibilities for an SND indicator.

Ms Gilles presented the results of the largest pathological investigation of harbour porpoises in the Baltic Sea[8] where a large number of harbour porpoises were used for extensive necropsies. Most animals were very young. She called for a similar programme for the North Sea, emphasising the value for establishing cause of death and said that they are now combining the data with genetic data to detect differences between the two populations in the Baltic Sea. She also referred to a number of publications from a thesis on grey seal predation on marine mammals, indicating relatively new behaviour and the potential impact on the harbour porpoise population[9]. There is also a collaborative project which started in 2020 called BioWeb, which will run for three years, joining data sets to build up a food model for the North Sea, including a large-scale diet study.
Ms Sveegaard said that Denmark dissects up to 25 harbour porpoises annually.

[7] Lambert, Elke (2020). The Feeding Ecology of the Harbour Porpoise *Phocoena phocoena* L. in a Changing Environment. Oceans & Lakes. Interuniversity Master of Science in Marine and Lacustrine Science and Management.
[8] Siebert et al. (2020). Health assessment of harbour porpoises (PHOCOENA PHOCOENA) from Baltic area of Denmark, Germany, Poland and Latvia. https://doi.org/10.1016/j.envint.2020.105904
[9] van Neer A. (2019). Predation of marine mammals by grey seals (Halichoerus grypus): Assessment of the background, the extent and the potential effects on the ecosystem. https://elib.tiho-hannover.de/receive/tiho_mods_00000142); van Neer et al. (2019). Behavioural and pathological insights into a case of active cannibalism by a grey seal (*Halichoerus grypus*) on Helgoland, Germany; van Neer et al. (2020). Assessing harbour porpoise carcasses potentially subjected to grey seal predation. https://doi.org/10.1038/s41598-020-73258-y

Julia Carlström (Swedish Museum of Natural History) presented on the ongoing collaboration between the Swedish National Veterinary Institute and the Museum of Natural History which in 2020 increased the reporting and investigation of bycaught harbour porpoises. The animals were investigated to determine cause of death, and to collect samples for reproductive, dietary and genetic studies. The target for 2021 was to collect up to 30 harbour porpoises.

Ms Macleod noted some data from an effort to analyse stomach contents collected by the strandings schemes in Scotland and the rest of the UK. Graham Pierce (Instituto de Investigaciones Marinas Spain) said they had done some of the analysis in Scotland but only up to 2015. Sinéad Murphy (Ireland) flagged that the 2020 presentation that she had made on spatio-temporal variability of life history parameters of harbour porpoises in UK waters had now been published[10].

3.5. Investigation of the effects of anthropogenic sounds on harbour porpoises (Action 11)

The Chair introduced this item, again asking for updates, flagging input into the ICES Impulsive Noise Register and ongoing work on mapping continuous noise from shipping data. Mr Haelters said the last offshore windfarms have now been constructed in Belgian waters. They had to use a double-bubble curtain, with monitored noise data being reported to the ICES Impulsive Noise Register.

Ms Scheidat referred to: the work of the TNO Institute on a number of acoustic subjects; international projects such as Jomopans working on monitoring ambient underwater sounds in the North Sea; the Strategic Environmental North Sea Energy (SEANSE) project aiming to have a common environmental assessment framework, and the development of a modelling tool to look at cumulative impacts of piling; and wind farm environmental impact studies.

Ms Gilles presented on an investigation of the effects of blast/acoustic trauma in harbour porpoises, highlighting mine-clearing activities in 2019, following which a number of harbour porpoises were stranded and 24 were collected and underwent forensic pathological investigations to identify and understand better the effects of the blast trauma. The investigation concluded that these explosions are an enormous threat to harbour porpoises, and in the North Sea there are many such activities (e.g. in the clearing required for wind farms). These findings highlighted the importance of investigating hearing ability as the animals are effectively “blind”. On the effects of pile driving noise on harbour porpoise hearing, she referred to studies[11] relating to wind farms, indicating that single strikes, repeated pile driving, and single seal scarer pulses can induce a temporary threshold shift (TTS) It had therefore been suggested to reduce the source level of the seal scarers and increase the energy overtime. This would give the porpoises more time to flee.

Mr Simmonds asked whether there was an understanding of the range at which this acoustic trauma may have an impact and whether it is possible to transfer this knowledge to other networks across Europe. Ms Gilles affirmed the need for training, that a network involving inner ear pathologists does exist and believed that there is a lot of communication and exchange across groups but urged a joint project. Mr Ritter added that the blasting that took place in the Baltic Sea was during summer which is the most sensitive time for harbour porpoises. He welcomed the refined studies on TTS, and urged reviewing the thresholds on a regular basis.

Mr Haelters asked for an indication which metrics are used – sound level or sound exposure levels -- and welcomed advice on measures to limit the exposure of harbour porpoises; in Belgium seal scarers are being deployed by the military from 2021 onwards.

[10] Murphy et al. (2020). Spatio-Temporal Variability of Harbor Porpoise Life History Parameters in the North-East Atlantic. https://doi.org/10.3389/fmars.2020.502352

[11] Lucke et al. 2009, Kastelein et al. 2016, Schaffeld et al. 2020

For Denmark, Ms Sveegaard reported on the joint Danish-Swedish TANGO project, compiling data on the effects of the relocation of large shipping on harbour porpoises and noise distribution in the area; the development of new guidelines on noise during pile driving; the DEPONS project (now completed) building a population model based on individual animals, which is undertaking continuing work to focus on noise impacts relating to wind farms; the Jomopans project; and tagging data now being analysed for noise impacts.

For Sweden, Ms Owen reported on a research project: a study on the impact of ship noise on porpoise echolocation using stations in the Skagerrak Sea and Baltic Sea which found that the louder and more peaks there are, the fewer harbour porpoise detections there are – expecting to be published later in 2021.

Ms Macleod referred to the UK national report sent to the ASCOBANS MOP9 in 2020. The UK was also involved in the Jomopans project and the DEPONS project, including sharing data from harbour porpoise prey density maps. JNCC continued to maintain the Marine Noise Registry, recording activities that produce low to mid-frequency noise. She drew members' attention to two studies: Box et al., 2020 (https://doi.org/10.1121/2.0001194) reviewing spatial and temporal distribution of loud impulsive noises in UK waters (2015-2018), and the National Physical Laboratory (NPL) report[12] on the characterisation of acoustic fields generated by UXO removal. The Chair added that the Centre for Ecology and Hydrology have been leading on a project funded by the Scottish government looking at cumulative effects on marine mammals, including anthropogenic noise, and the Sound and Marine Life Programme of the International Association of Oil and Gas Producers (IOGP) has been funding the University of Santa Cruz to undertake a case study on the Population Consequences of Disturbance on harbour porpoises in the North Sea. He also referred to a new student project (Grundy, 2021)[13] looking at the responses of harbour porpoises to recreational craft which, while not based in the North Sea, may have relevance.

3.6. Collection and archiving of data on anthropogenic activities and development of a GIS (Action 12)

The Chair asked for updates on this agenda item, noting overlaps with agenda item 3.5. Ms Scheidat gave an example of how the OSPAR Impulsive Noise Registry was used in a project in the Netherlands on how best to assess impact of anthropogenic activities[14]. The Chair noted that a number of groups are using the same sort of data in different ways and urged collaboration.

4. Other activities contributing to the conservation of the Harbour Porpoise in the North Sea

4.1. Update on the implementation of the Habitats Directive and actions of the European Commission relevant for the Harbour Porpoise Conservation Plan

Mr Vedran Nikolić (European Commission) gave an update on the implementation of the Habitats Directive and actions of the EC relevant for the Harbour Porpoise Conservation Plan.

Harbour porpoises were a strictly protected species under the EU Habitats Directive and there was a system of strict protection under Article 12. Gaps had been identified in all Member States regarding bycatch; the EC has been investigating compliance since 2019 and taking legal action as appropriate. There was a need to complete the designation and management of Natura 2000 sites, establishment of site-specific conservation objectives and to fully implement conservation measures for all sites.

[12] https://www.gov.uk/government/publications/uk-offshore-energy-strategic-environmental-assessment-research-projects#history

[13] Grundy, E.C. (2021) *Harbour porpoise behavioural responses to recreational craft*. MSc thesis, Bangor University.

[14] https://www.nnoordzeeloket.nl/publish/pages/182474/assessment_methodology_noise_-_d10014710.pdf

Mr Nikolić then gave an update on the EU Biodiversity Strategy for 2030:

On protected areas, a coherent Trans-European Nature Network would consist of Natura 2000 sites, existing protected areas under national/regional schemes and newly designated areas. All protected areas need to be effectively managed, with clear conservation objectives and measures. A process is underway to define criteria and guidance for additional designations and strict protection.

On the EU Nature Restoration Plan, Member States endorsed the intention to adopt legally-binding nature restoration targets to be proposed in 2021 with full implementation and enforcement of existing legislation.

Bycatch of species threatened with extinction must also be eliminated or reduced to a level that allows full recovery which should also be the case for those in bad conservation status or not in good environmental status. The bycatch of other species must be eliminated or, where not possible, minimised so as not to threaten their conservation status. To support this, data collection on bycatch for all sensitive species needed to be stepped up and fisheries management measures must be established in all MPAs according to clearly defined conservation objectives and on the basis of the best available scientific advice.

By 2021, the EC will also propose a new action plan to conserve fisheries resources and protect marine ecosystems. Where necessary, measures will be introduced to limit the use of fishing gear most harmful to biodiversity, including on the seabed. Mr Nikolić urged members to contribute to the stakeholder consultation on the effectiveness of Regulation (EU) 2019/1241.

On bycatch, recent EC action included:

- full engagement with regional high level groups to support drafting of joint recommendations on conservation measures;
- a round table with Commissioner Sinkevičius in June 2020;
- species protection guidance;
- a letter from the Commissioner to all EU environment and fisheries ministers;
- infringement procedures against Spain, France and Sweden which started in July 2020 for violation of Article 6, (11) and 12 and of the CFP rules (pingers);
- legal action against other Member States is not excluded; and
- Consideration of Commission's emergency measures– following ICES advice of May 2020

On the monitoring of bycatch, Mr Nikolić urged for joint engagement of nature and fisheries authorities in ongoing discussions in regional coordination groups (RCG) that discuss regional data collection programmes under the CFP data collection programme (DCF). He also urged for significant improvement of bycatch monitoring and coordination of monitoring across marine region(s) to support implementation of fisheries management measures, and cooperation between fisheries and nature authorities, as well as regional cooperation.

The Biodiversity Strategy was an opportunity for improving conservation and under the EU Nature Restoration Plan, the restoration of habitats important for the harbour porpoise (or its prey). He urged expansion of MPAs to cover important areas for the harbour porpoise, including migration corridors. Member States had endorsed the targets of the Strategy, and the EC hoped to see a cooperative process for setting priorities for additional MPAs and restoration in each marine region, and the NSG could contribute regarding the needs of the harbour porpoise in this context.

In response to a question from the Chair, on the difference between "legal protection" and "strict protection," Mr Nikolić explained that legal protection meant the protection such as in already defined

MPAs whereas in strictly protected areas “the natural processes should be left essentially undisturbed.” What this exactly meant was currently under discussion by EU Member States, but essentially these were marine reserves in their truest sense, where no extractive activities were permitted.

Mr Haelters asked about coordination between DG Environment and DG MARE concerning strictly protected areas and fisheries management, proposing it would work better to impose restrictions through DG MARE. Mr Nikolić reassured that the Commission worked closely across DGs, and had provided guidance to explain how they saw the process of proposal and adoption of fisheries management measures. Ultimately, it was of course the responsibility of the Member States to fulfil the legal requirements.

In response to a question from Ms Sveegaard about the impact of the proposed restoration targets specifically on harbour porpoises, Mr Nicolić said that the agreement that the EC will propose a legally binding instrument was endorsed as an objective of the Biodiversity Strategy by Member States. He explained that the idea is that the priority for restoration should be towards ecosystems that offer important services in relation to climate change mitigation and adaptation. However, more broadly, there is a desire to restore ecosystems that are in bad status and fulfil multiple requirements for species that are protected or endangered. It will be up to the Member States to decide what they want to restore but the instrument was to focus and coordinate the details of restoration amongst Member States. He welcomed ideas from the NSG.

Mr Simmonds referred to earlier presentations on population concerns and noted the need to know what was happening in neighbouring waters. He asked if there was a post-Brexit strategy and Mr Nikolić said it was too early to know the actual mechanism but perhaps the coordination would continue under the European Environmental Agency. There were no longer reporting requirements for the EC from the UK, and ASCOBANS would play an important coordinating role in this regard.

On the Biodiversity Strategy 2030, Ms Murphy asked how to interpret the priorities regarding a species where there is insufficient data (such as for the common dolphin). Mr Nikolić explained that existing legislation still existed to protect marine mammals through their conservation status, including Member State reporting obligations on their status. If the status was unknown, it didn’t remove the obligation to collect data on bycatch and take appropriate action but rather made it more strict as one had to take the precautionary approach and assume that any effect of bycatch was adverse.

4.2. Update on Marine Mammal indicators from an OSPAR perspective

Ms Gilles gave a presentation on the work of the OSPAR Marine Mammal Expert Group (OMMEG).

With the 2023 Quality Status Report (QSR 2023) coming up, contracting parties that are also EU member states should use the OSPAR area for EU Marine Strategy Framework Directive (MSFD) reporting and the OSPAR boundary between the Greater North Sea and the Celtic Seas in the English Channel has been realigned to reflect the MSFD Sub-Region. In the approach to QSR 2023, there will be thematic assessments where indicators will be integrated across disciplines. Compared to the intermediate assessment, QSR 2017, these indicators (for porpoises, bycatch and abundance and distribution) underwent a semi-qualitative assessment for a range of species.

She provided detail on the process leading up to QSR 2023, including that: abundance and distribution will be based on transect data and the data call for national monitoring data is out now and will ask for dedicated surveys only; no regional abundance assessment will be available before QSR 2023, so there will be a joint analysis of national and international visual survey data for 2010-2020; the aim is then to do a density surface modelling approach depending on the availability of

data. They are following the advice of the ICES Working Group on Marine Mammal Ecology (WGMME) which adopted the IUCN criteria of no decline larger than 30% over 3 generations, so they are investigating generation lengths for species and deriving species-specific thresholds.

On bycatch, in the 2017 assessment, only the harbour porpoise was mentioned in the indicator and no threshold was adopted. This time they had two extensions proposed: to include more species (including common dolphins and grey seals); extensions to Regions III and IV; and positive feedback for a pilot assessment in Region I. OSPAR agreed that they will request ICES to collect data at the next WGBYC meeting in September 2021, and Ms Macleod will lead a sub-group to work on this ICES request. On thresholds for bycatch, she outlined 3 potential ways depending on data availability and region. The group is also working on a pilot assessment on pollution.

Ms Scheidat asked how this work could be fed back into ASCOBANS, and Ms Gilles said it is largely qualitative so that is challenging. Debate ensued about how to balance focus on thresholds needed for policy-makers to make decisions, and conservation objectives. Ms Macleod pointed out that the proposed OSPAR conservation objective for bycatch is to “minimise and where possible eliminate, incidental catches of marine mammals, such that they do not represent a threat to the conservation of the species.” Although working with thresholds, by addressing the latter part of the objective, the overall objective has not been lost. Ms Scheidat urged better conservation objective messaging to make it clear that this is not a compromise but that the aim is to have healthy populations which are resilient. Nathalie Houtman (WWF Netherlands) said that it can be challenging as there is always a hiatus in implementing measures to mitigate bycatch caused by waiting for the science and the numbers. Ms Murphy pointed out that conservation objectives are designed to address species which are severely under threat of extinction and do not take care of other species sufficiently as their conservation status is not under threat due to the size of their populations, and reminded the group of the conservation objectives overall of ASCOBANS.

4.3 Analysing Porpoise Mortality Rates

Olivia O’Connor presented her Master’s thesis (supervised by Ms Murphy): Harbour Porpoise Case Study on Assessing Mortality Rates of Small Cetaceans. There were two main aims: to create two simulated populations to test StrandCet; and to model mortality rates for two harbour porpoise management units in UK waters. StrandCet is an R-package developed in 2018 to streamline the analysis of mortality and survival rates and population parameters for cetacean populations using stranding data. It uses age-structured strandings data to estimate both natural and non-natural mortality-at-age. The life tables are used to estimate the Siler Model and the Heligman-Pollard Model which are then used to create Leslie matrices to estimate, inter alia, population parameters. The data were collected from the UK coastline between 1990 and 2012, comprising two management units treated distinctly although they are not two distinct populations, and she provided details on how these boundaries were re-assessed.

At the NAMMCO/IMR workshop in 2019, the population dynamics model estimated that the Celtic & Irish Seas management unit had been potentially declining slowly since 2009, and that the North Sea management unit had been relatively stable since 2005; the ICES WGBYC Risk Assessment (2019) for the North Sea ecoregion found that the bycatch mortality rate was between 0.3-0.6%, and for the Celtic Seas ecoregion for nets and bottom trawls was between 0.3-0.8%. However, when these boundaries were assessed using the revised IMR-NAMMCO management unit boundaries, for the Celtic Seas ecoregion it was estimated that those mortality rates were between 2-5%. They carried out a meta-analysis and compared pregnancy rates for bycaught and stranded samples, using the meta-analysis as the basis for the birth rate in the study for the dummy populations. She also described the methodology and outlined the resulting estimates of anthropogenic and natural mortality rates and birth rates in the two dummy populations.

She concluded that, *inter alia*: there was a high sensitivity for the birth rate calculation but that StrandCet had calculated the birth rate as a 'birth flow' which might explain why some of the parameters were not consistent; the first 5 years were very important in affecting mortality rates which is important for analysing harbour porpoise populations as many studies do not find any individuals of 10+ years old; StrandCet did not allow data to be analysed per year which means that the data input has to be compiled which limits analysis possibilities; biases in actual mortality may not be reflected in the stranding rates; and the Heligman-Pollard model may be too parameterised for the harbour porpoise. The preliminary results for the North Sea and Celtic & Irish Seas management units (these were flawed given the issues above) were: no differences between 1990-1999 and 2000-2013, no significant differences between the sexes; the North Sea had marginally higher overall growth rates whilst the Celtic & Irish Seas had marginally higher overall mortality rates.

Mr Pierce suggested the real issue was whether the models built into StrandCet are applicable to harbour porpoises and proposed Ms Murphy coordinated with Camillo Saavedra. Ms Murphy explained they had not been able to coordinate with Mr Saavedra during the study due to COVID and time restrictions, but would do so. The samples run through StrandCet for the study were combined but they would soon re-run the samples separating the strandings and by-caught samples; the big question for the study was to see whether it was possible at all to estimate mortality rates using strandings data.

4.4. Update from the Wadden Sea

Sascha Klöpper (Common Wadden Sea Secretariat - CWSS, Germany) presented an update from the Wadden Sea.

The Wadden Sea is a World Heritage site shared between Denmark, Germany and the Netherlands. He explained it is a tourism site and defined as "the world's largest undisturbed stretch of sand and mudflats." He described the long history of the trilateral cooperation between Germany, Denmark and the Netherlands which started in 1978, resulting in the inscription as a UNESCO World Heritage Site in 2009. The main achievements included a common monitoring assessment programme and integrated management plan, and cooperation with many different governments and organisations including ASCOBANS following the Leeuwarden Declaration in 2018.

In 2018, a 2-day event on harbour porpoises in the Wadden Sea developed seven recommendations presented to the Wadden Sea Board, including one noting that the Wadden Sea is a habitat of special importance for harbour porpoises. The 30th Wadden Sea Board in April 2019 decided that harbour porpoises would be dealt with within the Expert Group (EG) on Seals and in October 2020, the EG discussed integrating harbour porpoises into the EG's terms of reference and to rename the EG on Marine Mammals with bi-annual meetings. The 15th International Scientific Wadden Sea symposium will take place from 20 November to 3 December 2021, including hopefully a presentation of the update Wadden Sea QSR Thematic Report on Marine Mammals.

The Chair asked if there were any current management actions which will have a positive impact on the populations of harbour porpoise. Mr Klöpper said that current actions on seals will have a positive effect but that information specific to harbour porpoises would be better provided following an imminent inventory on measures. Mr Ritter asked whether he saw a way of encouraging the Federal State of Lower Saxony to establish a dedicated strandings network and whether it can it be related to the management plans for the coastal MPAs under the Habitats Directive. Mr Klöpper said there is good potential for a common strandings network and asked for input to the EG on relevant topics.

The Chair said that there was an EC project starting to look at the effectiveness of management plans for MPAs focusing on Natura 2000 sites but also proposed the Wadden Sea be included, and suggested that he could communicate with EG on that. Ms Scheidat announced that the Netherlands

had been working with Denmark and Germany to compile an analysis of the data in the area and are trying to get an expert into the EG.

The Secretariat announced that ASCOBANS had submitted a poster abstract to the upcoming scientific symposium about collaboration between CWSS, the Wadden Sea Trilateral Cooperation, and ASCOBANS.

4.5. New Surveys

Ms Macleod reported on the potential for a SCANS-IV, confirming that the surveys as part of the MMANA proposal would not be happening due to technical issues with the project proposal submission to the EC. They were now aiming to realise a SCANS-IV in 2022 as summer that year would be the 6-yearly interval since SCANS-III, and carrying out surveys more frequently is part of the commitment in ASCOBANS and OSPAR. New estimates from the survey would be timely for supporting Member States to carry out their MFSD Article 8 assessments which were due in 2024 and would fit with the upcoming Habitats Directive reporting round. The plan would be to repeat SCANS-III so would cover shelf and offshore waters and would coincide with Ireland's ObSERVE surveys taking place in 2021 and 2022. She said they are likely to need to seek funding from country contributions and were aware that the North Atlantic sighting surveys (NASS) are due to happen in 2022 and 2023 so would provide greater coverage of offshore areas too.

The Chair asked if it could extend offshore around the Iberian Peninsula off Portugal, and Ms Macleod said ideally yes but it was funding-dependent. Mr Pierce asked about comparability with NASS and T-NASS, and Ms Macleod said, previously, NASS had adapted their protocol so it was more compatible, with small cetaceans being recorded better and those data have been used collectively in the past. Ms Scheidat endorsed the work and said the Netherlands supports a coordinated SCANS-IV, has some money set aside for this, and hopes that the other range states will also be active in providing the necessary funding.

Ida Carlén (Chair of the ASCOBANS Jastarnia Group) asked Sweden about the status of the Swedish Species Action Programme for the harbour porpoise, which was to come out in the first quarter of 2020, for public consultation. Susanne Viker (Sweden) assured that it would be out for consultation in February 2021.

5. Overall progress in the implementation of the Conservation Plan (Action 1)

The Chair shared a Progress Report on screen, and invited NSG members to send comments in writing to him and fill in any gaps in the relevant parts of the Progress Report. He also shared a Table representing the Qualitative Assessment of Progress in the Implementation of the ASCOBANS North Sea Conservation Plan for the Harbour Porpoise (see below).

	Actions from the North Sea Conservation Plan for HP	Priority		SE	DK	DE	NL	BE	FR	UK
1	Implementation of the CP: co-ordinator and Steering Committee	High		Coordinator currently in place						
2	Implementation of existing regulations on bycatch of cetaceans - e.g. EC 812/2004 & Habitat Directive (HD) (* Table 1ab, ICES WGBYC 2012)	High	Vessels requiring pingers	yes	17	yes	na	na	9	24
			No. of vessels using pingers	?	?	?	na	na	?	?
			Enforcement policy	0	?	?	?	na	?	3
			Dedicated observer prog	0	2	0	1	0	2	3
			Monitoring under HD	0	2	0	1	0	2	3
3	Establishment of BYC observation programmes on vessel smaller than 12m long, professional and recreational fisheries	High	Professional	1	1	0	1	0	1	1
			Recreational	na	1	na	0	0	1?	na
4	Regular evaluation of relevant fisheries, extent of HP BYC:	High		0	0	0	0	0	1	1
	Gillnet fisheries =>15m vessels, dedicated, % DAS observed			0	0	0	0	0	?	?
	Gillnet fisheries <15m vessels, dedicated, % DAS observed			0	?	0	?	0	?	?
	Cetacean scheme appended to DCF / DCR schemes			no	yes	yes	yes	no	yes	yes
	DCF observations in 2018 in NS, % DAS observed			0	?	0	0	0	?	?
5	Review of current pingers, dev. of altern.pingers and gear modif.	High		2	2	2	na	na	2	2
6	Finalise a management procedure approach for determining maximum allowable byctch limits	High		neral progress ICES WGMME, WGBYC, OSPAR (MS						
				1	1	1	1	1	1?	1
7	Monitoring trends in distribution and abundance of HP in NS	High	Large scale	SCANS III undertaken in 2016						
			Reg/survey	1	2	2	2	2	1	1
			Reg/modelling	1	2	2	2	2	2	1
8	Review of the stock structure of HP in NS	High		1	1	1	1	1	1	1
9	Collection of incidental HP data through stranding networks	Medium		1	1	3	3	3	2	3
10	Investigation of the health, nutritional status and diet of HP in NS	Medium		1	2	2	2	1	1	3
11	Investigation of the effects of anthropogenic sounds on HP	Medium		1	2	2	2	2	1	2
12	Collection and archiving of data on anthropogenic activities and development of a GIS	Medium		1	1	1	1	1	1?	1

Except for Action 2, ref. pinger use: na = non applicable; **-1**, situation is less good than at the adoption of the plan in 2009, **0** = no progress, **1** = small progress or at experimental level; **2**, steady progress; **3**, fully implemented.

5.1. Review of the proposed criteria for assessment of progress for the different actions

Referring to the Progress Report, the Chair presented draft status assessment criteria for progress on the implementation of the actions of the Conservation Plan (undertaken in Oct 2020), saying that there had not been the opportunity for the NSG to review the criteria and that they had been based on discussions within the Jastarnia Group, and adapted to suit the NSG and its actions. Following discussion, it was agreed to flag up difficulties in each criterion, and then set up an intersessional working group finalise the draft.

Criteria 2 on Enforcement Policy debate focused on being clear it refers to enforcement not mitigation, clarification that it was enforcement of regulations not fisheries and how to distinguish which regulation it is being measured against. On Dedicated Observer Programme, broadening the definition of observer programmes was discussed as well as the need to define “robust” in terms of “robust bycatch monitoring.” The Jastarnia Group had defined “robust,” as “monitoring that can give a robust estimate of bycatch rate.” They also discussed whether to have a separate reference to

each type of activity under each regulation and debated how best to separate out the criteria on monitoring under the Habitats Directive.

The Chair explained that Criteria 3 was intended to take account of small vessels not covered otherwise that could have observer programmes. Ms Macleod pointed out the Habitats Directive does not specify size classes, and Eunice Pinn (Seafish) pointed out that Article 12 (Habitats Directive) is clear that monitoring is intended to ensure that bycatch is not having a negative impact on the favourable conservation status.

On Criteria 5, Ms Macleod reminded the group of the need to make it applicable to the UK where references are made to EU-delegated acts, and also suggested splitting the current list into separate points.

Debate on Criteria 6 focused on whether it was relevant to keep this criterion, given the work going on in OSPAR. Noting that NSG cannot amend Actions themselves which can only be done by the MOP, the value of national reporting approaches, and the need to progress this important issue, the NSG favoured retaining it while considering a recommendation under Agenda item 9.

On Criteria 7, the difference and appropriate requirements between large-scale surveys (a SCANS type approach) and regional or national surveys were considered. Discussion also centred on whether the criteria set the frequency so high that no country could achieve it, whether focus on seasonal surveys would be better, and the need to take into account what is the best monitoring scheme for the area being monitored. The Chair proposed leaving it to the country to ultimately decide what is appropriate, accounting for seasonal variations as to what temporal scale is right. Ms MacLeod supported retaining the regional modelling criteria.

On Criteria 8 and 9, the group discussed the need to recommend revision to the Actions to address poor sampling in some areas with spatial gaps, including whether to define sample size for the particular objective and then work within the country-specific circumstances. Ms Murphy said life history should be listed separately if any revision was made to that Action.

On Criteria 11, Ms Macleod urged recommending revising the Action to better address mitigating the effects of impulsive underwater noise.

Criteria 12 was amended to include processing and onward transmission of data, so that it could be used, and to include a broader variety of anthropogenic activities and not just the ICES Noise Register.

5.2. Review of the Conservation Plan Actions

The Chair shared the Conservation Plan on screen and the meeting was asked to review the priorities assigned to each. Actions 1-8 were agreed as high priority. Action 9 was agreed as medium priority and Actions 10 and 11 were raised to high. Action 12 remained medium priority with Ms Scheidat suggesting the need to specify cause of death in recommendations on future changes. It was agreed to add in further priorities when the Conservation Plan is revised.

6. Liaison with other organisations

The Chair introduced this item, noting the continuing need to consider liaison with fisheries bodies, and to consider further recommendations. Regarding the Marine Stewardship Council (MSC), they were establishing a replacement for the previous representative who had participated in the NSG as he had left the MSC. There was an ongoing need to improve data flow with ICES WGMME and ICES WGBYC as it is quite hard to align timings with the new EU regulations on reporting, in particular with WGBYC and with the three-year reporting round. The Chair agreed to follow up with Ms Macleod and Ms Königson who were current Co-Chairs of WGBYC. On WGMME, there was quite a lot of overlap of members so there is a good data flow in principle.

7. Review of recommendations from the North Sea Group

The Chair referred to the NSG8 recommendations circulated prior to the meeting and invited country members to report on status.

On Recommendation 1, there was some discussion on the challenges of gathering information from fisheries colleagues as well as how to ensure data quality, with the Chair flagging that it is under discussion in ICES WGBYC, with the meeting agreeing to keep it under discussion.

On Recommendation 4, the Chair explained the EMFF is flagged as a potential funding source as the EC have pointed out that this has been under-utilised. The UK had funding from EMFF to look at minke whale and humpback whale gear entanglement in Scotland, and the Netherlands did under EU LIFE with its bycatch projects.

On Recommendation 8, the meeting addressed lack of progress on having fisheries representatives present at AC and NSG meetings. Ms Scheidat emphasised true stakeholder involvement more than coming to meetings, and the Chair agreed, saying sometimes it is not appropriate for a fisheries representative to join meetings as they would find much of it not directly relevant to them. Nikki Taylor (UK) referred to DEFRA's Cleancatch UK, which has made some progress in having two-way communication to address issues on seabirds, cetaceans and other protected species.

On Recommendation 10, discussion focused on the need for collaboration between Parties on collating information on life history parameters to enable better estimates with larger sample sizes, and on the need for a North Sea-wide assessment. They considered where funding might be available, including from Parties. The Chair flagged the need for this to be a priority recommendation.

Recommendation 11 discussion focused on identifying and filling gaps in stranding networks within the North Sea Region (for example in Lower Saxony, and some coastal areas in Denmark and Sweden). One of the problems is that strandings and health issues are not seen as a priority, and the Chair suggested national initiatives. The UK has a big coastline including some remote areas and it was only when there was a national initiative to alert people to report strandings that the number increased significantly even though there had been a strandings network for a long time.

It was agreed to retain Recommendation 15 as a priority and to consider asking governments to provide funding with some discussion on governance longer term, including whether to consider the issue at an ASCOBANS AC (enabling consideration by an international body).

On fisheries liaison recommendations, the Chair showed a list of options which had been discussed with DG MARE Regional Coordination Groups, Member State scientists and administrators concerned with planning of activities under DCF; Advisory Councils comprising fishing sector and NGO representatives; and High-level regional groups convened by Member States mainly to discuss technical measures (e.g. the Scheveningen Group). The need to consider the agenda of these meetings to assess which were most appropriate was flagged, as was the need to understand how fisheries management across the North Sea was going to work given Brexit. It was agreed to keep a watching brief.

The Secretariat then presented, and the Chair invited consideration of, a list of NSG9 recommendations which had been circulated by the Secretariat. The finalised list of Priority Recommendations can be found on Annex 1 and on the meeting page.

Recommendation 1 was amended so as not to imply the need to investigate seal bycatch which would be outside the NSG remit, but rather to agree to take into account the impact on seal bycatch, as well as to include other taxa such as birds.

Recommendation 2 was amended to refer more broadly to the behaviour of harbour porpoises around nets and in particular sensory capabilities and auditory health not just acoustics, and to include an understanding of the factors leading to bycatch.

The recommendation encouraging Parties to collaborate on analyses of trends in abundance and distribution was amended to focus on regional trends, with a separate recommendation that the NSG consider the implications on trends in QSR 2023.

New recommendations included one encouraging further research on grey seal predation on harbour porpoises and three recommendations on the impact of explosions and impulsive noise events on harbour porpoises, including expressing serious concern about explosions. In Recommendation 9 Parties were urged to make every effort to mitigate the effects on harbour porpoises of activities involving explosions.

It was agreed that the recommendations would be circulated to the meeting participants as some people had to leave following which they would be sent to all Parties and circulated to the AC for endorsement intersessionally.

8. Consideration of special topics for the next Progress Report and NSG Meeting

Given the number of priority actions already underway, it was agreed not to take on any special subjects at this stage.

9. Planned review of the Conservation Plan

The Chair introduced this item, noting that the North Sea Conservation Plan had not been reviewed since the outset. He said they had already identified some changes to make but might find more or want to amalgamate actions or make changes to the Implementation Table and the Priorities.

The Chair showed a slide on the Review of the Conservation Plan boundaries flagging that it needed to align with the Jastarnia Group (JG) on which area to consider, noting his preference would be to go with the Management Units proposed by Sveegaard et al. (2015) (editor's note: these have since been endorsed by the JG, using 56.95ºN within the Kattegat as the boundary). Ms Pinn asked if it could be reviewed as part of the Review of the Conservation Plan, but the Chair said it needed to be a bit earlier than that to align with the Jastarnia Group's timeline.

It was felt that the review and consideration of changing priorities should be done through some kind of common discussion and then if necessary, to recruit a dedicated person to do the work for this, to be selected through an open-tender process. Six months was suggested for this review.

Given the review would need to be ready for the next ASCOBANS MOP in 2024, ideally it would be put to the NSG by mid-2023 so it can be tabled 90 days before MOP. It was agreed that the Secretariat would draft a tender for review and circulation.

10. Any other business

The Secretariat announced that the Aquatic Species team in the CMS family are advertising internship positions with the deadline 11 February 2021, and encouraged members to spread the word.

11. Next Meeting of the North Sea Group

The Secretariat suggested the next meeting be scheduled either before or after the AC meeting in November 2021. The Chair flagged the issue of liaison with ICES WGBYC, noting that WGBYC is meeting from 28 September – 2 October 2021; there followed some discussion on how to schedule

meetings to best coordinate on bycatch information from WGBYC. It was considered safer to schedule as virtual at this stage and reference was made to previous proposals to alternate holding meetings back-to-back with the AC and the Jastarnia Group meeting. It was agreed it would be best after the AC and the Secretariat proposed 6-7 December 2021, which was agreed.

12. Close of Meeting

After the customary expression of thanks to all those that had contributed to the success of the meeting, the Chair declared proceedings of the ninth meeting of the North Sea Group closed at 18:00 CET on Thursday 21 January 2021.

Annex 1: Priority Recommendations

(Adopted by the Advisory Committee)

Development of alternative pingers and gear modifications

1. Parties to support further investigations of approaches to mitigate harbour porpoise bycatch taking into account potential adverse impacts on other taxa such as birds and seals.

2. Parties to support more research on the behaviour of harbour porpoises around fishing gear, especially static nets, including their sensory capabilities and auditory health, for a better understanding of factors leading to bycatch.

Monitoring trends in distribution and abundance

3. Encourage Parties to collaborate on analyses of regional trends in porpoise distribution and abundance at a North Sea-wide scale, and examine potential explanations for any observed changes.

4. The North Sea Group to note any information on trends in abundance and distribution from the forthcoming OSPAR QSR2023, and consider the implications of the findings.

5. Urge Parties and non-Party Range States to support a SCANS-IV survey of shelf and offshore waters being planned for summer 2022 that will include delivery of updated abundance estimates for the Greater North Sea.

Investigation of the health, nutritional status and diet

6. Encourage collaborative research by Parties on the extent and potential reasons for grey seal predation on harbour porpoises.

7. Encourage Parties to further support North Sea-wide monitoring of life history parameters through the collection and analysis of stranded and bycaught animals in order to assess evidence of temporal changes in those parameters and explore links to anthropogenic drivers.

Investigation of the effects of anthropogenic sounds on harbour porpoises

8. In the light of recent studies demonstrating acoustic trauma in porpoises due to explosions in the Baltic (Siebert et al. 2020), serious concern is expressed over similar activities occurring in the North Sea. Surviving animals might have impaired hearing which, among other things, could affect their ability to detect nets and find prey. The Secretariat is asked to bring these studies to the attention of all North Sea States and relevant bodies carrying out explosions.

9. Parties to make every effort to mitigate the effects on porpoises of activities involving explosions.

10. Collaborative studies are encouraged to quantify the impact of impulsive noise events on harbour porpoises.

Annex 2: List of Participants

COUNTRY REPRESENTATIVES & ADVISERS

Name	Affiliation	Email
Belgium		
Jan HAELTERS	Royal Belgian Institute of Natural Sciences	jhaelters@naturalsciences.be
Denmark		
Nynne LEMMING	The Danish Environmental Protection Agency	nyele@mst.dk
Signe SVEEGAARD	Aarhus University	ssv@bios.au.dk
Germany		
Patricia BRTNIK	Oceanographic Museum Stralsund	patricia.brtnik@meeresmuseum.de
Anita GILLES	University of Veterinary Medicine Hannover, Foundation; Institute for Terrestrial and Aquatic Wildlife Research	anita.gilles@tiho-hannover.de
Ireland		
Sinéad MURPHY	Galway-Mayo Institute of Technology	sinead.murphy@gmit.ie
The Netherlands		
Meike SCHEIDAT	Wageningen Marine Research	meike.scheidat@wur.nl
Marije SIEMENSMA	Independent Advisor	m.siemensma@msandc.nl
Anne-Marie SVOBODA	Ministry of Agriculture, Nature and Food Quality, The Netherlands	a.m.svoboda@minlnv.nl
Jip VROOMAN	Wageningen Marine Research	jip.vrooman@wur.nl
Sweden		
Julia CARLSTRÖM	Swedish Museum of Natural History	julia.carlstrom@nrm.se
Sara KÖNIGSON	SLU Aqua	sara.konigson@slu.se
Kylie OWEN	Swedish Museum of Natural History	kylie.owen@nrm.se
Susanne VIKER	Swedish Agency for Marine and Water Management	susanne.viker@havochvatten.se
United Kingdom		
Lauren BROOKES	DEFRA	lauren.brookes@defra.gov.uk
Kelly MACLEOD	Joint Nature Conservation Committee	kelly.macleod@jncc.gov.uk
Nikki TAYLOR	JNCC	nikki.taylor@jncc.gov.uk

ORGANISATION REPRESENTATIVES

Name	Affiliation	Email
Common Wadden Sea Secretariat		
Sascha KLÖPPER	CWSS	kloepper@waddensea-secretariat.org
European Commission		
Vedran NIKOLIC	DG Environment	Vedran.NIKOLIC@ec.europa.eu
Humane Society International		
Mark SIMMONDS	HSI UK	mark.simmonds@sciencegyre.co.uk
Seafish		
Eunice PINN	Seafish	eunice.pinn@seafish.co.uk
Sea Watch Foundation		
Peter EVANS *(Chair of the North Sea Group)*	SWF	peter.evans@bangor.ac.uk
Whale and Dolphin Conservation		
Fabian RITTER	WDC Germany	fabian.ritter@whales.org
World Wildlife Fund		
Nathalie HOUTMAN	WWF Netherlands	nhoutman@wwf.nl
Heike ZIDOWITZ	WWF Germany	heike.zidowitz@wwf.de

OTHER MEMBERS

Name	Affiliation	Email
Ida CARLÉN *(Chair of the ASCOBANS Jastarnia Group)*	Coalition Clean Baltic (CCB)	ida.carlen@ccb.se

INVITED EXPERTS

Name	Affiliation	Email
Olivia O'CONNOR	Galway-Mayo Institute of Technology (GMIT), Ireland	olivia.oconnor@imbrsea.eu
Graham PIERCE	Instituto de Investigaciones Marinas (IIM), Spain	g.j.pierce@iim.csic.es
Fiona READ	Whale and Dolphin Conservation (WDC), UK	fiona.read@whales.org

SECRETARIAT

Name	Affiliation	Email
Jenny RENELL	ASCOBANS, Coordinator	jenny.renell@un.org
Bettina REINARTZ	ASCOBANS, Admin Assistant	bettina.reinartz@un.org
Tine LINDBERG-RONCARI	CMS Conference Services	tine.lindberg-roncari1@un.org