

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
	2018	2019	2020					
<i>Objective 1: Programme coordination</i>								
1.1 Coordination of programme All aspect of programme coordination including liaison with the Bycatch SWG; coordination of expert panel & involvement/coordination/administration of pilot & affiliated projects; coordination with other IWC bodies and initiatives; engagement with other Inter-governmental Organisations (IGOs) and organisations; fundraising; monitoring of progress and communication. Includes Bycatch Coordinator salary costs and travel to IWC SC, & Commission meetings.	x	x	x	Bycatch Coordinator	IWC Secretariat, Chair of Bycatch SWG, Bycatch SWG	£51,250 (annual) Total £102,500	Voluntary Conservation Funds (VCF)	Core
1.2 Develop and implement a fundraising strategy for BMI Identify and pursue potential sources of funding for implementing actions- including international funds (World Bank, Global Environment Facility- GEF etc), private foundations, national and regional sources.	x	x	x	Bycatch Coordinator	IWC Secretariat, Chair of Bycatch SWG, Bycatch SWG, Expert Panel	Included in coordination cost	n/a	Top
1.3 Progress reports of BMI to the Commission, Conservation Committee (CC) and updates to Scientific Committee (SC).	x		x	Chair of Bycatch SWG	Bycatch Coordinator, Bycatch SWG, IWC Secretariat	Included in coordination cost	n/a	Core
1.4 Annual review of expert panel membership	x	x	x	Bycatch Coordinator	Chair of Bycatch SWG	Included in coordination cost	n/a	Core
1.5 Expert panel meetings (NB. 2019 meeting costed under 2.2 below)		x	x	Bycatch Coordinator	Expert panel, Bycatch SWG	£10,000 in 2020 (travel, venue, catering etc)	VCF, external funds	High
<i>Objective 2. Identification of specific fisheries, cetacean species or populations where achievable bycatch mitigation strategies could be tested and/or introduced</i>								
2.1 Collaborate with international organisations and experts to identify and review existing data available on cetacean distribution, bycatch and fishing effort Collaborate with international organisations/bodies holding existing bycatch, fisheries and cetacean information; evaluate its utility (see activity 2.2) to assist the BMI (particularly for small-scale/artisanal and Areas Beyond National Jurisdiction fisheries) and identify key gaps and opportunities to fill knowledge gaps. Links to action 5.2; 5.3; 6.1)		x	x	Bycatch Coordinator to stimulate an externally led project	IWC Secretariat, Scientific Committee (IWC-SC)	Included in coordination cost	n/a	High

<p>2.2. Technical workshop evaluation of existing bycatch and cetacean data & small-scale fisheries bycatch challenges (Regional Focus on Indian Ocean)</p> <p>A 2- day workshop including: Day 1) Technical workshop with invited experts and data owners to evaluate the data available within the Indian Ocean region on cetacean distribution, bycatch and fishing effort, compare sources and brainstorm whether useful products/decisions can be made with existing data or what is needed for the future.</p> <p>Day 2) Technical workshop on small scale fisheries bycatch challenges in Indian Ocean region & options for bycatch risk assessments and low-cost mitigation trials.</p> <p>*Workshop potentially held back-to-back with SC meeting in Kenya, May 2019 & includes first face to face meeting of the Bycatch Expert Panel.</p>		x		Bycatch Coordinator	Expert panel, Bycatch SWG, Human Induced Mortality sub-committee (HIM-SC) members (invited as experts in addition to external experts)	~£15,000 Travel, venue etc	VCF, external funding, IWC-SC for Independent Experts	High
<p>2.3. Identify pilot projects through expert review - IWC and government consultation.</p> <p>The BMI expert panel, SC (HIM, SM) and CC (CMP) regularly review any new information and make suggestions for the BMI on current priorities and if necessary to (re)prioritise fisheries or regions with specific bycatch issues for pilot projects (see Objective 3 & 4) or targeted capacity development work (Objective 5).</p>	x	x	x	Bycatch Coordinator	Expert panel, Bycatch SWG, Conservation Committee (IWC-CC) members, IWC-SC, IWC contracting governments	Included in coordination cost	n/a	Top
<p>2.4 Rapid bycatch assessment conducted through pilot project in small scale/artisanal fisheries</p> <p>Implementation of standardised approach to rapidly assess bycatch in very data poor situations, as appropriate and according to gaps identified in Activity 2.3.</p>		x	x	Pilot project lead	Bycatch Coordinator, Expert Panel	~£20,000 per assessment & based on location	VCF, external funding sources- project based	High
<i>Objective 3. - Develop, test, demonstrate effective bycatch mitigation and monitoring solutions [within pilot projects identified under Objective 1]</i>								
<p>3.1 Sensory ecology review & identify research priorities</p> <p>Review what is known about cetacean sensory biology (vision, hearing, tactile, gustatory) of cetaceans and how these relate to the body of work (where it exists) on responses to different bycatch prevention techniques. Identify research priorities based on outcomes of review for potential innovative mitigation methods.</p>		x		Consultant led- or collaboration with external experts	Bycatch Coordinator, Expert panel, external experts	~£10,000-25,000 dependent on scale/scope & if consultant led	External funding - project based	High
<p>3.2 Collaborate with sensory ecologists, fisheries technologists, economists, scientists to develop prototypes and carry out lab and field trials using innovative gear</p> <p>Undertake experimental trials (including new options identified by Activity 3.1 and priorities in 2.3) with multiple species to inform the design and assess the effectiveness of novel bycatch mitigation techniques.</p>		x	x	Pilot project leads	Bycatch Coordinator, Expert Panel, SC-HIM	To be costed in pilot project/ external funds. Dependent on what is developed	External funding sources- project based	Medium
<p>3.3 Raise awareness in scientific, engineering and conservation funding community of need for mitigation research</p>	x	x	x	Bycatch Coordinator	Expert panel, IWC-SC, IWC-CC,	£1000 for specific material- other		Medium

Produce material (printed and online) to highlight the need for further research. Promote this material through expert panel and SC community.						communication costs under 4.1		
3.4 Scope out potential for incentivising global fisheries engineering community to develop new mitigation measures Explore collaborative ways to fund innovation- linked to 3.1 and 3.2		x		Bycatch Coordinator	Expert panel, IWC Secretariat	Included in coordination costs. costs to be developed if a funding scheme set up	External funds/partnerships with funders	Medium
3.5 Test mitigation measures and strategies with fishermen (small scale and commercial) in pilot projects and regularly evaluate progress Dependent on pilot projects developed/collaborating with BMI-; low cost mitigation device trialling, gear switching, spatial/temporal restrictions and other new innovative mitigation (e.g. as per 3.2). Socio-economic aspects studied alongside to determine economic viability. Information/data regularly presented at IWC SC meetings.		x	x	Pilot project lead	Bycatch Coordinator, Expert Panel, IWC-SC	£50k-200k per pilot project/yr (dependent on location & activities)	External funding sources- project based. Small scale projects potentially through IWC existing funds (VCF/SC)	Top
3.6 Engagement with ongoing projects of relevance to BMI (creation of BMI affiliated projects) Affiliation of BMI with ongoing, already funded projects (e.g. Bycatch SWG led projects, external collaborators) where assessment/mitigation/incentivising approaches are being trialled. Information exchange & collection of technical advice/lessons learnt and provision of BMI expert panel advice where requested/relevant. Presentation of information where possible at SC meetings and to expert panel.				Bycatch Coordinator	Expert panel	Travel budget, £3000	VCF, External funds- potentially approach affiliated projects	Top
3.7 Review of bycatch mitigation strategies in collaboration with experts & existing platforms providing technical guidance Collaboration with FAO and other experts and bodies on the development of technical guidelines on marine mammal bycatch; Collaboration with GEF/FAO ABNJ Common Oceans BMIS platform. Review of current strategies and technical advice for cetacean mitigation measures and input of new information from pilot projects/affiliated projects.		x	x	Bycatch Coordinator (coordinating input from IWC groups)	Expert panel; HIM-SC	Included in coordination costs	n/a	High
<i>Objective 4. Bring about a change in attitudes within fishing communities towards cetacean bycatch mitigation (where appropriate and applicable)</i>								
4.1 Engage communities participating in pilot & affiliated projects This will be context specific depending on pilot study locations, but could include port-based outreach, training workshops, engagement with industry representative groups etc. Development of trust with fishing communities participating in pilot projects (including involvement of fishing community in the design and development of pilot projects) and collection of information for deeper understanding of socio-economic conditions related to tackling bycatch.		x	x	Pilot project lead	Bycatch Coordinator, Expert panel,	Costed in pilot project costs	n/a	Top

<p>4.2 Develop toolbox of socio-economic incentive-based approaches for small-scale fisheries in both developed and developing countries and for commercial fisheries</p> <p>Desk based task to compile toolbox. Once developed these can be trialled in pilot projects depending on local context.</p>		x	x	Expert panel	Bycatch Coordinator,	Costed in pilot project costs	n/a	High
<p>4.3 Scope out opportunities for outreach and train fishermen beyond pilot projects on how to operate bycatch mitigation gear (proven as effective) & adapt solutions for vessels & raise awareness of effective solutions & approaches</p> <p>Further scoping for collaboration with industry/research groups e.g. ISSF, Sustainable Fisheries Partnership, Too Big to Ignore to reach fishing communities beyond pilot projects.</p>			x	Bycatch Coordinator (coordinating response team)	Expert panel, GWERN Coordinator	Dependent on scoping of opportunities		High
<p><i>Objective 5. Raise awareness and capacity within national governments to tackle cetacean bycatch (where relevant and applicable)</i></p>								
<p>5.1 Develop and implement a BMI communication strategy for engagement with national governments (contracting & 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.</p>	x	x	x	Bycatch Coordinator	IWC Secretariat, Bycatch SWG, IWC-CC	~£3000 annually for materials		Top
<p>5.2 Identify main barriers and gaps in IWC bycatch data (national progress reports)</p> <p>In the context of activity 2.1 & 2.2. develop a questionnaire to contracting & non-contracting governments on barriers to reporting bycatch & existing monitoring programmes. Explore means to make the IWC national reporting requirements standardised to reduce reporting burden and ensure the most useful data is acquired for identifying significant bycatch.</p>		x	x	IWC Secretariat	Bycatch Coordinator	Included in coordination costs.	n/a	High
<p>5.3 Compilation and review of IWC progress report bycatch meta-data, entanglement and strandings data during IWC Scientific Committee meetings</p> <p>Includes relevant data reported on bycatch, strandings (where bycatch is likely to have occurred) and entanglement (e.g. GWERN database).</p>	x	x	x	SC-HIM (& Bycatch inferences from Strandings Working Group)	Bycatch Coordinator, IWC Secretariat, GWERN & Strandings Coordinator	IWC core costs	n/a	Medium
<p>5.4 Scope out, develop and begin to implement capacity building/technical advisory programme.</p> <p>Scope out training and capacity development needs for national governments on bycatch mitigation strategies for IWC and non-IWC countries. Scope opportunities to collaborate with others (including 6.1) such as investigating opportunities to do capacity building with FAO, ICES, PICES, NAMMCO, CMS, CITES, ISSF, GEF/FAO ABNJ Common Oceans Project etc. Scope out opportunities to deliver capacity development/training/promotion of effective mitigation approaches through existing IWC programmes; CMPs, GWERN programme etc.</p>	x	x	x	Bycatch Coordinator	Expert panel, IWC Secretariat, Bycatch SWG, GWERN Coordinator, IWC-CC, Contracting Governments	Travel costs £5000-10,000 once programme established & depending on number of countries & number of experts involved	VCF, requesting governments; external funds; collaborating partners	Top

<p>5.5 Develop recommendations on tackling cetacean bycatch, including technical advice for monitoring and mitigation. Includes promotion of technical information (activity 3.7 & information coming from pilot and affiliated projects).</p>			x	IWC-CC	Bycatch SWG, Bycatch Coordinator	n/a- current IWC-CC costs & coordination costs		High
<p><i>Objective 6. Raise awareness of cetacean bycatch and available solutions within regional and international fisheries management organisations (where relevant and applicable)</i></p>								
<p>6.1 Regional and international outreach activities on bycatch Includes promotion of technical information on effective solutions and strategies for tackling cetacean bycatch (activity 3.7) through existing IWC channels and where relevant in international fora. Further collective scoping for streamlining and improvement of global fisheries and bycatch data (linked to 2.1 & 5.3); scoping of collaboration on capacity development programmes (e.g. FAO, & national fisheries capacity development programmes); potential collaboration with FAO/GEF ABNJ Common Oceans (& follow up project preparation). Further scope collaboration with CMS and daughter agreements, CITES, World Bank (including environmental safeguards guidance), GEF, UNEP and UN Regional Seas and ICES working groups on bycatch, fisheries and economics work</p>	x	x	x	Bycatch Coordinator	IWC Secretariat, Expert Panel	Covered under coordination costs	n/a	High
<p>6.2 Attendance at relevant IGO meetings e.g. FAO COFI meeting, CMS, etc</p>	x	x	x	Bycatch Coordinator	IWC Secretariat	Covered under coordination costs	n/a	Core
<p>6.3 Identify and engage with priority RFMOs and RFBs on cetacean bycatch & set up and coordinate network of regional leads to participate in relevant meetings Set up a coordinated regional network of individuals acting as IWC representatives (potentially CC governments, scientists/expert panel members) to attend priority RFMO and RFB meetings of relevance to pilot projects/CMPs/priority fisheries (e.g. ABNJ and inshore/coastal/artisanal/small scale). Provide expert advice, where applicable, on cetacean bycatch. Hold regular coordination meetings to discuss upcoming meetings, and available information to share in meetings. Coordination between IWC RFMO network and other international bodies (e.g. CMS, ACAP, CITES, ICES, PICES, NAMMCO) and national governments attending RFMO meetings</p>	x	x		Bycatch Coordinator	Expert panel, Bycatch SWG, IWC Secretariat, IWC-SC, IWC-CC, RFMO reps/leads	£4000 per year, travel budget	VCF, external funds	High