

Conservation Committee intersessional progress since CC 2020

Prepared by the Chairs of CC working groups and the Secretariat

July 2022

Action Requested

The Conservation Committee Planning Group (CCPG) is asked to note and provide any comments on intersessional progress made since the Conservation Committee (CC) meeting in October 2020 and future plans for each area of work.

1. Introduction

This report provides an update on the Intersessional Progress of the Conservation Committee and its Working Groups since the last Conservation Committee meeting in 2020. It is an updated version of the document presented to the CCPG at its meeting in May 2020.

2. Strategic Issues

The Conservation Committee Strategic Plan and work plan can be found at <https://iwc.int/conservation-committee>.

The workplan was extended initially for 1 year due to the postponement of IWC68. This was further extended to 2022 after the decision to hold IWC68 in October 2022. A new 4-year workplan will be presented to cover 2023-2026.

The Secretariat has been working with New Zealand to develop a detailed specification for an integrated Conservation Database to replace the current voluntary reports. An outline of the current database will be presented at this meeting for input. The objective is to have a prototype to present to CC and Commission in October.

3. Thematic work areas – updates from Working Groups

3.1. Bycatch Standing Working Group, chair Stephanie Langerock (Belgium)

- PROJECT COORDINATION

Marguerite Tarzia, who served as Bycatch Coordinator since January 2018, stepped down in January 2022. The Secretariat recruited Cecilia Passadore as Coordinator, who began in June 2022. In the interim, IWC Secretariat staff and the BMI Expert Panel on Bycatch maintained momentum on a number of core elements of the BMI.

- BMI WORKPLAN 2021-2024

The Bycatch Mitigation Initiative's (BMI) four-year work plan (2020-2024) was endorsed by the Conservation Committee during its October 2020 meeting (Annex 1). Activities relating to the Scientific Committee were discussed and agreed during SC68B and initial progress on pilot project development, external fundraising options, the capacity building programme and progressing collaborative work in the Indian Ocean were discussed at SC68C. The BMI workplan is now in its second year of implementation.

- PILOT PROJECTS

The Bycatch Coordinator, members of the Bycatch Expert Panel, the Standing Working Group on Bycatch and other collaborators have focused on identifying and developing pilot projects for assessing and addressing bycatch. Seven different countries/locations have been prioritised for pilot project development: Peru, Republic of Congo, Kenya, Pakistan, India, Thailand, Malaysian and Indonesian Borneo. The IWC Secretariat has reached out to IWC Commissioners, national governments, and national experts to discuss collaboration and project concepts. Each pilot project is particularly focused on small scale fisheries using gillnets, and proven, practical, and novel approaches to monitoring, mitigating, and managing bycatch. The focus during 2022 is to continue developing project concepts, applying for external funding, and beginning some activities with existing 'seed funding'. The Sub-Committee is requested to provide any advice on suitable monitoring and mitigation approaches which could be considered for inclusion in the project. The BMI would also encourage and welcome any researchers with relevant information to consider sharing this information with the BMI team, and we welcome a discussion on collaboration on individual pilot projects.

- **ENGAGEMENT WITH THE FAO AND RFMOS**

The IWC Secretariat attended two FAO Committee on Fisheries (COFI) meetings (2018 and 2021), where IWC interventions were made regarding the need to address cetacean bycatch and collaborative opportunities between fisheries management organisations and the IWC. In September 2022, the Secretariat will attend the COFI meeting in Rome. In 2021-2022 the focus is on finalising agreements with FAO on the Common Oceans ABNJ project and the development of Technical Factsheets.

FAO Technical Guidelines & Factsheets

The FAO has contracted the IWC Secretariat to produce the content for a series of 15 factsheets illustrating the [FAO Technical Guidelines](#) for reducing and preventing marine mammal bycatch. These will be published online by the FAO, as part of their factsheet series. In addition to input from the Expert Panel there will be a workshop held to review the content of these factsheets. This is an exciting opportunity to collaborate with the FAO on the outreach material associated with the Guidelines and to provide updated information on mitigation measures based on progress since the guidelines were drafted. The BMI Expert Panel will validate the factsheets by the end of July 2022 and the final presentation is scheduled by September 2022.

FAO Common Oceans ABNJ

Following the final approval of the GEF, the Common Oceans ABNJ project is due to begin in July 2022. The Secretariat is working with the FAO administrators on a Letter of Agreement (LoA) that will formalize the four-year programme with the IWC. This project provides \$320K for the Secretariat with a higher in-kind contribution from the IWC. The overall objective of the project is to improve understanding and management of cetacean bycatch in tuna fisheries in ABNJ and in Exclusive Economic Zones of the Indian and Western Pacific regions. Specifically, the proposal aims to address the lack of information in relation to cetaceans, cetacean bycatch, and fisheries, by undertaking a gap analysis and a spatial bycatch risk assessment at the ocean basin scale. It also aims to address the mitigation of cetacean bycatch by working collaboratively with RFMOs, national governments, experts, and the fishing industry to raise awareness of practical solutions.

IOTC Scientific Committee meeting.

The IOTC Scientific Committee meeting, held in December 2021, briefly discussed the draft Letter of Intent between the IOTC and the IWC – which is key for future collaboration on cetacean bycatch and

the Common Oceans ABNJ project. The Scientific Committee decided that this should be discussed in detail during the IOTC Commission meeting in May 2022. The IWC Secretariat was invited by the Chair of IOTC to intervene on this specific agenda item and a letter of intent as recently been signed. This will now be presented to IWC68 for endorsement.

- CAPACITY BUILDING PROGRAMME

The BMI is establishing its capacity building programme in relation to various topics relating to bycatch assessment, monitoring, and mitigation. This includes:

Technical Workshops

The Entanglement Initiative has partnered with Dr. Ellen Hines in order to offer combined entanglement response and Bycatch Risk Assessment (ByRA) capacity building. Prior to the pandemic a combined topic, abbreviated virtual seminars were given to Colombia. A similar plan is in place for cooperative training in Vietnam, within the year. The BMI is keen to explore opportunities for future capacity building workshops, including through links with Small Cetacean Task Teams, existing Conservation Management Plans (CMPs) or CMPs that are being developed.

'Bycatch Mitigation Apprenticeships'

Adapted from the successful 'Entanglement apprenticeships' where individuals working in less developed countries who wish to receive technical training could be placed with experts for a short period.

'Library' Of Bycatch Mitigation and Monitoring Equipment

Equipment which could be accessed and shared by researchers carrying out affiliated research. This would lower the initial costs for small-scale bycatch mitigation research projects. The concept for this is still in the early stages of development – and requires further scoping, particularly in relation to how this could be logistically possible. If you would be interested in discussing how the BMI might assist you technically, please get in touch with the Secretariat.

- EXPERT PANEL

The Bycatch Coordinator and the Standing Working Group on Bycatch have continued to receive technical advice and guidance from the Expert Panel on Bycatch. This has included: participation in external meetings such as the IOTC/IWC meeting on potential collaboration; presentations at conferences alongside the Bycatch Coordinator; leading the development of capacity building material; and reviewing and providing feedback on IWC documents and those of external organisations (e.g., FAO).

The Panel's process of strategic engagement is an ongoing action. Due to the pandemic, it has been difficult to engage with the entire panel at once, so this has been limited to one-on-one engagement on specific topics. More thought should be given to how to incorporate the Panel into key collaborations and projects, such as the Consortium for the Conservation of the Atlantic Humpback Dolphin (CCAHD) and the Common Oceans ABNJ, as well as capacity building work.

The Terms of Reference for the Expert Panel were updated, reviewed, and agreed by the SWG in September 2021, and this includes the procedure for rolling over membership for existing panel members willing to serve another term. The first four-year term of the Expert Panel ended in early 2022, and panel membership is currently being reviewed to fill expertise and geographical gaps. As part of this process the Panel welcomes two new panel members: Louisa Ponnampalam (Executive

Director & Co-Founder, The MareCet Research Organization) and Putu Liza Kusuma Mustika (Director, www.cetasindonesia.org and Coordinator, www.whalestrandingindonesia.com).

3.2. Ship Strikes Working Group, chair Sharon Livermore (IFAW)

- SHIP STRIKES STRATEGIC PLAN and WORKPLAN

The SSWG prepared a new Ship Strikes Workplan for 2020-2022 in 2020, outlining priority activities in support of the strategic plan's objectives, assigning timetables, and proposing roles and duties. Due to the postponement of IWC68, the workplan has been amended and produced for the time period 2022-2024 to cover the next intersessional term. The draft plan delegated authority to existing IWC entities, as well as the Data Manager and a new Expert Panel (Annex 2). An updated Strategic Plan has also been developed for the period 2022-2032 (SC/68D/HIM/03). The SSWG appreciates the Planning Group's assessment and discussion on these drafts before they are presented to the Commission for approval at IWC68.

- IWC DATA MANAGER

The Data Manager, in collaboration with the SSWG, Scientific Committee, and proposed Expert Panel, works to progress the strategic development of the Ship Strike Database and delivery of the Ship Strikes Workplan. The Data Manager has been in place since April 2021 with funding from VCF and the SC. During SC68C, the Committee endorsed the proposal for additional funding for the position of Data Manager. The SC endorsed matching funding from SC68D (£10,000) for the Data Manager position to continue progressing the development of the Ship Strike Database and delivery of the Ship Strikes Workplan for 2023 –2024. This will be taken to IWC68 in October 2022 for endorsement by the Commission

- SHIP STRIKES DATABASE

Since 2007, the IWC has been compiling a global database of collisions between vessels and whales with assistance from other international organisations. The objectives of this database are to contribute to a better understanding of the scale of the problem, of the factors that relate to risk (such as vessel type and speed), to estimate ship strike mortalities for different whale populations, to identify High Risk Areas and inform mitigation measures. The database went online in 2009. Between 2013 and 2020, the IWC employed two part-time data coordinators to facilitate addressing this issue.

An evaluation of the IWC Global Ship Strikes Database data model and records over the last year has revealed areas of strength and improvement. Some of the Portal's strengths include data entry and verification. Some areas for improvement include standardising open text fields and incorporating quality control measures into data entry steps. Additionally, the Portal has been improved to fix automatic emails and alerts. There are currently 1,154 cases in the database, with 58 new reports assigned to cases since April 2020. Approximately 45 percent of the new reports are ready to be finalised, 10 percent lack sufficient data to proceed, and 35 percent require additional follow-up. The Data Manager will collaborate with the IWC Ship Strike Data Review Group to ensure that all new entries are verified and classified in accordance with the data processing protocol.

Priority should be given to the existence of country-specific datasets that can be added to the global database. The database currently contains some records from the United States and Australia, but not the official records from their respective national databases. The intake of known country datasets would add significant value to all data involved, whether it was submitting new reports to the database or adding additional information to already existing cases within the database. With the employment

of the Data Manager at the Secretariat, it is ideal to begin adding these datasets into the global database. Regardless of differences in data format and standardisation within datasets, the Data Manager will be responsible for data processing into the database to reduce the effort load for current data holders. Additional data sharing and analysis can take place after the data has been ingested into the database.

There have been four data requests in the last year. Ship strike data along the US east coast, data on human injury and vessel damage, spatial data for students to create an ESRI (Environmental Systems Research Institute) Story Map, and records from Norwegian waters are among the requests. Three of the data requests were met, with data usage and metadata documentation included. The data request for Norway, however, could not be fulfilled because there is no data for those waters. To increase data access and usage, the IWC website should consider hosting a data platform. This could include a data exploration dashboard and a graphical user interface for downloading high-level data to csv files.

3.3. Conservation Management Plans (CMPs) Standing Working Group, co-chairs Annie Robinson and Adam Clark (Australia)

The Standing Working Group on Conservation Management Plans (SWG) has continued to implement the actions in the revised CMP Work Plan, which was endorsed by the Commission at IWC67. Details on CMPs can be found in the full update report.

- CURRENT CMPs

All existing CMPs continue to progress. These include:

- Amazon river dolphin (2021) *Colombia, Ecuador, Peru, Brazil*
- Franciscana dolphin (2016) *Argentina, Brazil and Uruguay*
- Western South Atlantic southern right whale (2012) *Argentina, Brazil, Chile, Uruguay*
- Eastern South Pacific southern right whale (2012) *Chile, Peru*
- Western North Pacific gray whale (2010) *Russia, USA, Republic of Korea, Mexico, Japan*

- PRIORITY POPULATIONS

The SC can recommend that populations be treated as high priority for CMP development due to the conservation status of the population or species, and knowledge of threats. When this recommendation is made, range states and drafters can progress development of a draft CMP without first preparing a CMP nomination. The SC has made this recommendation for the following populations:

Arabian Sea Humpback Whale

The Arabian Sea Whale Network continues to undertake conservation action and research to further knowledge of this population. In 2021, focus areas for the network included furthering acoustic research and stranding response efforts for cetaceans in the Arabian sea. Thanks to the network's efforts, knowledge of Arabian Sea humpback whales is increasing which can feed into a CMP. The network continues awareness raising activities and engagement with the range state government of India and Oman.

Central American humpback whale

Mexico is progressing development of this CMP with the governments of US, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, and Panama. The main objective of the CMP is to conserve the Central America humpback whale population and its habitat through collaborative regional actions to

reduce anthropogenic threats throughout its range. Additional objectives include improving habitat connectivity and conservation and improving knowledge about population size, trends, movement patterns, and habitat use.

Mediterranean sperm whale

ACCOBAMS has adopted the IWC guidelines for its CMPs and is progressing development of the CMP.

Mediterranean fin whale

ACCOBAMS is progressing development of the CMP.

- CMP PROGRAM MANAGEMENT

Strategic Plan and Handbook

The current CMP Work Plan was set to expire in 2020, however it was extended to 2022 due to IWC68 postponements. The Chair of the SWG-CMP has prepared a strategic plan and handbook for consultation ahead of IWC68 as well as a workplan covering the period of 2022-2026 (files uploaded separately). The purpose of the handbook is to raise awareness of the CMP programme and to assist IWC members and stakeholders in navigating the CMP process. These materials will be reviewed in the 2022 joint CC/SC meeting and the CC Planning Group meetings before being submitted for consideration by the Commission at IWC68.

Promoting the CMP program

The SWG launched a newsletter '*the CMP Deep Dive*' in 2019 to promote the achievements and priorities of the CMP program. Unfortunately, due to capacity constraints additional issues have not been developed. We hope to prepare and circulate an issue to highlight CMP progress ahead of IWC68. CMP stakeholders are invited to provide content for the newsletter at any time, including upcoming training and workshops, new research, and information about any of the cetaceans that are covered by CMPs. Content can be sent to whales@awe.gov.au.

The SWG-CMP also plans to update the CMP content on the IWC website, to include new CMPs and priority populations.

3.4. Whale Watching Standing Working Group, chair Ryan Wulff (USA)

- WORKPLAN 2022-2024

At its meeting in 2020 the Conservation Committee endorsed the modest workplan for WW in 2021 focused on the WW Handbook and agreed to develop a three-year workplan on WW for consideration at IWC68. The WW SWG welcomes Planning Group input on the draft workplan (Annex 3).

- IWC WHALE WATCHING HANDBOOK

During 2021, work on the Handbook focused on content consolidation, working with CMS to finalise and upload translations for all existing and new content, minor updates to existing content requested by countries/data providers, and updating the searchable table of literature in accordance with the SC68C. Gianna Minton was hired to help coordinate and carry out this work. The table of literature in the Handbook was updated with new information in December 2021, at the end of Minton's Contract. The table now features the details and abstracts of 501 reports and peer-reviewed journal articles on whale watching. Minor updates to the handbook will be carried out in accordance with the editorial protocol approved at SC68B.

As of April 2022, thanks to generous support from the CMS all existing content has been translated from English into both French and Spanish, and these translations have been uploaded to the site.

Minton trained several Secretariat staff members on updating and editing the Handbook content in December 2021. The Secretariat will now continue to collaborate with countries and experts on any updates or requests, as well as begin scoping for new content.

There have recently been two requests for minor changes to the WW Handbook. More information has been suggested for the Bowhead whale page, and we have been informed of some changes to WW regulations in Norway. According to the editorial protocol, these are being discussed and approved. There is a need to find a way to pay for edits to translated pages.

At its meeting in September 2020 the Conservation Committee endorsed a plan for 2021 including a focus on promotion of the Handbook. In 2021, promotional activities were built around the 75th anniversary of the IWC and included dissemination of the Handbook's factsheets via schools and the main IWC website and flagging the Handbook in a range of presentations and articles. The IWC is collaborating with ECO: environment, coastal and offshore magazine on a special edition focused on marine mammals. This was published in April 2022 and included an [article](#) about the Handbook. In 2022 the Secretariat will also renew efforts to increase support for the French and Spanish language versions of the Handbook which continue to record lower usage than the English version. A new promotional plan is in development by the Secretariat.

- IWC PRINCIPLES AND GUIDELINES FOR WHALE WATCHING

At its meeting in 2019 (SC68A) the SC drew attention to the need to update the IWC General Principles for Whale Watching, which had not been updated since 1996, and recommended the approval and adoption of a revised document, which was drafted and approved by the SC WW Subcommittee during SC68A. The primary changes were to incorporate issues that have arisen or become more prominent within the whale watching industry over the past 20+ years (e.g., swimming with whales and the emergence of new technologies, such as drones). These revisions were subsequently endorsed by the SWG WW and transmitted to the CC meeting in September/October 2020 for further discussion. The CC noted the SC revisions, and the comments provided during the meeting and agreed that changes to the Principles need to be further reviewed. The delay to IWC68 allowed a further round of comments to be conducted in 2021 including both the SWG WW and the WW Sub-committee members and the revised document is included in Annex 3. All comments were finalised at SC68D including the suggestion to cross-reference CMS Guidelines for Wildlife Watching (CMS Resolution 11.29 (rev. COP12) Sustainable Boat-based Marine Wildlife Watching) and, more specifically, the Annex containing Species-specific Guidelines for Boat-based Wildlife Watching. The General Principles will now be presented to CC for approval and Commission for endorsement in October 2022.

IWC input to CMS Guidelines on in-water interactions

The Secretariat was asked for input on the draft guidelines. These were circulated to both the SC WW Sub-committee and the WW SWG members for feedback which the Secretariat compiled. It was greatly received by CMS, and we look forward to seeing the revised document.

- COMMUNICATION BETWEEN THE CC AND SC

At SC68B the Scientific Committee noted an ongoing need to effectively interact with the CC and the SWG WW generally, but in particular to the Whale Watching Handbook. At a meeting prior to SC68C it was agreed that the mechanism for SC input to the Handbook was set out well in the Editorial Protocol for the Handbook and that in addition the SC could contact Minton (contract expired Dec

2021) and a named Secretariat focal point (Imogen Webster) with input and suggestions. The Secretariat, in liaison with the SWG Chair would also have responsibility for ensuring SC input to the Handbook, as set out in the Editorial Protocol. The SWG welcomed input from the new Convenors of the Sub-committee on Whale watching Suydam and Urban -Ramirez.

Membership of the CC Standing Working Group

The Chair of the WW SWG and Convenor of the SC WW Sub-committee discussed SC representation on the SWG WW at a meeting in early 2021. It was proposed that the Convenor of the SC WW Sub-committee, along with either the Chair or Vice Chair of the SC and one more SC representative be included in the SWG. The WW Sub-committee agreed to this proposal at SC68C, however changes in leadership for the SC and the Sub-committee in 2022 meant representatives needed to be updated again. At SC68D it was agreed that Suydam and Urban -Ramirez would join the SWG along with Parsons. There are still two vacancies on the SWG WW for industry as ex officio members, the PG is asked for suggestions for industry representatives.

3.5. Marine Debris

The IWC has worked on the issue of marine debris through its Scientific Committee for some years, including holding workshops in 2013, 2014, 2019 and through the Scientific Committee's pollution-focused workstream. The IWC has a correspondence group on marine debris that is co-chaired by the Scientific and Conservation Committees.

A new [paper](#) detailing what is known about the effects of marine debris on all cetaceans, with an emphasis on pandemic-generated plastic wastes, has been published. This new open-access review discusses the IWC's work, as well as its most recent workshop. Even though this is not a direct result of the intersessional group, the IWC's discussions clearly inspired and informed the paper.

In March 2022, Heads of State, Ministers of environment and other representatives from UN Member States endorsed a historic resolution "End Plastic Pollution: Towards an international legally binding instrument" at the UN Environment Assembly (UNEA-5). The [resolution](#) is aimed at addressing plastic pollution and forging an international legally binding agreement by 2024. It addresses the full lifecycle of plastic, including its production, design and disposal. There should be future opportunities for the IWC to engage in the process as it goes forward. Taking this into context and potentially other processes, the Secretariat has compiled a list of experts drawn from the joint correspondence group who may be called upon to represent the IWC at relevant meetings.

In response to recommendation SC19208, the Secretariat is actively working with the Alaskan native community and the USA, to convene a workshop of stakeholders in order to assess, discuss and recommend mitigation for bowhead whale entanglement in ALDFG, primarily ghost crab gear.

3.6. Ecosystem functioning

The Conservation Committee workshop on Socio-Economic Values of the contribution of Cetaceans to Ecosystem Functioning was conducted virtually in April 2022 and [this](#) draft summary report presents its primary outcomes, recommendations, and proposals. The participants received information on the importance of marine megafauna traits related to ecosystem functions and services and the importance of considering cetacean carcasses in management policies. A study on how climate change and other threats could affect ecosystem services was also presented. The UN System of Environmental Economic Accounting (SEEA), market and non-market techniques of

economic valuation for ecosystem services, and good governance to integrate socio-economic data in marine science policy were introduced. Common Asset Trust and Nature-Based Solutions were introduced as possible financial and institutional frameworks to support marine species conservation.

Participants received a report on the IWC-CMS workshop on cetaceans and ecosystem functioning. It covered nutrient circulation, ocean fertilisation, whale falls, trophic cascades, and future research. A small working group was established to review the IWC-CMS table of cetacean traits. The small group aims to clarify concepts and discuss how cetacean traits could be related to socioeconomic valuation. The workshop's final report will be available before the next Conservation Committee and plenary meetings at IWC68.

4. Developing work areas for the Conservation Committee

Intersessional groups are working to further develop CC work programmes on anthropogenic underwater noise, chemical pollution, and climate change. More details can be found in the joint [paper](#) submitted to SC68D.

4.1. Noise

- COLLABORATION WITH IMO ON REDUCING UNDERWATER NOISE FROM SHIPPING

Anthropogenic ocean noise is highlighted as one of the priority threats in the Strategic Plan of the IWC Conservation Committee, and work continues to better understand the impact of noise on cetaceans, and the effectiveness of different approaches to reducing exposure. The IMO started a process in 2008 to develop non-mandatory technical guidelines for reducing ship noise and the IWC participated in the IMO correspondence group. The IMO adopted its Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life in 2014 (IMO, 2014), however there has been very little uptake on the guidelines and a wide recognition that further work was needed at IMO to address the issue of underwater noise from shipping.

At MEPC 76 in 2021, the IMO agreed to review the 2014 Guidelines and identify next steps. This was addressed in the Ship Design and Construction Sub-Committee (SDC 8) in January 2022. An outcome from this meeting was the establishment of a correspondence group coordinated by Canada to work on updating the IMO noise guidelines and identification of next steps.

- COMMUNICATION BETWEEN THE CC AND SC

In accordance with recommendation (SC2184) encouraging further intersessional collaboration and coordination between the Scientific Committee and the Conservation Committee on underwater noise, representatives of the CC AUN CG and SC along with the Secretariat have joined the IMO CG to contribute to discussions reviewing the Guidelines. The first round of input is underway in the form of a questionnaire on general issues to be addressed. The IMO Correspondence Group is tasked with providing a report to SDC 9 in early 2023. Thus, there will be a need for input over the coming year.

4.2. Chemical pollution

The chemical pollution group is still under development, advancements will depend on discussions lead by the SC.

4.3. Climate change

The joint CC/SC Climate Change Workshop took place virtually from November 30 to December 3, 2021. Sixty-six people from 21 countries took part. The workshop heard and discussed a variety of presentations, including the IPCC's most recent contributions, rebuilding baleen whale ecosystems (i.e., the Southern Ocean provides a case study); and recent developments related to climate change

in the Bering-Chukchi-Beaufort Sea, where there is an increasing complexity (IMMAs). Cavanagh and colleagues from the British Antarctic Survey also presented on the effects of climate change on Southern Ocean ecosystems, with a focus on synergies between the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) and the IWC. The workshop acknowledged that, due to its shortened virtual nature, not all elements of the planned agenda had been completed. While the SC could not support an in-person workshop at present, it endorsed the workshop's other recommendations. These included, inter alia, prioritising work in regions known to be experiencing intense climate change impacts, particularly those which are key habitats for cetaceans; the incorporation of multi-disciplinary considerations at the design stage of any research programme and identify possible collaborations with other environmental sciences; and stronger collaboration between IWC and CCAMLR, and potentially with other Antarctic science bodies (including SCAR and ICED) to enhance understanding of the impacts of climate change. The workshop report and its recommendations will be presented to CC at IWC68 ([full report here](#)).

ANNEX 1

IWC Bycatch Mitigation Initiative - Workplan 2021-2024

The Bycatch Mitigation Initiative 10-year [Strategic Plan](#) provides the overarching vision for the period 2018-2028. High level objectives presented in the workplan below directly correspond to the six agreed objectives outlined in the Strategic Plan. As outlined in Strategic Plan, the BMI is under-taking a phased approach to implementing its ambitious vision. The focus of the initiative in this workplan period (2021-2024) will be on securing funding for implementing pilot projects; evaluation of results from pilot project trials; driving innovation of mitigation measures; promotion of BMI technical advice and capacity building opportunities; promotion of best practice; and improvement and streamlining of bycatch reporting to IWC and other processes. Given the collaborative nature of the BMI, and the collective challenges ahead in addressing cetacean bycatch, the success of this ambitious workplan relies in part on the continued and strengthened engagement from collaborating organisations, governments and experts and fishing communities.

Prioritisation of activities during the workplan period is provided and includes: Core= essential activities undertaken as the normal running of programme, and covered via coordination costs or other existing IWC programmes; Top = highest priority activities needed to progress workplan with focused effort to ensure implementation; High = very important activities that will be attempted, often requiring long-term ongoing efforts; Medium = Slightly lower priority activities, often led by others or requiring longer time frames

The activities in the workplan are costed (total amounts for the full, 4-year period, or by activity) where estimates have been possible to calculate. Funds to implement these activities will be sought through IWC voluntary contributions (through VCF), in kind and financial contributions from partners and wider, external fundraising.

High level objective and Description of activity	Timeframe				Lead	IWC Community involved	External collaborators	Priority	Total Budget 2021-2024	Progress
	2021	2022	2023	2024						
Objective 1. Coordination of programme										
1.1 Coordination of programme	x	x	x	x	Bycatch Coordinator	IWC Secretariat; Bycatch Standing Working Group; Expert Panel	e.g., FAO, CMS, RFMOs, NAMMCO, ICES, ASCOBANS, ACCOBAMS	Core	Coordination costs (for full period 2021-2024): ~£200,000. Coordination costs (for 2021 only): £47,792	Ongoing - individual updates provided under the specific workplan activities
All aspect of programme coordination including: - liaison with the Bycatch Standing Working Group; - coordination of expert panel meetings, email correspondence, annual review of membership. - coordination/administration and contribution to implementation of pilot projects and capacity building initiatives - engagement with affiliated projects; - coordination with other IWC bodies and initiatives. - engagement with other inter-governmental Organisations (IGOs) and organisations;									Travel (non-IWC meetings,	

<p>-coordination with national governments undertaking bycatch reduction initiatives or capacity building -fundraising; -monitoring of BMI progress; -communication activities.</p>									<p><i>pilot projects, other relevant travel):</i> £20,000</p>	
<p>1.2 Expert Panel -provision of technical advice to the Bycatch Coordinator and Standing Working Group on Bycatch upon request -participation in development and implementation of pilot projects -participation in development and implementation of capacity building programme -sharing of information, and relevant networks with the BMI on bycatch and fisheries related work -raising awareness within the broader scientific, cetacean and fisheries management and conservation community of the BMI -annual virtual meetings and (where cost effective to do so) in person meetings</p>	x	x	x	x	Expert Panel, Bycatch Coordinator	IWC Secretariat; Bycatch Standing Working Group;		Core	<p>EP Meetings: £6.000 <i>In person meetings will be organised in conjunction with other events to minimise travel costs. EP time and travel for pilot projects and capacity building included in costings for specific activities.</i></p>	<p><i>Ongoing-</i> in 2022, panel will evaluate factsheets commissioned by the FAO.</p>

<p>1.3 Standing Working Group on Bycatch Governance of BMI activities, including: -monitoring of performance of the BMI according to workplan and strategic plan and reporting to Conservation Committee -strategic input to and development of BMI work programme -development of recommendations on bycatch management/conservation for consideration by the Conservation Committee -guidance and assistance in outreach within and between national governments and different inter-governmental organisations on addressing cetacean bycatch and raising awareness of the BMI.</p>	x	x	x	x	Standing Working Group-Bycatch	Bycatch Coordinator, Conservation Committee		Core	n/a	Ongoing-updates provided under the specific workplan activities
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Objective 2. Knowledge gathering. Identify specific fisheries...where achievable bycatch mitigation strategies could be tested and/or introduced

<p>2.1 Actively collect updated information on cetacean bycatch in specific fisheries The BMI will actively focus efforts on gathering bycatch information from gillnet and other fixed gear fisheries and prioritise information gathering in the seven pilot project countries and those listed as possible future priorities and from those countries requesting BMI technical assistance. This includes information collected from rapid risk assessments. This activity includes working with IWC contracting governments on national progress reporting, data presented to Scientific Committee sub-committees; data collected from pilot projects and through collaborations with experts and partners in priority regions and countries. Collaboration with other organisations, such as FAO, RFMOs and NGOs collecting bycatch data.</p>	x	x	x	x	Bycatch coordinator	Scientific Committee (HIM, Small Cetaceans, Conservation Management Plans (CMPs), Conservation Committee National representatives; Expert Panel	e.g., FAO, RFMOs, CMS, NAMMCO, ASCOBANS, ACCOBAMS, ICES, UNEP regional seas agreements	Top	Costs included under coordination; risk assessments, pilot projects or existing IWC work	Ongoing- IWC Programme Development team compile recently published information
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<p>2.2 Collaboration to identify bycatch hotspots and review existing data available on cetacean distribution, bycatch and fishing effort</p> <p>Collaborate with international organisations/bodies holding existing bycatch, fisheries and cetacean information (abundance/distribution); Review available information by region with workshop/group of experts, identify priority regions with high bycatch risk. Identify key gaps and opportunities to fill knowledge gaps. Estimate bycatch and fishing effort where possible (external consultant etc).</p>	x	x	x		<p>Bycatch Coordinator to stimulate an externally led project</p>	<p>IWC Secretariat, Expert Panel, Scientific Committee, HIM, Small Cetaceans, CMP, Global Whale Entanglement Response Network -GWERN, Strandings Initiative to provide input</p>	<p>FAO, CMS, RFMOs, IUCN IMMA Task Team; Experts working on bycatch of other taxa</p>	High	<p><i>Non-workshop activities costs included under coordination.</i></p> <p>In person: £10,000-£15,000. Consultant contract (data compilation, gap analysis, bycatch estimation): £20,000.</p>	<p><i>Ongoing-</i> IWC continues collaboration with FAO, RFMO, and CMS.</p>
<p>2.3 Rapid bycatch risk assessments undertaken in small scale/artisanal fisheries</p> <p>Collaboration with national governments and experts in priority countries to rapidly assess bycatch, including in very data poor situations, as appropriate. Provide information to Scientific Committee and Conservation Committee. Potentially work to develop guidelines on implementing a standardised approach to risk assessment in data poor situations, or a process for choosing the right tool depending on national context.</p>	x	x	x	x	<p>Pilot project lead, Expert Panel members, national governments</p>	<p>Bycatch Coordinator, Standing Working Group, Bycatch, Conservation Committee, Scientific Committee (HIM, Small Cetaceans, CMPs)</p>	<p>Country dependent; National Governments, Research Institutions, NGOs, Fishing communities.</p>	High	<p>Workshop on risk assessment training: £3000 (virtual); £10000 (in person) Rapid Risk assessment (staff time, travel, analysis) £10,000 Guideline development £10,000. (To be developed with external partners)</p>	<p><i>Not started-</i> Part of the Common Oceans ABNJ Project, scheduled in 2023-2024.</p>

Objective 3. Develop, test, demonstrate effective bycatch mitigation and monitoring solutions and Objective 4. Bring about change in attitudes within fishing communities towards cetacean bycatch mitigation (where appropriate and applicable)										
<p>3.1 Implement pilot projects in Kenya, Peru, India, Republic of Congo, Thailand, Borneo (Indonesia/Malaysia), Pakistan</p>	x	x	x	x	<p>Pilot project lead, national governments</p>	<p>Bycatch Coordinator, Expert Panel; CMP coordinators where relevant</p>	<p>Dependent on each country RFMOs as relevant, FAO, CMS etc.</p>	Top	<p><i>The budget below includes the following estimates pilot project costings (over 3-4yrs); Total per project cost: ~£250,000 – 300,000. 2) an ideal level of IWC-provided co-funding for external funding proposals per project: £30,000. 3) seed funding to set up projects (compile data, train staff, meet key stakeholders). Per project: £15,000</i></p>	<p>Ongoing- Local partnerships to be built and project concepts developed. Funding opportunities currently being sought.</p>
<p>3.2 Engagement with ongoing projects of relevance to BMI</p>	x	x	x	x	<p>Bycatch Coordinator</p>	<p>Expert Panel; Bycatch Standing Working Group; CMP coordinators</p>	<p>ACCOBAMS, ASCOBANS, SPREP, CPPS, Individual Experts, NGOs</p>	Med	<p><i>Costs included under coordination</i></p>	<p>Ongoing - Presentations on bycatch were conducted during</p>

advice where requested/relevant. Presentation of information where possible at IWC Scientific Committee meetings and to expert panel.					Task Teams Scientific Committee members			or existing IWC work	SC68D and will continue throughout the duration of the workplan.
3.3 Review of evidence for bycatch mitigation strategies Collaboration with FAO, BMIS, Bycatch.org and experts (etc.) on bycatch mitigation strategies, best practices and guidelines. Reviewing existing material provided in current guidelines (as requested by partners) and provide updated information from pilot projects/affiliated projects.	x	x	x	Bycatch Coordinator	(Coordinating input from IWC groups – Expert Panel, Scientific Committee (HIM), CMP coordinators)	WCPFC, SPC, Bycatch.org, FAO; ASCOBANS, ICES, ACCOBAMS, CMS	High	Costs included under coordination or existing IWC work	Ongoing- IWC Programme Development team compile recently published information and will continue collaboration with names organisations.
3.4 Collaboration to identify research priorities for innovative mitigation strategies Collaboration with sensory ecologists, behavioural scientists, fisheries technologists to identify possible areas for gear innovation. Undertake experimental trials with multiple target and bycaught species to inform the design and assess the effectiveness of novel bycatch mitigation techniques.	x			Bycatch Coordinator, Expert Panel	Pilot project leads; Scientific Committee (HIM) CMP coordinators	Research institutions, fisheries technologists, NGOs etc, FAO as appropriate	Medium	Costs included under coordination.	Ongoing- Development of brief concept for follow up workshop. Engagement with other taxa experts on multi-taxa sensory ecology needs.
4.1 Develop toolbox of socio-economic, incentive-based approaches for small-scale fisheries Desk based task to compile toolbox which can be trialled in pilot projects depending on local context. This can include working across the supply chain to identify opportunities to incentivize change in bycatch management, switching to alternative livelihoods, micro-financing for mitigation and other tools as they are developed	x	x		Expert panel, Bycatch Coordinator	Scientific Committee, Conservation Committee, CMP coordinators	External project members	Top	£5000 £10,000	-Not started, will begin 2023.
4.2 Map out supply chains in pilot project fisheries and identify mechanisms for influencing change [Activity currently being developed and discussed]	x	x		External partners	Expert Panel, Bycatch Coordinator		Med	Costs included under pilot projects and	Action pending pilot project commencement.

									by external partner	
<p>4.3 Scale up from pilot projects to fleets</p> <p>Includes outreach and training activities with fisheries managers and fishing communities beyond pilot projects. Work to develop collaboration with industry/research groups e.g., ISSF, Sustainable Fisheries Partnership, Too Big to Ignore to reach fishing communities beyond pilot projects.</p> <p>Includes investigation of possible mechanisms for sustainable financing of bycatch mitigation and management.</p>			x	National governments from pilot project countries	Pilot project leads Bycatch coordinator Expert Panel CMP coordinators where relevant		Med (long term activity)	External project, depending on country. To be costed as appropriate	Action pending pilot project commencement.	
<p>Objective 5. Raise awareness and capacity within national governments to tackle cetacean bycatch (where relevant and applicable)</p>										
<p>5.1 Implement BMI communication strategy for engagement with national governments (contracting and non-contracting) and broader outreach.</p> <p>Includes promotion of BMI technical advice and BMI activities, raising awareness of cetacean bycatch issues, promotion of pilot and affiliated projects and work underway focused on bycatch globally. Raise awareness of FAO Technical guidelines and other tools available to assist in bycatch reduction efforts. Costs include communication materials (website development, printed materials e.g., infographics, promotional material etc)</p>	x	x	x		Bycatch Coordinator	IWC Secretariat, Standing Working Group Bycatch, Expert Panel, Conservation Committee		Core	£15,000 (for materials). Staff time included under Coordination and Secretariat existing activities.	Ongoing-Communication strategy has been developed. Implementation activity to be continued.
<p>5.2 Develop and implement capacity building/technical advisory programme.</p> <p>Includes activities for building national capacity on rapid risk assessments, population abundance assessment, bycatch analysis, project design, mitigation techniques, management, incentivisation and enforcement. This could be via dedicated workshops, apprenticeship or internship programmes, a bycatch mitigation equipment 'loan scheme' and other approaches to be developed.</p> <p>This activity also includes BMI technical assistance (in person or remote) to requests from contracting and non-contracting governments to the IWC.</p>	x	x	x		Bycatch Coordinator, National governments	Expert Panel; Standing Working Group Bycatch, Conservation Committee. CMP coordinators; Task Teams Scientific Committee	*Collaboration being investigated with organisations including FAO, CMS, IOTC, and others (CPPS, ISSF, IPLF)	Top	Estimated costs per activity: Expert Panel-led training: ~ £15,000 per session (~£3000 if virtual) Apprenticeship	Ongoing-Common Oceans ABNJ II project development team. Joint workshop training programme (GWERN entanglement & BMI bycatch risk

Continue to identify opportunities to collaborate with others (e.g., FAO, ICES, PICES, NAMMCO, CMS, CITES, ISSF, SPREP, etc.) and within existing IWC programmes; CMPs, GWERN etc.								programme: ~ £10,000. Per request - Expert Panel time/travel for technical assistance: £3000	assessment) being discussed. Discussion with CMP SWG Chairs on potential opportunities for joining up BMI capacity building efforts with CMP activities.	
5.3 Identify main barriers and gaps in IWC bycatch data (national progress reports) and suggest how to streamline and improve bycatch data reporting The BMI will work with the Scientific Committee Ad Hoc Working Group on databases and associated issues to understand the barriers to bycatch data reporting to the IWC. This activity will explore means to make the IWC national reporting requirements standardised and streamlined with RFMOs and other IGOs collecting bycatch data to reduce reporting burden and ensure the most useful data are acquired for identifying significant bycatch.	x	x			Scientific Committee Ad Hoc Working Group on databases and associated issues, IWC Secretariat	Bycatch Coordinator, Scientific Committee (HIM), Expert Panel	Other inter-governmental organisations (e.g., FAO, RFMOs, UNEP, CBD etc)	High	<i>Costs included under coordination and existing IWC Sec and Scientific Committee activities</i>	<i>Ongoing</i> - This action is part of broader IWC engagement on national progress reports and how to improve reporting and utility of data.
5.4 Compilation and review of IWC progress reports bycatch meta-data, entanglement and strandings data during IWC Scientific Committee meetings Includes relevant data reported on bycatch, strandings (where bycatch is likely to have occurred) and entanglement (e.g., GWERN database).	x	x	x	x	IWC Secretariat	Scientific Committee (HIM), Bycatch Coordinator, Expert Panel		Medium	<i>Costs included under coordination and other IWC Secretariat activities</i>	<i>Ongoing</i> — SC-HIM compile research presented during meetings.
5.5 Develop recommendations for IWC Commission consideration on bycatch related conservation, management and science to address cetacean bycatch at national, regional and global scales. Led by the Standing Working Group on Bycatch, this includes promotion through the IWC of existing guidelines, and best practice (including that emerging from pilot and affiliated projects). Will also include (as appropriate) advice to specific governments or advice regarding specific	x	x	x	x	Standing Working Group Bycatch, Conservation Committee, Scientific Committee	Bycatch Coordinator, Expert Panel		High	<i>Existing Conservation and Scientific Committee work.</i>	<i>Ongoing</i> - Recommendation from SC, CC meetings will be taken into consideration for future work.

bycatch situations brought to the BMI's and Conservation and Scientific Committee's attention.										
Objective 6. Raise awareness of cetacean bycatch and available solutions within regional and international fisheries management organisations										
<p>6.1 Regional and international outreach activities on bycatch</p> <p>Awareness raising and development of collaborations within the international fisheries management community (on cetacean bycatch. Promotion of the BMI as a collaborative partner to address bycatch, and other initiatives that are available to promote solutions. Promotion of best practice and effective tools to fisheries management community to address bycatch. This includes actions in communication strategy; engagement through the Regional Secretariats Network; the KOBE bycatch working group; Common Oceans ABNJ Phase 2 project etc; attendance and awareness activities at FAO COFI and other relevant events</p> <p>Includes promotion of technical information on effective solutions and strategies (e.g., FAO technical guidelines; CMS safe handling and release for small cetaceans; GWERN) at national and regional level. Includes collaboration with relevant IGOs and national governments on capacity building initiatives.</p>	x	x	x	x	Bycatch Coordinator	IWC Secretariat, Standing Working Group-Bycatch, Conservation Committee, Scientific Committee (HIM, Small Cetaceans, CMPs where appropriate) Expert Panel	FAO, RFMOs, other relevant IGOs)	High	Costs included under coordination and existing IWC activities	Ongoing-Outreach to IOTC Working Party, with presentation by Executive Secretary at 2022 meeting, the Common Oceans ABNJ II project engagement, and presentation by bycatch coordinator at SPREP meeting.
<p>6.3 Engage with priority RFMOs and RFBs on cetacean bycatch</p> <p>Attend relevant scientific and technical meetings of priority RFMOs (IOTC, ICCAT, SIOFA, SWIOFA; SPRFMO; WCPFC).</p> <p>Develop formal relationships with RFMOs (including MOUs etc where mutually beneficial). Provide expert advice, where applicable, on cetacean bycatch.</p> <p>Collaboration with priority RFMOs and coordinators of Bycatch Data Exchange Protocol on bycatch data collection, streamlining and analysis.</p> <p>Collaboration with RFMOs to explore regional bycatch risk assessments for 1-3 regions (e.g., Indian Ocean, Pacific, South Atlantic</p>	x	x	x	x	Bycatch Coordinator	IWC Secretariat, Standing Working Group Bycatch	IOTC, ICCAT, SIOFA, SWIOFA; SPRFMO; WCPFC FAO, CMS, ACAP	High	Costs included under coordination and existing IWC activities Specific costs included under Common Oceans ABNJ Phase 2 project	Ongoing-Initiated under FAO Common Oceans ABNJ II project with IOTC, WCPFC, SPREP.

									<i>proposal [under development]</i>	
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ANNEX 2

DRAFT IWC SHIP STRIKES WORKPLAN 2022-2024

High level objective & Description of activity	Timeframe			Lead	IWC community involved	Budget per year/ total budget	Potential funding source(s)	Priority Core = essential Top High Medium
	2022	2023	2024					
Coordination of programme								
All aspects of programme coordination including liaison with the SSWG; coordinate work on ship strikes database; coordinate with ship strike data holders to facilitate national/regional database upload; coordination with other IWC bodies and initiatives; engagement with other Inter-governmental Organisations (IGOs) and organisations; fundraising; monitoring of progress and communication.	x	x	x	IWC Data Manager, Secretariat		See Objective 3		Core
(1) To reduce mortalities and injuries to large whales as a result of ship strikes.								

<p>1.1 Identify at risk populations</p> <p>The Scientific Committee should provide an estimate of annual incidence rate of ship strikes for each of the following:</p> <ul style="list-style-type: none"> a. Western North Atlantic right whale b. Eastern North Pacific right whale c. Chile-Peru right whale d. Arabian Sea humpback whale e. Western gray whale f. Blue whale - Sri Lanka and Arabian Sea g. Blue whale - Chile h. Sperm whale - Mediterranean Sea i. Fin whale - Mediterranean Sea j. Bryde's whale - Gulf of Mexico k. Omura's whale - North-western Madagascar l. Sperm whale - Canary Islands region <p>The Scientific Committee should continue to identify and review potential high risk populations for ship strikes.</p>	x	x	x	Chair of HIM, IWC Data Manager, Secretariat, Ship Strikes Expert Panel and SSWG	IMO IUCN - IMMAs	Expert Panel no extra cost if meets virtually or in margins of SC meetings. Other costs in Objective 3		Top
<p>1.2 Identify high risk areas</p> <p>The Strategic Plan identifies high risk areas for ship strikes. The IWC should work with relevant stakeholders to develop proposals for ship strikes reduction measures in high-risk areas. The Scientific Committee should review the high-risk areas, to update on new areas and progress with existing areas.</p> <p>See High risk ship strike areas table in the Strategic Plan for further details of location and species of concern, alongside associated stages in identifying high risk areas and developing appropriate mitigation strategies</p>	x	x	x	Chair of HIM, Ship Strikes Expert Panel and SSWG, IWC Data Manager and Secretariat		Expert Panel no extra cost if meets virtually or in margins of SC meetings. Potential travel costs £1000 per annum for engagement with countries. Other costs	Secretariat funding for travel or VCF (application to be submitted, if needed).	Top

						in Objective 3.		
1.3 Continued monitoring of measures implemented The SC should regularly review the impact of measures for high-risk populations and in high-risk areas implemented to reduce the incidence of ship strikes. Develop case studies to demonstrate benefits, anticipated and actual costs of measures introduced to reduce ship strikes.	x	x	x	Chair of HIM, SC		Included in core costs SC meetings		High
1.4 Improve the understanding of the relationship between vessel speed and risk of injury, death and damage to the vessel	x	x	x	Chair of HIM, SC		Included in core costs SC meetings		Medium
(2) Increase the application of measures that reduce collision probability, such as re-routing and speed reduction/limits on a global scale.								
2.1 Implementation of measures IWC member countries put in place speed and re-routing where necessary	x	x	x	IWC Contracting Governments, SSWG				High
2.2 Communication of mitigation measures to the IMO The IWC continues to promote mitigation options at the IMO. Prepare a paper for MEPC in 2023 that provides an update on research, risks and mitigation opportunities on ship strikes.		x		Secretariat; Chair of HIM; Ship Strikes Expert Panel, SSWG		Travel to IMO meetings £200 per annum	To be met by core Secretariat travel costs	Medium
(3) Improve reporting of incidents that do occur to the IWC Ship Strike Database.								

<p>3.1 Systematic outreach to data providers</p> <p>Systematic outreach to countries (members and non-members) and regional authorities to help obtain and secure data for entry to the database.</p> <p>Systematic outreach to shipping sectors, including shipping associations, to seek support with data entry</p> <p>Data from National Progress reports assessed and entered where appropriate.</p>	x	x	x	IWC Data Manager, Secretariat		£38,000 per annum for Data Manager	SC, VCF, welfare funds	High
<p>3.2 Review and provision of data</p> <p>Inclusion of known datasets (e.g., USA, Australia) and development of bulk upload tool</p> <p>Records included and reviewed in a reasonable timeframe</p>	x	x	x	IWC Data Manager, Secretariat, Ship Strikes Expert Panel, IWC Contracting Governments		Included in Data Manager costs		High
<p>3.3 Availability of database</p> <p>Update the website with the most recent version of data</p> <p>Ongoing, regular publication of routine summary statistics from the ship strikes database</p> <p>Maintain a compendium of relevant papers and reports of ship strikes issues</p>	x	x	x	IWC Data Manager, Secretariat		Included in Data Manager costs		Medium
<p>3.4 Use of the database</p> <p>Undertake review of the database to understand how it can be used and improved to help meet the IWC Strategic Plan</p> <p>Undertake analysis of the database to assess the scale of the problem, factors that relate to risk, estimate ship strikes mortalities for whale populations and assess effectiveness of mitigation measures taken</p>		x	x	IWC Data Manager, Secretariat, Chair of HIM, Ship Strikes Expert Panel		Included in Data Manager costs		Medium
<p>3.4 Outreach to other organisations</p> <p>When database has been updated, communicate results to IMO, CMS, ACCOBAMS, ASCOBANS and others as appropriate.</p>	x	x	x	IWC Data Manager, Secretariat, WG-SS		Met by core Secretariat costs		Medium

(4) Increase development/use of avoidance technologies and push for their widespread-standardized where appropriate.								
4.1 Technological approaches Regular review and monitoring of new technologies by the Scientific Committee. Consult with shipping industry on technologies used.	x	x	x	Chair of HIM, Ship Strikes Expert Panel		Included in core SC meeting costs. Potential costs for additional research/ review work	VCF or SC science fund proposals to be submitted if needed	High
4.2 Avoidance of overlap between whales and ships Reduction of ship strikes will focus on avoidance on overlap between whales and ships, or a reduction in speed. The IWC should look into technology to help mariners understand where to slow down or where seasonal areas e.g., mapping tools that show whale distribution or IMMAs.		x	x	Chair of HIM, Ship Strikes Expert Panel		Included in core SC meeting costs. Potential costs for additional research/ review work	VCF or SC science fund proposals to be submitted if needed	Medium
4.3 Using AIS data Investigate systems for monitoring all types of vessel traffic in high-risk areas including expanding requirements for vessels to transmit AIS signals to smaller vessels.				Chair of HIM, Ship Strikes Expert Panel		Included in core SC meeting costs. Potential costs for additional research/ review work	VCF or SC science fund proposals to be submitted if needed	Medium

<p>4.4 Application of technology</p> <p>Assess the feasibility and support the application of technology for known high risk areas.</p> <p>Work with IUCN MMPA Task Force and regional stakeholders to ensure that recently identified IMMAs, in which ship strikes are a risk, be added to "Whale Alert" for the Mediterranean Sea.</p> <p>Evaluate efficiency of the REPCET system for reducing the risk of Ship Strikes (SC2019)</p>	x	x		IWC Data Manager, SSWG and other named leads		Included in Data Manager and core SC meeting costs. Potential costs for additional research/ review work	VCF or SC science fund proposals to be submitted if needed	Medium
(5) Improve collaboration on ship strike issues internationally (e.g., International Maritime Organization (IMO), other IGOs (ACCOBAMS, ASCOBANS), NGOs, Arctic Council).								
<p>5.1 International Maritime Organization</p> <p>Continue to liaise with the IMO on issues relating to ship strikes, including high risk species and areas. Development of an appropriate protocol to enable consideration of cetacean distribution and occurrences for proposed new or revised routing schemes or speed restrictions.</p> <p>Inform the IMO that the IWC SC is "available" to review new TSS, PSSAs and ATBA for relevance and impact on avoiding ship strikes.</p> <p>Maintain SC group to advise on intersessional requests from IMO.</p> <p>Provision of appropriate information to the IMO MEPC</p>	x	x	x	Secretariat with WG-SS and other named leads		To be delivered with core Secretariat funding		Top
<p>5.2 IUCN Marine Mammal Protected Area Task Force</p> <p>Continue work on the use of Important Marine Mammal Areas to help identify high risk areas for ship strikes. This could include review of potential uses of IWC databases in helping identify Areas of interest (AOIs) for surveys and verification of longevity of IMMAs</p>	x	x	x	Secretariat		To be delivered with core Secretariat funding		High
<p>5.3 Convention on Migratory Species</p> <p>Liaise with the CMS and daughters agreements ASCOBANS and ACCOBAMS</p>	x	x	x	Secretariat		To be delivered with core		Medium

						Secretariat funding		
5.4 Arctic Council						To be delivered with core Secretariat funding		Medium
5.5 UNEP-CEP-SPAW: Collaborative activities under new MoC to be presented for endorsement at IWC68	x	x	x			To be delivered with core Secretariat funding		Medium
5.6 CPPS		x	x			To be delivered with core Secretariat funding		Medium
5.7 SPREP		x	x			To be delivered with core Secretariat funding		Medium
5.8 NGOs	x	x	x			To be delivered with core Secretariat funding		Medium
5.9 Marine Traffic Continue to develop MOU for use of AIS data on shipping activity	x			Secretariat		To be delivered with core		Medium

						Secretariat funding		
(6) Increase public and industry awareness about the issue and measures used to reduce this threat.								
6.1 Training and education Identify and evaluate various training/education programmes to determine which might feasibly expand to other marine resource groups. Identify opportunities for IWC input.		x	x	Secretariat				
6.2 Specific advice to particular sectors Develop advice for vessels/sectors where there may be specific issues not covered by the IMO's general guidance documents. Discussion needed on which sectors to include here, including timelines for the development of guidance. This could include consideration of: Service vessels for offshore renewables Fast ferries Offshore sailing yachts (racing) - review needed by Expert Panel, update and promote guidance already produced. Cruise ship guidance - review needed by Expert Panel, update and promote guidance already produced. Oil & Gas.		x	x	Expert Panel and Secretariat		£500 per annum for communications activities	Core Secretariat and VCF (application to be submitted if needed)	
6.3 Public outreach Circulate leaflet on ship strikes for countries to distribute to their maritime networks		x	x	Data Manager and Secretariat		Included in communications budget above		
6.4 Review of impact Assess the receptiveness of outreach efforts				As above		As above		

ANNEX 3

DRAFT Whale Watching Workplan 2022-2024

The Whale Watching Strategic Plan provides the overarching vision for the period 2018-2024. High level objectives presented in the workplan below directly correspond to the three objectives identified as the key components of the Strategic Plan. There is a suite of short-, medium-, and long-term actions associated with each objective. Short-term actions are taken to be those which can be delivered within two years of the adoption of the Strategic Plan, with medium-term actions delivered over five years. Two long-term actions are identified in this iteration of the Strategic Plan: (1) Continued development of the digital Whale Watching Handbook, and (2) Development of an integrated research plan.

The Whale Watching Handbook (Handbook), the SC Sub-committee on Whale Watching, and the Standing Working Group on Whale Watching will be important mechanisms through which these objectives can be achieved.

High level objective & Description of activity	Timeframe			Lead	IWC community involved	Budget per year/ total budget	Potential funding source(s)	Priority Core= essential Top High Medium
	2022	2023	2024					
Objective 1: Information Sharing Identify methods to facilitate cooperation and information/expertise-sharing between Contracting Parties and others to support the development of a responsible whale-watching sector, including the provision of benefits to local communities.								
1.1 Use the Handbook to continue to improve industry and public access to data, information, and research results	x	x	x	Standing Working Group on Whale Watching	SC Sub-Committee on Whale Watching, Secretariat			
1.2 Ongoing maintenance of the IWC WW Handbook including: -Scoping of new content	x	x	x	Standing Working Group on Whale Watching, Secretariat	SC Sub-Committee on Whale Watching			

-Regular updating the searchable table of literature -Modest updates to existing content requested by countries/data providers								
1.3 Further development of IWC WW Handbook including: - development of new content		x	x	Secretariat	Standing Working Group on Whale Watching, SC Sub-Committee on Whale Watching			
1.4 Promotion of the WW Handbook and related resources (communication strategy) - Researchers - Whale watching managers - Naturalists - Operators - Public	x	x	x	Secretariat, Standing Working Group on Whale Watching,	SC Sub-Committee on Whale Watching, IWC community			Top
1.5 Review of implementation of the IWC Strategic Plan to date to help identify priorities. * Within two years of commencing work on the actions outlined, this Working Group aims to undertake a comprehensive review of outputs to allow activities to be refocused, if required.	x			Standing Working Group on Whale Watching,	SC Sub-Committee on Whale Watching, Secretariat			
1.6 Draft new Strategic Plan 2025-2035 (10year)			x	Standing Working Group on Whale Watching,	SC Sub-Committee on Whale Watching, Secretariat			Medium
Objective 2: Capacity Building and International Collaboration Support the development of a responsible whale watching sector and the provision of benefits to local communities.								

2.1 Identify, on a regional basis, specific capacity building, research and development needs. In particular, those (or including those) providing long-term benefits for the livelihood of local communities.	x	x	x	Standing Working Group on Whale Watching	BMI (Secretariat), SC Sub-committee on WW			
2.2 Continue to Support the IORA Network on Sustainable Whale Watching	x	x	x	SC Sub-committee on WW, intersessional correspondence group for cooperation with IORA	Standing Working Group on Whale Watching			High
2.3 Identify and list in the Handbook, funding and development organisations able to offer assistance relevant to the establishment and maintenance of whale watching operations at varying scales.	x	x	x	Standing Working Group on Whale Watching	Secretariat, SC Sub-Committee on Whale Watching, IWC community			
2.4 Work with relevant international bodies, industry associations and outside expertise, to develop guidance and training tools in the Handbook that address occupational health and safety aspects of whale watching operations.	x	x	x	Standing Working Group on Whale Watching	Secretariat, SC Sub-Committee on Whale Watching, IWC community			
2.5 Investigate and promote best practices on cost-effective monitoring and compliance regimes and alternative strategies to promote environmentally responsible whale watching.	x	x	x	Standing Working Group on Whale Watching, Secretariat	SC Sub-Committee on Whale Watching, IWC community			
2.6 Identify and work with key partners and priority organizations who might contribute to the vision and objectives/goals.	x	x	x	Secretariat, Standing Working Group on Whale Watching	SC Sub-Committee on Whale Watching, IWC community			
Objective 3: Research and Data Collection Continue to develop the necessary research principles and tools to assist the collection of data important to ensuring that whale watching (1) does not significantly and adversely affect the								

behaviours and fitness of individual cetaceans or populations or their habitats and (2) realizes its potential benefits, e.g., educating the public, positively affecting attitudes toward conservation, improving local economies								
<p>3.1 Continue the Modelling and Assessment of Whale Watching Impacts (MAWI) initiative, to develop tools and methodologies to assist researchers and managers in their efforts to assess potential impacts of whale watching on cetaceans and to mitigate them. This initiative is ongoing and could focus on:</p> <ul style="list-style-type: none"> • Investigating modelling methods to link short- (e.g., behavioural reactions) and medium-term (e.g., changes in population distribution) responses with potential impacts from whale watching to long-term (i.e., >10 to 20 years) consequences (e.g., vital rates). • Establishing standard data collection methodologies, including from platforms of opportunity. • Identifying key locations for whale watching research projects and programmes, taking into consideration logistics, capacity and management urgency; 	x			SC Sub-Committee on Whale Watching, MAWI	Standing Working Group on Whale Watching			
<p>3.2 Develop a long-term integrated research programme to better understand the potential impacts of whale watching on the demographic parameters of cetacean populations. Seek to:</p> <ul style="list-style-type: none"> • Investigate whether there is a causal relationship between whale watching 	x	x	x	SC Sub-Committee on Whale Watching	Standing Working Group on Whale Watching			

<p>exposure and the survival and vital rates of exposed cetacean individuals and populations;</p> <ul style="list-style-type: none"> • Understand the mechanisms involved in causal effects, if they exist, in order to define a framework for improved management 								
<p>3.3 Develop processes and mechanisms for whale watching activities to collect and provide scientifically robust and useful data to researchers and research programmes</p>	x	x	x	SC Sub-Committee on Whale Watching	Standing Working Group on Whale Watching			
<p>3.4 Develop an approach (e.g., hold an intersessional workshop; establish a joint intersessional working group) to integrate social and ecological scientific research within the IWC to inform whale watching management and promote potential benefits.</p>	x	x	x	Standing Working Group on Whale Watching	SC Sub-Committee on Whale Watching			