REPORT
OF THE 1st MEETING OF THE
ASCOBANS COMMON DOLPHIN GROUP

Stralsund, Germany

16 September 2019

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

UNEP/ASCOBANS Secretariat - UN Campus, Platz der Vereinten Nationen 1, 53113 Bonn, Germany
Tel. +49 228 815 2416 - ascobans.secretariat@ascobans.org - www.ascobans.org

Table of Contents

REPORT

OF THE 1ST MEETING OF THE COMMON DOLPHIN GROUP

1. Opening of the Meeting

1.1. Welcome and announcements

Sinéad Murphy, Co-chair of the Steering Group for the ASCOBANS Species Action Plan (SAP) for the North-East Atlantic Common Dolphin (hereinafter the 'Common Dolphin Group'), opened the meeting at 09:10. It was noted that that Fiona Read, Farah Chaudry and Al Kingston would make presentations remotely.

Vincent Ridoux, Co-chair of the Common Dolphin Group, explained that Florence Caurant had taken over his role at their workplace and suggested she therefore replace him as the Co-chair. Comments were invited from the floor. As there were no objections, Ms. Caurant moved to the chairing table next to Ms. Murphy.

Ms. Murphy listed the current members of the Steering Group (see Annex 4 to this report). The question of whether additional representation from Portugal (and Spain) should be sought was discussed. Currently the responsible authorities in Portugal only reported to ACCOBAMS. Peter Evans suggested Antonio Teixeira from Portugal. Catherine Bell confirmed she could join the Steering Group. It was acknowledged with thanks that the member representing ACCOBAMS was Joan Gonzalvo.

1.2. Adoption of the Agenda

Ms. Murphy invited comments from the floor. As there were no objections, the agenda was adopted, with the mentioned additional presentation.

2. Draft Terms of Reference for the Common Dolphin Group

Ms. Caurant presented the draft terms of reference (TOR) for the Steering Group (Annex 5). Fabian Ritter assumed this was an ASCOBANS working group and asked if ACCOBAMS had a Common Dolphin expert in the group.

Mr. Ridoux pointed out that ACCOBAMS had a Conservation and Management Plan (CMP), but nothing had yet been developed specifically for the Common Dolphin – though a draft plan had been submitted to the ACCOBAMS Parties during the mid-2000s. It was highlighted that the Common Dolphin Group could work in cooperation with all the Range States from ACCOBAMS area as well.

Mark Simmonds was excited about the SAP and wondered why the review period was every six years. Ms. Caurant said that it was aligned with the reporting period of the European Commission (EC) Marine Strategy Framework Directive (MSFD). Mr. Simmonds wondered whether a review to assess the effectiveness of the SAP could be done every 2-3 years. Mr. Ridoux said this would be taken care of with an 'Achievements Table' which would be presented at each SAP meeting. An implementation review would then be undertaken at least at every meeting of the Common Dolphin Group.

3. Activities contributing to implementation of the Species Action Plan for the North-East Atlantic Common Dolphin

Ms. Caurant presented the 'Achievements Table' that was based on the SAP Actions and Tasks under each Action. It would include a description of the activities undertaken by each Range State and progress status coloured with green (routinely undertaken in a consistent way), yellow (tasks being undertaken/still in progress) and orange (task only commenced/would be

undertaken in the near future). It was pointed out that the North Sea and Jastarnia Groups used the traffic light system as well. It would be good to have coherence between the ASCOBANS species action plans. **It was agreed that colour coding of the Common Dolphin SAP Achievements Table should correspond with the progress report tables of the ASCOBANS North Sea and Jastarnia Plans for the conservation of the Harbour Porpoise**.

Mr. Ridoux presented activities undertaken by France in the draft Achievements Table (Annex 2). SAMM covered the French Atlantic coast in the winter 2011-2012 and the summer 2012, collecting distributional data on marine megafauna (cetaceans, seabirds, turtles, large fishes) and human activities (boats, fishing buoys, floating marine litters). More recently the marine natural park of Pertuis Charentais and Gironde Estuary funded a similar study at a more local scale, to investigate seasonal changes in the distribution of marine megafauna (February, May, August, November 2019 and 2020). Ifremer[1] was also maintaining a fishing record according to different fishing gear. There had been a meeting with Météo France this week and it was noted that Météo France was working in the Atlantic (Spain, Portugal, west of the UK) and also across the Mediterranean. Météo France should be able to provide more data regarding SAP action RES-03[2] Task 2 'Complete seasonal risk assessment/risk mapping of relevant human activities and Common Dolphin distribution in order to meet the agreed objectives of Resolution 7, MOP 4, Resolution 7, MOP 5 and Resolution 5, MOP 8.'

Mr. Simmonds asked if anyone was undertaking telemetry work on Common Dolphins. Nobody knew if this was taking place. Mr. Ridoux commented that Common Dolphins were extremely sensitive: when handled they could die, and many of them died when live-stranded. Mr. Ritter asked if we knew about the hearing abilities of the Common Dolphin. Ms. Murphy agreed this was one of the things recommended for research during the development phase of the SAP. Ms. Caurant emphasized that bycatch was still the greatest threat and while for example pollution had effects on the species, bycatch remained the primary threat.

Ms Murphy provided an overview of research activities in Ireland regarding the Common Dolphin. As part of various projects funded through University College Cork, strandings, health status, life history, pollutant and genetic data had been collected between 1990 and 2007; some of which were worked up as part of Ms Murphy's PhD on the species in the region. Since then, data collection for strandings and bycatch observer programmes, as well as pollutant studies, were collected on an *ad hoc* basis, funded through mechanisms such as the Marine Institute's Beaufort Marine Research Awards and Bord Iascaigh Mhara. In 2017, a marine mammal necropsy strandings project had been re-established, funded by the Irish Marine Institute and the European Maritime and Fisheries Fund (EMFF)[3]. Part of this work was to assess bycatch in stranded small cetacean carcasses, work that was undertaken by the Regional Veterinary Laboratory in Cork, Irish Whale and Dolphin Group (IWDG), GMIT and the Institute of Zoology, London. The necropsy protocol employed in the project was an adaptation of the one used by the UK CSIP and included additional criteria for identifying bycatch on necropsy, outlined in the paper 'Discrimination between bycatch and other causes of cetacean and pinniped stranding' authored by researchers at Wood Hole Institute in the US and colleagues[4].

Common Dolphin strandings in Ireland occurred mainly on the west and south coasts, and peaked in the months of January, February, March and December[5]. Strandings of Common Dolphins had increased year on year along the Irish coast since 2013, especially over the winter period (December to February); an increase out of proportion with other species. Of the 36 Common Dolphins necropsied between June 2017 and March 2018 for which results were

[1] L'Institut Français de Recherche pour l'Exploitation de la Mer.
[2] 'Improve understanding of causes of seasonal and annual variation in abundance and distribution, particularly in relation to human activities'.
[3] https://emff.marine.ie/marine-biodiversity/assessment-species-catch-composition-fisheries-posing-risk-biodiversity
[4] http://www.int-res.com/abstracts/dao/v127/n2/p83-95/
[5] https://www.cambridge.org/core/journals/journal-of-the-marine-biological-association-of-the-united-kingdom/article/temporal-and-spatial-trends-in-stranding-records-of-cetaceans-on-the-irish-coast-20022014/6509CE11F73A25618F15C8F5C26C174D

available, causes of death were attributed to infectious disease (47 per cent), starvation/hypothermia (19 per cent), live stranding (14 per cent), gas embolism (3 per cent), suspected bycatch (3 per cent), other (6 per cent), or were not established (8 per cent). Preliminary results suggested that incidences of infectious diseases and starvation were higher than reported elsewhere.

Funding was also provided through the EMFF to enhance the Irish observer sampling scheme under the Data Collection Framework, as well as hiring a temporary Scientific and Technical Officer to look at the impacts of fisheries on habitats and species in coastal European marine sites/Natura sites. This work would include the development of fishing pressure indicators.

Ms Murphy also reported on the recent abundance estimates from the Irish aerial ObSERVE survey. The most recent abundance estimates from the SCANS-III survey (July 2016) of 467,673 individuals (CV=0.26; 95% CI: 281,100-778,000) covered the European continental shelf and UK offshore waters, but did not include the contemporaneous aerial survey data from the Irish Exclusive Economic Zone (EEZ) which was recently published by Rogan et al.[6]. These authors reported 33,215 (CV=41.52; 95% CI: 19,844-55,595) Common Dolphins at that time. This included Common Dolphins identified to species, and undifferentiated Common/Striped Dolphins (but these were likely to have been almost all Common Dolphins) in this area. The ObSERVE survey results from 2015-17 for the Irish EEZ showed considerable variation between seasons and years. During the July 2016 aerial survey flights in both ObSERVE and SCANS-III, no Common Dolphins were seen in the Irish Sea (in contrast to the results in July 2004 from SCANS-II), suggesting that, at the time, Common Dolphins might have been concentrated further south in the Bay of Biscay and around the Iberian Peninsula, where abundance estimates were highest.

It was noted that as the Irish aerial survey was not accurate to species for the Common Dolphin, which could be mistaken for other small delphinid species, that the survey methodology should be reviewed.

The UK had collected more than three decades of data through the cetacean strandings investigation programme (CSIP) which recorded cases of dead stranded animals around the UK, and performed post-mortem analysis on a subset of these animals to determine contributing factors to the stranding event and where possible, the cause of death. Samples were also collected for analysis of e.g. diet and life history parameters. Common Dolphins were one of the most commonly recorded species under the CSIP, contributing to a growing dataset on pressures and threats including any evidence of bycatch. A dedicated on-board bycatch observer programme was also funded in the UK, enabling assessment of bycatch risk as well as reporting on effectiveness of applied mitigation measures (see Section 5.2). A Bycatch Mitigation Initiative was being drafted with the aim of addressing bycatch in the UK, tying in with actions identified within the Common Dolphin SAP. A national bycatch steering group has also been convened to take ownership of addressing bycatch in the UK, and ensure representative stakeholder participation.

Species distribution was monitored through coordination of and participation in systematic widescale surveys (e.g. Small Cetacean Abundance in the North Sea and Adjacent waters (SCANS)) which supported identification of trends in distribution, which could be considered alongside trends in pressures such as bycatch risk identified through the aforementioned programmes. A project titled the Joint Cetacean Data Programme (JCDP) was also underway to facilitate standardization and collation of other distribution data sources for combined use in analyses to maximize effectiveness of ongoing data collection effort around the NE Atlantic.

Ms. Murphy presented a table on the bycatch data by métier from Spain from 2015 to 2018 and during that time, two Common Dolphins had been reported as bycaught in 771 observed fishing trips in the North-east Atlantic.

[6] https://www.dccae.gov.ie/en-ie/natural-resources/topics/Oil-Gas-Exploration-Production/observe-programme/Pages/ObSERVE-Programme.aspx

The deadline for completing the Achievements Table was discussed. Realistically it could be completed in 2-3 weeks.

3.1. French National Working Group on the Common Dolphin

Mr. Ridoux delivered a presentation prepared by Laureline Gauthier7, who was leading the French national working group on cetacean bycatch. There had been Multiple Stranding Events (MSE) of small cetaceans along the Atlantic seaboard in the winter: 950 in 2017, 700 in 2018 and 1,188 in 2019 – with the majority showing bycatch marks.

A national working group on cetacean bycatch had been established in April 2017 to improve knowledge for a better understanding on cetacean and fisheries interactions, to prevent bycatch by implementing mitigation actions, and to sensitize fishermen for a better participation to the above-mentioned objectives. The working group consisted of administrations (central and regional services of the Ministry of Food and Agriculture and the Ministry of Ecology), scientists, fisheries, and NGOs.

The first scientific analyses were undertaken by Observatoire Pelagis using data from winter 2016-2017. These data showed a strong correlation between the Common Dolphin mortality areas and the distribution of three fishing fleets in the Bay of Biscay. The (putative) period and gear of higher risk was from 1 December to 30 April and the French pair trawlers (PTM_FR), respectively.

Measures implemented for winter 2018-2019 included: (1) to improve knowledge of interactions between the fleet (PTM_FR) and the small cetacean populations, bycatch observer coverage onboard the above-mentioned fleet would be increased. In addition, carcasses would be tagged and dropped off at sea by observers to estimate the proportion of dead animals that strand along a coastline. (2) To prevent bycatch, vessels of the fleet (PTM_FR) would be fitted with acoustic deterrents aiming at preventing cetaceans from entering the trawls. (3) To enforce the existing regulation, all fishermen were to declare marine mammal bycatch from 1 January 2019 onwards.

First results from the first measure (on-board monitoring): an increased sampling rate (205 days at sea out of 740 days at sea, i.e. 28 per cent) had been achieved for PTM_FR. Twelve out of 14 active PTM pairs had been monitored during at least one trip by an onboard observer – the fleet sampling rate appeared to be good. Thirty-one Common Dolphins had been bycaught by the French pair trawler fleet during the period of higher risk. Of those, 26 individuals had been tagged before being dropped off at sea by observers, of which only three had been recovered by the French stranding scheme. Results from the second measure (deployment of pingers): all PTM pairs had been fitted with two to four DDD003 pingers. Pingers had been reported to be correctly deployed. Third measure (compulsory declaration): a guide was prepared and distributed to help fishermen in this respect, and sensitisation of fishermen was to be continued.

Results from 2018-2019 indicated that although the French pair trawl fleet generated incidental catches, they did not account for all observed strandings. Therefore, the objectives for winter 2019-2020 were to pursue knowledge acquisition; initiate collaborations to understand, monitor and reduce bycatches in French fishing fleets, specifically French gill/trammel netters, as well as fleets from other EU Member States operating in the area; and to engage with other stakeholders at the regional level. In France, ultimately the challenge was to engage gillnet fishers and improve their participation in the national working group.

Vedran Nikolic (European Commission) raised the issue of the future of pingers, given their effect on animals and keeping in mind their possible impacts. Eunice Pinn noted that in the UK, pingers were effective for the Harbour Porpoise, but that for the Common Dolphin, whilst they did reduce bycatch, the results were less conclusive. Mr. Ridoux explained that in the case of pelagic

[7] Direction des pêches maritimes et de l'aquaculture, Ministère de l'agriculture et de l'alimentation, France.

trawlers the number of pingers to be deployed was limited so their negative effect would be acceptable. Nonetheless, Observatoire Pelagis was working with Ifremer on the development of a new pinger, that would be placed in the cone area in trawlers. Dolphins already knew the trawler was there – it was very noisy - therefore only pingers with deterring effect would potentially be efficient. However, when dolphins realized they were in nets, they tried to escape through the mesh and not through the entrance. Mr. Simmonds noted that dolphins had no opportunity to learn from escaping the nets (because they died) so suggested that dolphins should be helped to find out about where the exit was. Mr. Ridoux welcomed ideas on how to do that. One idea could be to reposition the pingers in trawlers.

4. Reports from previous meetings

4.1. Overview of ICES WGMME work on the Common Dolphin

Ms. Pinn, who was previously a Chair of the Working Group on Marine Mammal Ecology (WGMME) of ICES[8], presented the key outputs from the WGMME 2019 report. The report highlighted the mass stranding event in February-March 2017 of 793 cetaceans on the French Atlantic coast, of which 84 per cent were Common Dolphins.

Portugal's SafeSea and Life+ MarPro projects conducted systematic annual aerial surveys in 2010-2015, and the Common Dolphin was one of the most abundant species recorded. Bycatch limit reference points for Common Dolphins inhabiting waters off the Iberian Peninsula were estimated in 2017 by Saavedra using a minimum realistic ecosystem model implemented with GADGET. A bycatch threshold/limit of 1.4 per cent of the best available abundance estimate for the species was suggested, noting that the calculated confidence limits indicate that the bycatch limits should be reduced to 0.7 per cent for Common Dolphins to be precautionary.

The Irish ObSERVE data showed large differences in densities (sightings per area) between seasons for the species, namely summer and winter.

It was noted that Spain and the UK were undertaking work on marine litter. In Spain, microplastics were investigated in the stomachs of stranded Common Dolphins during 2005-2010. Common Dolphins had a 94 per cent probability of having microfibres in the stomach contents, with an average number of 3.6 fibres with an average size of 3.73 mm. In the UK, microplastics were detected in all 16 Common Dolphins assessed, with total numbers of microplastics ranging from 1–12 (mean 5.7 MPs). Macroplastic (green netting) was recorded in a juvenile Common Dolphin.

4.2. Update on OSPAR Marine Mammal Expert Group's work on developing mammal MSFD indicators

Ms. Chaudry gave this update remotely. The UK´s work had mainly focused on seals, with OSPAR[9] and HELCOM[10]. The OSPAR Marine Mammal Expert Group had been working on the M3/M5 Harbour and Grey Seal indicators (led by the UK) along with M4 Cetacean Abundance and Distribution (led by the Netherlands) and M6 Marine Mammal Bycatch (led by the UK) indicators in preparation for the Quality Status Report to be published in 2023. There was still some work to be done around threshold values for M4 Cetacean Abundance and Distribution for this to be agreed by the OSPAR Contracting Parties.

A joint OSPAR-HELCOM workshop on developing indicators for seabird and marine mammal bycatch was held in 2019 to discuss thresholds. The outcome of this workshop and subsequent discussions within OSPAR's Marine Mammal Expert Group was that assessments of marine mammal bycatch mortality would be made for the Harbour Porpoise, Common Dolphin and Grey Seal. There was still some work to be done around thresholds for marine mammal bycatch;

[8] The International Council for the Exploration of the Sea.
[9] The Convention for the Protection of the Marine Environment of the North-East Atlantic, or the OSPAR Convention.
[10] The Baltic Marine Environment Protection Commission, or the Helsinki Commission.

however, use of the ASCOBANS precautionary approach of a threshold of 1 per cent of best available abundance would be considered for data-poor species.

In addition, a new candidate indicator was proposed in 2019 for PCB toxicity in marine mammals. This indicator is still under development, including collation of what data are currently available from Parties. Parties were supportive of developing this indicator.

Mr. Simmonds inquired about the steer from OSPAR on the threshold issue and asked whether there was a connection with ASCOBANS. If a threshold value had not been agreed in an expert group, OSPAR preferred not to go ahead.

5. Overview of bycatch as a threat to Common Dolphins

A presentation was provided by Ms. Murphy which summarized a publication in press[11] on 'Conservation management of Common Dolphins: Lessons learned from the North-East Atlantic'. Ms. Murphy agreed to share the publication with the Steering Group once published. The presentation also summarized information reviewed in the 2013 publication on 'The Short-beaked Common Dolphin (*Delphinus delphis*) in the North-eastern Atlantic: distribution, ecology, management and conservation status.'[12]

One population was considered to exist within the North-east Atlantic, though the extent of the range of the population was unknown - sampling of individuals that inhabited waters beyond the continental shelf for genetic analysis was required. Until further genetic analysis had been undertaken, ICES proposed in 2014 one management/assessment unit for the Common Dolphin within the NE Atlantic, the waters of which encompassed OSPAR regions II, III and IV.

An increase in abundance in continental shelf waters between the SCANS II/CODA surveys (2005 and 2007) and the SCANS III (2016) survey very probably reflected either latitudinal or offshore–inshore movements, or a mixture of the two – rather than an increase in total population size. However, as samples analysed to date for genetic and cranial morphometric analyses had been obtained prior to 2016, it was unknown if the influx of individuals into the region were from the same population. Changes in occurrence of the species were also reported in the recent past in waters beyond the continental shelf; a possible decline in density/distribution in offshore waters was reported between the NASS 1995 survey, and later NASS surveys (e.g. 2007). The IWC Sub-Committee on Small Cetaceans (2009) identified several potential reasons for the observed changes in density/distribution within the range of the NASS surveys, including (1) differences in sighting conditions (e.g. sea state); (2) uncertain species identification (as other dolphin species were sighted); (3) a true reduction in Common Dolphin density; (4) ship effect; and (5) interannual distributional shifts.

Ms Murphy presented a table of annual bycatch estimates for the species in the NE Atlantic between 1990 and 2009. Highest bycatch rates were reported for tuna driftnets (French, UK and Irish vessels) in 1999, with an estimated 2,101 Common Dolphins reported as bycatch in the region. Based on data from 1990-2000, European tuna driftnets in the NE Atlantic had a high tendency for Common Dolphin calves and yearlings to become entangled. Of the Common Dolphin bycatch sample, 37 per cent was less than one year old, and 51.2 per cent was less than two years old or smaller than 165cm in length. Driftnets in the tuna fishery were subsequently banned in 2002.

[11] Murphy S, Evans PGH, Pinn E, Pierce GJ. Conservation management of common dolphins: Lessons learned from the North-East Atlantic. *Aquatic Conserv: Mar Freshw Ecosyst*. 2019; 1–30. https://doi.org/10.1002/aqc.3212.

[12] Murphy, S., Pinn, E., and PD. Jepson. 2013. The short-beaked common dolphin (*Delphinus delphis*) in the North-eastern Atlantic: distribution, ecology, management and conservation status. Oceanography and Marine Biology: An Annual Review 51: 193-280.

In the Irish tuna pelagic trawl fishery, no Common Dolphin bycatch was observed between 2005 and 2013, owing to several mitigation measures such as cessation of fishing activities when dolphins were near; extinguishing stern lights while towing at night; lowering the trawl headline to several metres below the surface. Also, use of more powerful sonar might have curbed bycatch due to more targeted catches.

The PETRACET project (2003-2005) assessed factors influencing incidental capture in the UK and French bass pelagic trawl fisheries using a stepwise model[13] – though only 32 per cent of the deviation was explained by the model. Individual Common Dolphins caught in UK bass nets (2001-2005) had been predominantly juveniles and young adults (8-10 years old). Whereas, strandings data of Common Dolphins along the UK coastline showed a peak in the three-year-old age class for dolphins diagnosed as bycatch (1990-2005). This suggested that some of the strandings of Common Dolphins diagnosed as bycatch in the region, particularly the western English Channel, might have resulted from interactions with other fisheries.

Ms Murphy further reported on work undertaken by the ICES WGBYC in 2016, which reviewed national reports for the years 2009-2013. In that year, ICES advised the European Commission that bycatches of Common Dolphins might be unsustainable – based on SCANS II & CODA abundance estimate. There was uncertainty in the assessment however, due to ambiguities in recording fishing efforts, unrepresentative sampling by gear type, and a lack of statutory reporting from some major fishing nations. In 2018, ICES evaluation and external assessments of the numbers of bycaught dolphins recorded on the shores of the Bay of Biscay indicated that a dedicated bycatch observer programme and bycatch mitigation were required for relevant fisheries in this area.

Interannual variation in stranding rates had been observed across the NE Atlantic, though the trend had predominately been increasing for all countries within the main range of the species.

Risk mapping for Common Dolphins undertaken by MERP (Marine Ecosystem Research Programme) revealed the main 'risk' areas for trawling: the western Channel/Western Approaches, Northern Bay of Biscay, and off north-west Spain. As for gillnetting, the main risk areas were off the south-west of Ireland, the northern Bay of Biscay, and off the north-west coast of Spain.

5.1. Overview of a publication on the nature of fleets

Mr. Ridoux gave a presentation on 'Modelling the drift of bycaught dolphin stranded carcasses helps identify involved fisheries', based on the recent publication from Hélène Peltier. 1,170 small cetaceans were reported stranded along the Atlantic coast of France from 1 December 2018 to 16 April 2019. Two multiple stranding events (from late January to mid-February; and mid-March) of which 90 per cent were examined by the stranding scheme. 93 per cent were Common Dolphins and 85 per cent of the animals had bycatch marks.

External bycatch marks included net marks, fracture of rostrum, amputations, hole under jaw, flensing, and pieces of fishing gear. If no such external lesions were found, the following combination of features was considered to be suggestive of incidental catch (good body condition, having no pathological condition, fresh food in the stomach, and asphyxia lung lesions).

The study found that drift modelling allowed candidate fisheries to be identified. Diversity of candidate gear and target species made monitoring and mitigation more complex to design and expensive to implement. The study recommended that candidate fisheries should be subject to additional observer and/or REM monitoring, that the analyses should be expanded to include

[13] Batch ~ Month + Towing speed + Start Hour + Area + Water Depth + Year.

periods outside of the multiple stranding events, and that same analyses be performed for the Harbour Porpoise.

During the multiple stranding event in February 2019, carcass abundance estimate was done by Conventional Distance Sampling: the number of (80) floating carcasses, corrected by probability to float.

Mr. Ridoux described how the national bycatch working group was important in establishing dialogue with fishers and administration, to try and reduce bycatch**.**

5.2. Current activities on bycatch monitoring and mitigation in the UK

Mr. Kingston gave a two-part presentation remotely and firstly provided an update from the UK Bycatch Monitoring Programme and then described some recent developments and work related to Common Dolphins undertaken by the ICES Working Group on Bycatch of Protected Species (WGBYC).

In relation to the UK specifically Mr. Kingston highlighted those species that were subject to annual bycatch mortality estimates and briefly described the procedure. Due to generally quite low monitoring coverage a method had been developed whereby bycatch rates were calculated using multiple years' monitoring data and were applied to a single year's fishing effort data to give an annual estimate for that year. This approach meant that estimates could still be produced for metiers that might not have been sampled in a particular year and so provided a fuller mortality assessment and broadscale mortality estimates to judge conservation status than simply using monitoring data from a single monitoring year. For Common Dolphins, the bycatch rates in most fisheries appear to be quite stable and the overall numbers observed bycaught were relatively low in comparison to Harbour Porpoises and seals. Annual total mortality estimates for UK fisheries ranged from 240-325 per year since 2013, with most of the bycatch occurring in ICES Subarea 7.

Mr. Kingston then also described some fairly recent mitigation work that had been carried out in the English Channel bass pair trawl fishery, a fishery that had been closed in 2015 under bass stock management measures but which had a well-documented Common Dolphin bycatch issue prior to that. Initial trials focussed on the use of an excluder grid and escape hatch system which showed some promising results, but this trial had to be stopped following an intervention by an environmental group that significantly damaged the experimental gear. Following that, trials of a recently available pinger, that was much louder than previously available models, were undertaken over the course of several years. The pingers were used voluntarily by the fishermen, as and when they chose, so the trial was not conducted following a strict experimental design but nonetheless the results also showed promise with rates reduced by about 90 per cent when pingers were used and functioning correctly.

Mr. Kingston then finished his presentation with a description of some passive acoustic monitoring that is being carried out in the UK. Two approaches are being undertaken: 1. Single channel recorders are being deployed on fishing nets to improve our understanding of the relationship between bycatch rates and relative cetacean abundance, and 2. More complex three-dimensional recorders and sensor packages are being used to investigate the fine-scale behaviour of animals around nets which it was hoped would provide new insights into the actual mechanisms of bycatch. Some preliminary results from both of these studies were presented.

5.3. Overview of ICES WGBYC

Mr. Kingston then briefed on the WGBYC report published in the end of August 2019. WGBYC was established in 2009, with the main purpose of assessing and improving protected species monitoring and mitigation methodology. The group currently had six main TORs:

(1) Review and summarize Regulation 812/2004 and other reports to collate bycatch rates and estimates in EU waters and wider North Atlantic;

(2) Collate and review information from 812 reports about bycatch mitigation measures and ongoing bycatch mitigation;

(3) Evaluate impacts of bycatch on protected species populations furthering the Bycatch Risk Assessment (BRA[1]) method to assess conservation level threats / prioritize areas for additional monitoring;

(4) Develop, improve and coordinate with other ICES working groups on methods for bycatch monitoring, research and assessment;

(5) Coordinate and support research proposals/projects and funding opportunities in support of researching protected species bycatch mitigation;

(6) Continue to develop, improve, populate through formal Data Call, and maintain database on bycatch monitoring and relevant fishing effort in European waters.

Mr. Kingston provided further detail related to TOR 3 and described an assessment method that has been developed by WGBYC called a Bycatch Risk Assessment (BRA) which used available bycatch rate data, fishing effort data and abundance estimates to provide a measure of bycatch mortality against population abundance. In 2018 WGBYC carried out a BRA for Common Dolphins for the Celtic Sea Ecoregion and Bay of Biscay which produced bycatch mortality estimates ranging from 1760 to 5259, with approximately 80 per cent occurring in the Bay of Biscay region. The mortality estimates are between 0.53 per cent and 1.57 per cent of the latest abundance estimates.

Mr. Kingston then finished the presentation with a description and update on WGBYC data acquisition procedures and ongoing data improvements within fisheries sampling programmes. Historically, WGBYC had primarily used bycatch data from national Regulation 812/2004 annual reports. WGBYC had been aware for a few years that Regulation 812/2204 was likely to be repealed and that annual reports would no longer be available so had gradually developed a formal ICES/WGBYC datacall that was issued to relevant nations requesting fishing effort, monitoring effort and bycatch data. In 2019 ICES issued a datacall to 24 countries requesting data for 2017, the majority of which submitted data in the required format. The resulting dataset contained over 17,000 fishing effort records, over 2,000 monitoring effort records and over 1,000 protected species bycatch records (containing circa 1 million individual PS specimens) and so provided a significant step forward in protected species data acquisition. WGBYC was also now working closely with the ICES Working Group on Commercial Catches (WGCATCH) to help improve sampling protocols for protected species bycatch within commercial catch sampling programmes which would also be a significant improvement that would permit more robust mortality assessments.

Analysis in the UK data indicated that marine mammal bycatch rates differed between observer programme types. Rates were 13 times higher in dedicated bycatch observer programmes versus the DCF sampling programme using non-dedicated observers.

Mr. Simmonds asked where this ASCOBANS Common Dolphin Group could make a difference. Ms. Murphy said that while WGBYC was specifically looking at bycatch, the SAP was dealing with all threats, and it was important to assess the impacts of all threats on the species, individually and combined. Further the remit of WGBYC was to review current knowledge, whereas the remit of the SAP was to address conservation measures that would improve the status of the species in the region.

5.4. Report back from the OSPAR-HELCOM workshop on developing indicators on bycatch

Ms. Murphy gave a presentation on the recent OSPAR-HELCOM workshop that took place on 3-5 September 2019 in Copenhagen, Denmark. The aim of the workshop was to develop methods to assess, for conservation purposes, the pressure of incidental bycatch of birds and marine mammals. Three subgroups were formed, highlighting similarities and differences between marine mammals and birds.

Group A identified various data needs for carrying out assessments and data gaps. For example, some Member States had no monitoring/sampling programmes for bycatch in place. It was noted that while extracting 'Days at Sea' (DaS) from VMS remained the long-standing method to measure fishing effort, a better approach would be to used soak time and net length data (for estimating bycatch rate). Further, a major sampling issue was the scarcity of monitoring for small vessels; and that data from all fishing vessels (full-time, part-time, recreational) were needed. Additional recommendations were made regarding monitoring for bycatch including; provision of incentives to accept onboard observers; enforcement mechanisms for non-compliance; use of a reference fleet to estimate bycatch where applicable; cover a certain percentage of métier and area under DCF monitoring; and employment of a single agreed data and monitoring standard, common logbook format, between EU and non-EU countries. It was also noted that the use of electronic logbooks would facilitate the sharing of information and shorten the time lag.

Group B was tasked with exploring approaches to identify areas of high/low bycatch risk. The sub-group concluded that a risk assessment to highlight/define a suitable monitoring approach should be carried out at regular intervals, so as to ensure ecological relevance of the assessment procedure; data on species distribution (inclusive of spatial and temporal aspects), habitat use, prey specificity, and other relevant parameters were important to enable improved identification of high-risk areas; fisheries effort data needed to be enhanced to a level that could support identification of high-risk areas. The sub-group also noted that cross-border cooperation over data collection and processing was important.

Group C identified approaches to setting thresholds for the indicator assessment method. Thresholds were the level, point, or value associated with a Risk Indicator that would trigger action[14]. The group concluded that the conservation objective was to minimize and where possible eliminate incidental catches of all marine bird and mammal species such that they did not represent a threat to the conservation status of these species.

Ms Murphy provided an overview on currently employed methods for describing 'thresholds' or 'bycatch limits' for cetaceans. ASCOBANS Resolution 5.5 on Incidental Take of Small Cetaceans instructed that total anthropogenic removal be reduced by the Parties to below the threshold of 'unacceptable interactions' with the **precautionary objective** to reduce bycatch to less than 1 per cent of the best available abundance estimate and the general aim to minimise bycatch (i.e. to ultimately reduce to zero). The resolution defined **'unacceptable interactions'** as being a total anthropogenic removal above 1.7 per cent of the best available estimate of abundance. The intermediate conservation objective was 'to restore and/or maintain stocks/populations to 80 per cent or more of their carrying capacity'.

Ms. Murphy further presented different bycatch limit approaches, including those employed in the United States. Pros of the percentage of abundance approach were that it was easy to estimate and could be compared to maximum net productivity rate, if known. Cons were, for example, that it did not incorporate any biological information on the species or uncertainty in estimates of population size or bycatch, and it did not include natural mortality.

The US Potential Biological Removal (PBR) level approach incorporated uncertainty in estimates of population size, and a recovery factor. However, it used only a single current value of absolute population size, did not incorporate estimates of bycatch, and did not include natural mortality.

[14] Scientific, Technical and Economic Committee for Fisheries (STECF) – Review of the implementation of the EU regulation on the incidental catches of cetaceans (STECF-19-07). Publications Office of the European Union, Luxembourg, July 2019. Accessible here.

Though further work had been undertaken on this approach to include a time series of abundance estimates.

The IWC Catch Limit Algorithm (CLA) approach was more conservative than PBR. It incorporated estimates (and uncertainty in estimates) of population size and bycatch, estimated relative population level (depletion) and allowed implementation of a 'protection level' below which limits to removals could be set to zero. This could shorten recovery time to target population levels. However, it did not include natural mortality, and if a time series of data on population size were unavailable, it performed like the PBR.

The OSPAR-HELCOM workshop suggested different approaches for setting thresholds/bycatch limits for data rich and data poor species [15]. Regarding thresholds for anthropogenic removals of data rich species, removals should not exceed levels that would results in a reduction of the medial population size below 80 per cent of carrying capacity within a 100-year time period for 50 per cent of the time[16]. For data poor species, a provisional suggestion was that the anthropogenic removals threshold was 1 per cent of natural[17] annual adult mortality of the species. However, estimates of actual natural adult mortality for small cetaceans in the region is poor. The workshop further suggested an alternative approach where anthropogenic removals should not exceed 'levels' that are 0.5 per cent/0.3 per cent/0.1 per cent[18] of the median population size within a specified time frame (e.g. 10 years), for species with a generation length (in pre-disturbance conditions with an assumed stable population) of 12 years of less (e.g. Harbour Porpoise) /13-20 years (e.g. Common Dolphin) />20 years (e.g. Minke Whale, Humpback Whale), respectively. Estimates for 'levels' were based on results from employing the Removal/Bycatch/Catch Limit Algorithm approach.

Ms. Murphy noted that based on the management framework procedure developed for the common dolphin under the CODA project, the bycatch limit estimated using the Removal/bycatch Limit Algorithm approach (adapted from the IWC Catch Limit Algorithm approach) was more conservative than the ASCOBANS limits of 1.7 per cent and 1 per cent[19]. Mr. Simmonds pointed out that data were difficult to interpret. Ms. Murphy reminded everyone that **the 2015 ASCOBANS bycatch workshop recognized that the 1.7 per cent was not as conservative as other approaches.** Mr. Simmonds noted that change to this must be presented to Parties. Jenny Renell (ASCOBANS Secretariat) prompted that the Meeting of the Parties to ASCOBANS was coming up in 2020.

Ms. Murphy reminded SAP members that EU Directives and Regulations already prohibited any bycatch. All ASCOBANS Parties were, currently, EU Member States.

Although the full range of the NE Atlantic population was not known, Ms. Murphy was of the view that we should have a threshold/bycatch limit for the Common Dolphin NE Atlantic Management Unit. It was agreed Ms. Murphy would request further clarification regarding employment of various 'levels' for data poor species from Peter Evans and Phil Hammond.

Ms. Bell pointed out the purpose of the bycatch threshold was to keep Contracting Parties in fold. The aim was always zero bycatch. The bycatch threshold would be reviewed based on the numbers that come back from surveys. Thresholds should take account of uncertainty, which the per cent did not.

[15] Outcome of the OSPAR-HELCOM workshop to examine possibilities for developing indicators for incidental by-catch of birds and marine mammals. Accessible here.
[16] RLA approach; NB. 'carrying capacity' needs defining.
[17] 'Natural' may need defining, discussion on summing all anthropogenic mortality.
[18] Numbers are placeholders, time period could be 10/6 years.
[19] Winship, A.J., Murphy, S., Deaville, R., Jepson, P.D., Rogan, E., and P.S. Hammond. 2009. Preliminary assessment and bycatch limits for northeast Atlantic common dolphins. Report to the International Whaling Commission, SC/61/SM19. 8pp.

5.5. Update on the New Technical Measures framework

In his presentation, Mr. Nikolic emphasized that data collection and implementation of measures required close inter-sectoral and inter-institutional cooperation, enforcement or rules and adequate support for and by fishers. For wide-ranging species such as cetaceans, the cooperation with other countries in the species range was essential, as well as the support of scientific organizations. Mr. Nikolic highlighted the importance of good knowledge and surveillance of the conservation status.

Links with the common fisheries policy: EU **Data Collection Framework (DCF) and the Technical Measures Framework** outline requirements on collection of data to assess the impact of EU fisheries on marine ecosystems, in particular on incidental bycatch (all fisheries, all vessels) of birds, mammals, reptiles and fish protected under Union legislation and international agreements. This would aim to fill the existing data gaps and facilitate compliance with provisions of Article 12 of the Habitats Directive.

Data collection methods and quality should be appropriate for the intended purposes, follow the best practices and relevant methodologies advised by the relevant scientific bodies. All types of fisheries and vessels should be collecting (during observer schemes and by the fishers themselves through logbooks) data on incidental bycatch of all protected species, including absence in the catch. Selection of methodologies should be coordinated at marine region level and be based on end-used needs.

Data were still heavily biased on stock assessments. The new 'Technical Measures Regulation' (Regulation 2019/1241) provided different avenues for action. It completed the framework for the implementation of horizontal conservation measures required under Article 12 of the Habitats Directive. Regulation 2019/1241 contained targets that linked specifically with the Habitats Directive (FCS) and other international requirements. Regionalization: Member States can submit joint recommendations to the Commission to adopt delegated acts containing additional mitigation measures. But if there were not enough data collected, there was no consensus or grounds for joint recommendations. However, Member States could take measures for their own fleets.

To a question of how could ASCOBANS contribute, Mr. Nikolic responded that we were missing a **recommendation to each country to determine, for example, which were the high-risk bycatch fisheries**. Plenty of money was available for this through, for example, EMFF funding. It was recognized the joint recommendations did not work perfectly – policy had been set in 2013. Mr. Nikolic highlighted that **SAPs were a very good instrument for countries to cooperate** – implementing SAP actions also corresponded to complying with EC Directives and Regulations.

Ms. Murphy further suggested that if the EU required such information, a request could be sent to ICES to collate further information on bycatch, in addition to organizing a follow-up OSPAR-HELCOM workshop on examining possibilities for developing bycatch indicators.

Mr. Ritter informed that WDC had lodged a complaint to EU regarding Member States non-compliance with Regulation 812/2004. Emergency measures were also proposed, which he would circulate to the group.

5.6. Overview of strandings, life history and fisheries interactions of the short-beaked Common Dolphin in Galicia

Ms. Read gave a presentation remotely entitled 'Strandings, life history and fisheries interactions of the Short-beaked Common Dolphin *(Delphinus delphis)* in Galicia, NW Spain'. Ms. Read undertook her PhD in Spain under the supervision of Graham Pierce (also a member of the Steering Group).

Galicia was one of the world's main fishing regions with an estimated 1 million fishing trips annually, from 85 harbours. Ninety per cent of the fleet was small-scale vessels (≤ 12 metres) operating in coastal waters. Many vessels were polyvalent. The region was socially and economically dependent on fisheries, and an important area for cetaceans and fisheries interactions. The Common Dolphin was the most frequently stranded and sighted cetacean species in the region.

Over 400 interviews with fishermen were conducted during the study, to learn about mortality rates and which gear type animals interacted with. Additionally, other objects of the study included: examination of evidence for temporal trends in stranding patterns and mortality rates; quantifying life history parameters for the species, including age structure, age and length at sexual and physical maturity, pregnancy rate, mortality rate, etc.; employment of age-at-death data to estimate total and fisheries mortality rate for common dolphins in Galicia; examination of trends in fisheries interactions of Common Dolphins in Galicia; and provision of recommendations on future work of common dolphin-fisheries interactions in Galicia, and the NE Atlantic.

Results of the study showed that there was high inter-annual variation in strandings; higher proportion of males: annually and seasonally; a higher proportion of strandings in south Galicia; peaks of strandings in winter (46 per cent) and spring (26 per cent); significant differences in the age structure of males and females, with a high number of males aged 7-12 years old; and an annual pregnancy rate of 33 per cent for Galician waters.

Using strandings data, an annual mortality rate of 13 per cent was reported – for individuals with a known cause of death. Whereas, the annual mortality rate due to fisheries interactions was 5.2 per cent. Between 1990-1999, 36 per cent of stranded animals showed evidence of fisheries interactions (animals with a known cause of death), rising to 58 per cent in 2000-2009. Biological impact of fisheries interactions was unknown, and questions about carrying capacity and the possible existence of separate stocks in the NE Atlantic needed to be answered.

High level of bycatch occurred across the range of the population in the NE Atlantic, and levels of fisheries interactions are most likely to be unsustainable. Maximum (reported) anthropogenic removal rate was ca. 3,000 individuals per year. Current levels of fisheries interactions in Galician waters exceeded both ASCOBANS and IWC limits/thresholds.

Increased monitoring of bycatch with on-board observers or REM through-out the range of the NE Atlantic population was essential, but the value of interviews with fishermen should not be underestimated. Ms. Murphy reported that the OSPAR-HELCOM workshop on developing bycatch indicators also confirmed the importance of interviews. Better collaboration between countries should take place to develop consistent monitoring and mitigation programmes e.g. MSFD.

6. Current status of the ACCOBAMS Conservation and Management Plan for Mediterranean Common Dolphins

Mr. Gonzalvo reported that a draft of the Mediterranean Common Dolphin Conservation Management Plan (CMP) was presented to the ACCOBAMS Scientific Committee in 2018. A template existed for such plans, including introduction, legal framework, species status in the Mediterranean, and action categories: coordination, public awareness, research, monitoring, mitigation measures. Development of the CMP would be undertaken during the ACCOBAMS Working Programme 2020-2022, work that may require an expert workshop. The priority species for ACCOBAMS were the Bottlenose Dolphin, Common Dolphin, Risso's Dolphin, and Fin Whale. Mr. Gonzalvo noted that it might make sense to combine these species CMP workshops.

Ms. Caurant made a point about considering efforts being made for the NE Atlantic population. Mr. Gonzalvo replied that this should be flagged to the ACCOBAMS Secretariat. It was important

that there be cooperation between the Secretariats on this; and that ASCOBANS Common Dolphin Group experts would be included in the final review of the ACCOBAMS CMP – threats were common in both areas.

Ms. Murphy inquired regarding the reach of the ACCOBAMS Common Dolphin CMP. Mr Gonzalvo had not received input from the contiguous Atlantic area – but that did not mean it could not be included. However, the current draft was for the population in the Mediterranean only – but potentially, if agreed, the contiguous Atlantic area could be included in an annex.

Mr. Gonzalvo noted that results from the large-scale ACCOBAMS survey initiative[20] in the Mediterranean would be presented the day prior to the ACCOBAMS MOP, 5- 8 November 2019.

It was agreed the ASCOBANS Secretariat would ask the ACCOBAMS Secretariat to send relevant information to the Common Dolphin Group. Mr. Gonzalvo noted that he would contact ACCOBAMS regarding the ideas that came up during the first meeting of the SAP – and encouraged the ASCOBANS Secretariat to do so as well. Mr. Simmonds highlighted the importance of looking for opportunities where the ASCOBANS and ACCOBAMS Secretariats could cooperate - for example, the next ECS would take place in April-May 2021.

Ms. Renell highlighted that cooperation with ACCOBAMS was also mentioned in the SAP. The 'joint plan' term in the SAP referred to the area common for both ASCOBANS and ACCOBAMS, i.e. Exclusive Economic Zones of Portugal and Spain. Ms. Murphy noted the value of requesting the participation of Antonio Tassera from Portugal in the SG. While the SG currently had representation from Spain: Graham Pierce and Begoña Santos.

7. Discussion and prioritizing actions for the SG and Range States over the forthcoming year

Ms Murphy presented the actions of the SAP and their priorities. It was agreed that the first task of the Steering Group would be to complete the achievements table.

8. Adoption of Action Points / Recommendations / Decisions

The adopted recommendations can be found in Annex 1 to this report.

9. Next Meeting of the Common Dolphin Group

It was agreed that the dates for the next SAP meeting would be decided later. One option could be to hold the meeting later in the year, after the ASCOBANS MOP9 in September 2020. If there were no funds available for a face-to-face meeting, an online meeting would be considered.

10. Close of the Meeting

After the customary thanks, the meeting closed at 18:50.

[20] ACCOBAMS Survey Initiative (ASI).

Annex 1: Recommendations from the 1st Meeting of the ASCOBANS Common Dolphin Group

1. SAP Range States to complete the 'Achievements Table' by the end of 2019 to identify data gaps and actions that are required going forward.
2. Letters of invitation to be sent from the Secretariat to request Non-Party Range States' participation in implementation of the SAP on Common Dolphins.
3. ASCOBANS Secretariat to ensure ACCOBAMS Secretariat is informed about the work of the Common Dolphin Group and invite input regarding the area of common interest and the threats in this area.
4. A review should be undertaken of aerial survey monitoring techniques to better discriminate small delphinid species to ensure explicit estimates of population size and uncertainty.
5. ASCOBANS Advisory Committee to consolidate some of the common/similar recommendations coming from ASCOBANS species conservation plans' Steering Groups, such as on bycatch and on fisheries involvement.
6. Support recommendations from the 8th Meeting of the North Sea Group that are relevant to the Common Dolphin and which could be adapted to apply to the North East Atlantic.
7. A joint ACCOBAMS-ASCOBANS workshop on the Common Dolphin to be held at the next European Cetacean Society conference in 2021.
8. To call on stakeholders to urgently help raise awareness about the Common Dolphin and the Species Action Plan for the North-East Atlantic Common Dolphin.

Annex 2: Achievements Table - template

3 = fully implemented (green)
2 = steady progress (green)
1 = small/slight progress (amber)
0 = no progress (red)
-1 = situation less good than when Plan introduced (red)

Actions / Tasks	Code	Description	Priority	Country 1	Country 2
Action	RES-01	Identify the priority bycatch issues	essential		
Tasks	1	Identify and monitor medium-to-high-risk fisheries activities with a high risk of common dolphin bycatch in order to ascertain more accurate assessments of bycatch rates in order to meet the agreed objective of Resolution 3 MOP 3 and Resolution 5 MOP 8.	essential		
	2	Progress development of a management framework procedure for common dolphin in order to meet the agreed objectives of Resolution 5, MOP 8.	essential		
	3	Facilitate the identification of factors influencing bycatch rates; including an assessment of temporal (seasonal) and spatial, gear characteristics, fishing practices and target/non-target species.	essential		
	4	Facilitate research in order to assess evidence of bycatch selectivity of age-sex groups in different fishing operations (e.g. gears, target species, seasons). (fisheries directorate)	essential		
	5	Monitor causes of death in the population through strandings programmes for aiding assessments of spatio-temporal relationships and trends in bycatch, aiding implementation of the agreed objectives of Resolution 10, MOP 8 on strandings.	essential		
Action	RES-02	Improve estimates of bycatch rates to support development of conservation strategy	essential		
Tasks	1	Ensure that existing regulations with respect to bycatch reduction measures are being effectively implemented and to collect data on their efficacy in reducing bycatch to meet the agreed objectives of Resolution 3, MOP 3 and Resolution 5, MOP 8	essential		
	2	Drive coordination of bycatch monitoring observer programmes across Parties and non-Party Range States.one	essential		
	3	Increase reliability of fishing effort data, particularly for medium-to-high risk activities, supporting the wider work of ICES.	essential		
	4	Support innovation and further monitoring methods, e.g. remote electronic monitoring (REM) and liaise with the newly created By-catch Inference from Stranding Working Group of IWC, to improve bycatch estimates in high risk fisheries.	essential		
	5	Support OSPAR in the development of a pressure-state indicator for bycatch in order to meet the requirements of MSFD[1].	essential		
Action	MIT-01	Implement and assess gear modifications and mitigation measures to reduce bycatch	essential		

Actions / Tasks	Code	Description	Priority	Country 1	Country 2
Tasks	1	Evaluation of current gear modification and mitigation measures to identify effectiveness in the reduction of bycatch in high and medium-risk fisheries to meet the agreed objectives of Resolution 5, MOP 8.	essential		
	2	Implement proven mitigation measures for all high and medium-risk fisheries that are appropriate to the nature of the vessels and their size, with subsequent monitoring to ensure effectiveness and the ongoing need to meet the agreed objectives of Resolution 5, MOP 8.	essential		
	3	Identification of funding and collaboration for further gear innovation and/or other measures for medium to high-risk fisheries, and implementation of monitored trials of promising mitigation measures, in collaboration with the fishing industry.	essential		
Action	MON-01	Implement a wide-scale surveillance programme to monitor trends in distribution and abundance in the NE Atlantic	high		
Tasks	1	Encourage Parties and non-Party Range States to collaborate and fund regular systematic wide-scale surveys in order to establish trends in abundance and distribution relevant for transboundary reporting of conservation status in order to meet the agreed objectives of Resolution 7, MOP 4 and Resolution 7, MOP 5.	high		
	2	Develop a mechanism for collation of all relevant, standardised data at a relevant spatial scale (e.g. JCP or MERP), including complimentary standardised data collection protocols, to enable seasonal trends to be evaluated to meet the agreed objectives of Resolution 7, MOP 4	high		
	3	Ensure that the outputs of this action provide a suitable mechanism to enhance transboundary reporting of conservation status and good environmental status.	high		
Action	RES-03	Improve understanding of causes of seasonal and annual variation in abundance and distribution, particularly in relation to human activities	high		
Tasks	1	Review the collection and collation of appropriate standardised data on anthropogenic activities, and display in a format that will facilitate use in a geographic information system (GIS). This should aim to support implementation of the MSFD and assessment of good environmental status through OSPAR.	high		
	2	Complete seasonal risk assessment/risk mapping of relevant human activities and common dolphin distribution in order to meet the agreed objectives of Resolution 7, MOP 4, Resolution 7, MOP 5 and Resolution 5, MOP 8.	high		
	3	Collate and monitor data on important prey species of common dolphins to identify spatial areas of concern for fisheries management measures to meet the agreed objectives of Resolution 7, MOP 4 and Resolution 7, MOP 5.	high		
	4	Regularly review of evidence for potential impacts of climate change on common dolphins to inform on appropriate mitigation measur es.	high		
Action	MON-02	Monitor health and nutritional status, diet, life history parameters, and causes of mortality in the NE Atlantic	high		
Tasks	1	Funding of national stranding and bycatch observer programmes for collection of carcasses, assessment of health status, cause of death, diet analysis and life history parameters to meet the agreed objectives of Resolution 10, MOP 8.	high		

Actions / Tasks	Code	Description	Priority	Country 1	Country 2
	2	Ensure implementation the ASCOBANS/ACCOBAMS/IWC strandings protocol to achieve standardised, comparable datasets.	high		
	3	Support strandings programmes to enable the analysis of diet, including tissue samples for fatty acids/stable isotope analysis, and life history parameters.	high		
	4	Support expansion of drift prediction modelling capabilities for determining the origin of stranded common dolphins, e.g. MOTHY (Peltier *et al.,* 2016) to identify potential bycatch high risk areas/seasons.	high		
	5	Explore opportunities to sample live animals (e.g. photo analysis, swabs), in addition to samples from stranded animals, facilitating agreed objectives of Resolution 7, MOP 8 to help determine population structure species. Such information is fundamental to the development of the management procedure outlined in Action RES – 01 (Identify the priority bycatch issues).	high		
Action	RES-04	Further our understanding on population structure by assessing and developing suitable techniques for these highly mobile small delphinids	medium		
Tasks	1	To identify funding and develop a programme which can involve existing or potential new samples. This programme will identify areas from which we require improved information on population structure, e.g. differentiating groups within and beyond the continental shelf, and work required to delineate the population range. Strategic sampling approaches (i.e. temporal and spatial) and statistical power analysis should be undertaken to determine level of sampling required to detect appropriate units to conserve.	medium		
	2	Actively support and encourage development of suitable techniques for discriminating population structure in highly mobile small delphinids.	medium		
	3	Facilitate the provision of dead bycaught animals for population structure assessment and other appropriate studies. This may require repeal of national legislation to facilitate landing of bycaught common dolphins for research.	medium		
Action	MIT-02	Improve understanding of and develop mitigation for the risks of anthropogenic sound	medium		
Tasks	1	Parties and non-Party Range States should coordinate and support research on the effects of underwater noise on common dolphins to meet the agreed objectives of Resolution 4, MOP 5, Resolution 2, MOP 6 and Resolutions 6, 8 and 9, MOP 8.	medium		
	2	Parties and non-Party Range States should introduce precautionary guidance on measures and procedures for all activities surrounding the development of renewable energy production and other noise-producing industry to minimise risks to populations and mitigate possible effects following current best practice as agreed in Resolution 2, MOP 6.	medium		
	3	Annually monitor and assess knowledge of the effects of anthropogenic sound through review of literature, including behavioural responses of common dolphins and the effectiveness of mitigation technologies as agreed in Resolution 2, MOP 6 and Resolution 6, MOP 8.	medium		
	4	Where suitable samples exist, monitor the physical effects of exposure to anthropogenic sound, i.e. acoustic trauma, where access to stranded animals within the required timeframe is possible.	medium		
	5	Parties and non-Party Range States should engage with OSPAR and other relevant fora to encourage noise data provision appropriate for the assessment of good environmental status.	medium		

Actions / Tasks	Code	Description	Priority	Country 1	Country 2
Action	MON-03	Ensure screening and assessment of the occurrence and effects of hazardous substances	medium		
Tasks	1	Continue to monitor and assess emerging chemical pollutants and marine litter (including macro-, micro- and nanoplastics) in common dolphins through review of literature to progress agreed objectives of Resolution 4, MOP 7, Resolution 7, MOP5 and Resolution 7, MOP 8.	medium		
	2	Monitor effects from exposure to legacy pollutants on immune, endocrine and reproductive functions in common dolphins against agreed thresholds, through continued analysis of strandings data to meet agreed objectives of Resolution 7, MOP 8.	medium		
	3	Encourage Parties and non-Party Range States to work through OSPAR and other relevant fora to aid the development of an indicator of GES to meet Criteria D8C2 in order to ascertain that the health of the species is not adversely affected due to contaminants including cumulative and synergetic effects.	medium		
Action	MON-04	Monitor for potential increases in anthropogenic activities that lead to incidences of death, injury or adverse health effects	low		
Tasks	1	Encourage Parties and Range States to continue to give their full support to the activities related to applying an ecosystem approach to the management of human activities under the frameworks of OSPAR, HELCOM, the European Union and the Convention in Biological Diversity as agreed in Resolution 9, MOP8.	low		
	2	Requests that Parties and Range States ensure that cross-sectoral and transboundary consultations take place as early as the planning stage of activities in marine areas (marine spatial planning) with the aim of identifying potential impacts and minimising or mitigating such impacts effectively as agreed in Resolutions 6 and 9, MOP8.	low		
	3	As part of the annual reporting for this plan, collect and review information to monitor changes in exposure to key anthropogenic pressures.	low		
Action	AWA-01	Public awareness tasks	essential		
Tasks	1	All key milestones (e.g. timetables for actions; assessment of progress against objectives etc.) to be publicised through ASCOBANS and Range State media outlets in a coordinated manner agreed through the SG.	essential		
	2	ASCOBANS webpages to host key documents and updates, to be publicised by SG members.	essential		
	3	Presentation of the progress at relevant events and conferences.	essential		
	4	Identification and publication of papers through journals and list servers/webpages to publicise lessons learned and successes.	essential		
	5	Wider circulation of articles and news items through the media/social media to support the dissemination of factual information to the wider public.	essential		
	6	Coordination with relevant NGO’s with an interest in common dolphins, to join up approaches for public information campaigns.	essential		

Annex 3: List of Participants

Catherine BELL
Policy advisor
Department for Environment, Food and Rural Affairs
Westminster, London, United Kingdom
catherine.bell@defra.gov.uk

Florence CAURANT (Co-chair)
Researcher
La Rochelle Université /
Observatoire Pelagis
La Rochelle, France
florence.caurant@univ-lr.fr

Farah CHAUDRY *(via Skype)*
Senior Marine Mammal Advisor
Joint Nature Conservation Committee
Peterborough, United Kingdom
Farah.chaudry@jncc.gov.uk

Joan GONZALVO *(via Skype)*
Biologist
Tethys Research
Milano, Italy
joan.gonzalvo@gmail.com

Sami HASSANI
Directeur Conservation Mammifères
MarinsOcéanopolis
Brest, France
sami.hassani@oceanopolis.com

Allen KINGSTON *(via Skype)*
Researcher
University of St Andrews,
St Columb, Cornwall, United Kingdom
ark10@st-andrews.ac.uk

Sinéad MURPHY (Co-chair)
Lecturer and Researcher
Galway-Mayo Institute of Technology,
Galway, Ireland
sinead.murphy@gmit.ie

Vedran NIKOLIC
Policy Officer – Nature Protection
European Commission, DG Environment
Auderghem, Bruxelles, Belgium
vedran.nikolic@ec.europa.eu

Eunice PINN
Marine Environment Regulation Advisor
SEAFISH
Edinburgh, United Kingdom
eunice.pinn@seafish.co.uk

Fiona READ *(via Skype)*
Whale and Dolphin Conservation
Wiltshire, United Kingdom
fiona.read@whales.org

Bettina REINARTZ
Administrative Assistant
ASCOBANS Secretariat
Bonn, Germany
bettina.reinartz@un.org

Jenny RENELL
Coordinator
ASCOBANS Secretariat
Bonn, Germany
jenny.renell@un.org

Vincent RIDOUX
Researcher
La Rochelle Université /
Observatoire Pelagis
La Rochelle, France
vridoux@univ-lr.fr

Fabian RITTER
Policy Consultant
Whale and Dolphin Conservation
München, Germany
fabian.ritter@whales.org

Mark Peter SIMMONDS
Senior Marine Scientist
Humane Society International
London, United Kingdom
mark.simmonds@sciencegyre.co.uk

Annex 4: Members of the Common Dolphin Group

France
Florence Caurant – University of La Rochelle (Co-Chair)
Vincent Ridoux – University of La Rochelle
Sami Hassani – Oceanopolis
Hélène Peltier – University of La Rochelle
Jérôme Spitz – University of La Rochelle

Ireland
Sinéad Murphy – Galway-Mayo Institute of Technology (Co-chair)

Portugal
Marina Sequeira – Instituto da Conservação da Natureza e das Florestas

Spain
Graham Pierce - Instituto de Investigacións Mariñas
Begoña Santos - Instituto Español de Oceanografia

UK
Farah Chaudry – Joint Nature Conservation Committee
Kelly MacLeod – Joint Nature Conservation Committee
Nikki Taylor – Joint Nature Conservation Committee
Cat Bell – Defra
Allen Kingston – University of St Andrews

IGOs
Greg Donovan – International Whaling Commission

NGOs
Peter Evans – Sea Watch Foundation/Bangor University
Mark Simmonds – Humane Society International
Fiona Read – Whale and Dolphin Conservation
Sarah Dolman – Whale and Dolphin Conservation
Simon Berrow – Irish Whale and Dolphin Group

Fishing industry
Eunice Pinn – SeaFish

ACCOBAMS
JoAn Gonzalvo – Tethys Research Institute, Italy

ASCOBANS
Jenny Renell – Secretariat

Annex 5: Terms of Reference for the ASCOBANS Common Dolphin Group

Terms of Reference for the Steering Group for the ASCOBANS Species Action Plan for North-East Atlantic Common Dolphin ("Common Dolphin Group")

1. Introduction

The Short-beaked Common Dolphin *(Delphinus delphis*; hereafter referred to as the Common Dolphin) population in the North-East Atlantic is facing ever-increasing anthropogenic pressures, the most significant of which is bycatch. Chemical pollution and noise disturbance are also major anthropogenic pressures.

In 2015, the Advisory Committee of the Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS) noted the need for monitoring the North-East Atlantic Common Dolphin population. In 2016, Parties to ASCOBANS adopted Resolution 8.4 on the conservation of Common Dolphins, requesting the Steering Group to develop a comprehensive conservation plan for the Common Dolphin in the eastern North Atlantic with the aim of restoring the population to a favourable conservation status. The draft Species Action Plan for the North-East Atlantic Common Dolphin was first tabled at the 24th Meeting of the Advisory Committee in 2018 and adopted intersessionally.

2. Terms of Reference

The group as described here will hereafter be referred to as the "Common Dolphin Group". The Common Dolphin Group is a Steering Group of the ASCOBANS Species Action Plan (SAP) for North-East Atlantic Common Dolphin, a group under the Advisory Committee within the meaning of Article 5.4 of the Agreement. The work of the Common Dolphin Group will be facilitated by the ASCOBANS Secretariat. Pending funding, a Coordinator will support the work in the future. The Chair or Co-chairs of the Common Dolphin Group will be appointed in its first meeting.

a) Tasks

The Common Dolphin Group has the following tasks:

- Coordinate and drive the implementation of the Species Action Plan for the North-East Atlantic Common Dolphin, including assessing funding options where appropriate;
- Collate reports on the progress of implementation, effectiveness, issues encountered, and the results obtained;
- Evaluate progress in implementation, specifically with regards to each of the ten actions as defined in the SAP;
- Establish further implementation priorities and make appropriate recommendations;
- Report to each Advisory Committee meeting on the progress;
- Encourage countries to harmonise their national efforts, including allocation of funding;
- Encourage cooperation between ASCOBANS, ACCOBAMS[1] (in particular taking into consideration the ongoing initiative of ACCOBAMS/IWC Conservation and Management Plan for Mediterranean Common Dolphins) and other Range States;
- Promote the SAP to relevant stakeholders; and
- Evaluate the effectiveness of the SAP every six years to make recommendations for updating it.

b) Composition

The group will aim to have representatives from all Range States of the species in the North-East Atlantic[2], irrespective of their status as ASCOBANS Parties or Non-Party Range States, preferably

[1] Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area.
[2] France, Ireland, Portugal, Spain, and the United Kingdom.

represented by members that are participating in the development and implementation of the national conservation plans for Common Dolphins.

Each State within the main distributional range shall be entitled to appoint Group Members, who shall represent the environmental sector and the fisheries sector, and such Advisers as the State may deem necessary. Appointed Common Dolphin Group Members should ensure sufficient national coordination.

Environmental non-governmental organizations and Sea fisheries organizations working in the NE Atlantic shall be entitled to appoint one Common Dolphin Group Member per organization and such Advisers as they may deem necessary.

The group will also comprise representatives of the ASCOBANS and ACCOBAMS Secretariats, and can include representatives from other UN Agencies, the European Commission, intergovernmental organisations such as fisheries management authorities, ICES and OSPAR.

The Common Dolphin Group may, as appropriate, invite representatives of any other body or any individual qualified in cetacean conservation and management to participate in a meeting in the capacity of an “Invited Expert”.

c) Meetings

The Common Dolphin Group will work intersessionally using email and internet-conferencing platforms. The group will meet in person approximately once a year, funds permitting, and preferably in the margins of a regular ASCOBANS Advisory Committee meeting or other relevant meeting.

d) Rules of Procedure

Pursuant to Rule 18 of the Rules of Procedure of the ASCOBANS Advisory Committee, those Rules shall apply *mutatis mutandis* to the proceedings of the Common Dolphin Group insofar as they are applicable.