
REVISION OF THE WPEB PROGRAM OF WORK (2027–2031)

PREPARED BY: IOTC SECRETARIAT & CHAIR, AUGUST 2026

PURPOSE

To ensure that participants at the 22nd Working Party on Ecosystems and Bycatch (WPEB22) revise the Program of Work for the WPEB by taking into consideration the specific requests of the Commission and Scientific Committee.

BACKGROUND

Scientific Committee

At the 28th Session of the SC:

- (Para. 286) The SC **NOTED** IOTC–2025–SC28–08 which provided the SC with a proposed Program of Work for each of its working parties, including prioritisation of the elements requested by each working party.
- (Para. 287) The SC **NOTED** the proposed Program of Work and priorities for the SC and each of the working parties and **AGREED** to a consolidated Program of Work as outlined in [Appendix 36a-g](#). The Chairpersons and Vice-Chairpersons of each working party will ensure that the efforts of their respective working parties are focused on the core areas contained within the appendix, taking into account any new research priorities identified by the Commission at its next Session. .
- (Para. 289) The SC **AGREED** on the consolidated table of priorities across all working parties (**Table 3**), as developed by each working party Chairperson, and **REQUESTED** that the IOTC Secretariat, in consultation with the Chairpersons and vice-Chairpersons of the SC and relevant working parties, develop ToRs for the specific projects to be carried out.
- (Para. 290) The SC **NOTED** that the consolidated table of priorities does not replace the full programme of work of each Working Party ([Appendix 37a-g](#)) and that adequate attention and focus should still be allocated to those activities where possible. The SC further **NOTED** that Table 3 has been developed by the SC and Working Party Chairs to provide more specific direction to the IOTC Secretariat and the SC Chair as to the priorities of the SC so that, if and when external funding becomes available intersessionally, it is possible to clearly prioritise across all working parties based on the objectives of the SC (as agreed in [IOTC–2014–SC17–R](#), para. 179).
- (Para. 291) The SC **NOTED** that CITES has recently listed several species of concern to the IOTC. The SC also **NOTED** that the WPEB has already incorporated this into its agenda to ensure better alignment with CITES's work.
- (Para. 292) The SC **ADOPTED** a revised assessment schedule, ecological risk assessment and other core projects for 2026–30, for the tuna and tuna-like species under the IOTC mandate, as well as the current list of key shark species of interest, as outlined in [Appendix 38](#).

Commission

In 2026, the Commission made a specific request to the WPEB:

S30 (para. 48) The Commission **NOTED** that paragraph 7 of Resolution 23/06 requests the SC to develop best practice guidelines for the safe handling and release of cetaceans by 2025, taking into account relevant work undertaken by other RFMOs. The Commission **REQUESTED** the WPDCS, WPEB and the SC to examine the existing recommendations related to this provision and provide an updated recommendation for endorsement by the Commission in 2027, including through intersessional collaboration among interested CPCs.

At Sessions of the Commission, Conservation and Management Measures adopted contained elements that call on the Scientific Committee, via the WPEB, to undertake specific tasks. These requests will need to be incorporated into a revised Program of Work for the WPEB:

Resolution 23/06 On the conservation of cetaceans

(para 7) The Commission requests that the IOTC Scientific Committee develop best practice guidelines for the safe release and handling of encircled cetaceans, taking into account those developed in other Regional Fisheries Management Organisations, including the Western and Central Pacific Fisheries Commission, and that these guidelines be submitted to the Commission meeting for endorsement by 2025 at the latest.

(para 12) The IOTC Scientific Committee shall review information on the status of cetaceans in the IOTC area of competence and provide recommendation or advice to the Commission no later than 2025 to identify appropriate measures that Commission shall take to mitigate negative effects of the interactions with cetaceans by the IOTC fisheries.

Resolution 23/07 On reducing the incidental bycatch of seabirds in longline fisheries

(para 8) The Scientific Committee will continue to review and make recommendations to the Commission on advancements and best practice in seabird bycatch mitigation as they become available. This will include, by 2024 at the latest, developing advice to the Commission on best practice branch line weighting.

(para 9) CPCs who elect to use hook-shielding devices as a mitigation method are encouraged to share their experience with other CPCs, as appropriate, through the Working Party on Ecosystems and Bycatch.

Resolution 24/06 On a ban on discards of bigeye tuna, skipjack tuna, yellowfin tuna, and non-targeted species caught by vessels in the IOTC record of authorisation that operate in the IOTC area of competence

(para. 7) The IOTC Scientific Committee, the IOTC Working Party on Tropical Tunas, and the IOTC Working Party on Ecosystems and Bycatch shall as a matter of priority act on its recommendation in the Report of the 18th Session of the IOTC Scientific Committee and undertake work to examine the benefits of retaining non-targeted species catches, other than those prohibited via IOTC Resolution, and present its recommendations to the 29th Annual Session of the Commission. The work should take into account all species that are usually discarded on all major gears, and should look at fisheries that take place both on the high seas and in coastal countries and the feasibility of both retraining on-board and processing of the associated landings.

Resolution 25/01 On climate changes as it relates to the Indian Ocean Tuna Commission

(para 5) To support and accelerate consideration of climate change issues in the Commission:

- a) All IOTC Working Parties reporting to the IOTC Scientific Committee shall include climate change as a standing agenda item at their regular meetings and provide any relevant information or advice to the IOTC Scientific Committee in line with their current reporting processes.

(para. 10) The IOTC Scientific Committee shall:

- a) At its annual meetings, review and consider any climate change information and advice from its subsidiary bodies, and from any other bodies or sources as relevant;

- b) On an annual basis, provide advice to the Commission based on its review and consideration of the information and advice in accordance with subparagraph a), and suggest any further steps that may be taken to integrate climate change considerations and analyses into its deliberations and decision making processes; and
- c) at its 28th annual meeting in 2025, review and propose amendments to its own Terms of Reference and those of its subsidiary bodies to meet the scientific needs stipulated in this Resolution.

Resolution 25/08 *On the conservation of sharks caught in association with fisheries managed by IOTC*

(para 15) In order for any CPCs to continue to use wire trace north of 20S at least one CPCs will undertake scientific fishing trials to assess the effects of leader materials on the mortality of vulnerable shark species (including oceanic whitetip shark, silky shark, shortfin mako and thresher sharks) and blue sharks. Such trials must be conducted, concluded, presented to the IOTC Scientific Committee by SC30 subject to the possible extension in paragraph 18

(para 16) The trials objective will be to determine if, for the CPCs fleet, the use of wire leaders has a higher catch and mortality for the vulnerable and target shark species (both in total and by species) than does use of nylon monofilament leaders.

(para 17) The trials will be conducted using an appropriate experimental design and analysed using appropriate statistical methods, the criteria and principles of which will be developed and agreed by the IOTC Scientific Committee at the annual Session in 2025.

(para 18) The results of CPCs fishing trials must be presented in a detailed research paper (describing fully the methods and results and conclusions) to the IOTC Scientific Committee at its annual Session in 2027 for review and development of advice from the IOTC Scientific Committee to the Commission on the outcomes of the trial. A CPC may, with reasonable justification, request the Commission for an extension of 1 year to present the results of the fishing trials.

(para 19) The IOTC Scientific Committee will also review available data and information by no later than SC29 pertaining to the spatial and temporal trends in:

- a) The relative distribution of vulnerable shark species and blue shark;
- b) The distribution of total longline fishing effort and by CPCs, by year over the past 10 years;
- c) The distribution and level of the use of wire leaders and monofilament leaders (and other leader types, if applicable) by CPC. For this point, all CPCs shall facilitate the provision of such information (best available) pertaining to their fleet to the IOTC Secretariat by 30 July 2026, to allow a summary of such spatial information to be provided to the SC.

(para 33) The Commission, on advice from the IOTC Scientific Committee, shall develop and consider for adoption at its annual Session in 2026 mechanisms to encourage CPCs to comply with their reporting requirements on sharks, notably on the most vulnerable shark species as identified by the IOTC Scientific Committee.

(para 38) The IOTC Scientific Committee shall, through the IOTC Working Party on Ecosystems and Bycatch, continue its work on identifying and monitoring the status of sharks until such time as comprehensive assessments are possible for all relevant sharks, including those listed in paragraph 3, silky sharks, hammerhead sharks and mako sharks. The IOTC Scientific Committee shall establish terms of reference for a long term-project on sharks in the IOTC area of competence to be considered by the Commission at its annual Session in 2026, with the aim to ensure the collection of data required for performing reliable stock assessments for key shark species, including those listed in paragraph 3, silky sharks, hammerhead sharks and mako sharks. The project will include:

- a) the identification of data gaps for key shark species in IOTC;
- b) the collection of relevant data, including through direct contacts with CPC national administrations, research institutes and stakeholders;
- c) any other activity that could contribute to improving the collection of data required for performing stock assessments of key shark species in IOTC;

d) the development and further improvement of shark identification guides for relevant shark species to provide a better overview on the compliance status of CPCs and thereby assist CPCs to comply with their reporting obligations. The IOTC Executive Secretary shall make these shark identification guides available on the IOTC website and distribute them among CPCs in regular intervals.

(para 39) The IOTC Scientific Committee shall advise the Commission on the population status of relevant sharks, on their vulnerability to overfishing, and on whether precautionary management of these species, through the application of specific measures such as the measure in paragraph 3, is recommended.

(para 41) The IOTC Scientific Committee shall review annually the information reported by CPCs pursuant to this Resolution and the results of the research project pursuant to paragraph 38, on a gear-by-gear basis. On this basis, the IOTC Scientific Committee shall, as appropriate and on an annual basis, provide recommendations to the Commission on ways to strengthen the conservation and management of sharks within IOTC.

(para 43) The IOTC Scientific Committee shall, at its annual Session in 2025, review existing data and information relating to the life history and conservation status of whale sharks, and confirm whether they meet the definition of being a taxon of the greatest biological vulnerability and conservation concern for which there are very few data. Should this be the case, the IOTC Scientific Committee shall advise the Commission on the appropriateness of applying precautionary management measures in IOTC fisheries, including a retention ban. The IOTC Scientific Committee may also identify options for future research and data collection, as well as advise on other mitigation measures for relevant IOTC fisheries.

Resolution 25/09 *On the conservation of shortfin and longfin mako sharks caught in association with IOTC fisheries*

(para 6) By 1 January 2028, CPCs that reported annual average catches (landings and dead discards) of shortfin mako sharks (SMA, MAK and MSK species codes) over 1 tonne between 2020-2023 shall present to the WPEB and SC the statistical methodology used to estimate dead discards and live releases. The WPEB and SC shall review and approve the methods and, if they determine that the methods are not scientifically sound, shall provide relevant feedback to the CPCs in question to improve them.

Resolution 26/03 *On the conservation of mobulid rays caught in association with fisheries managed by IOTC*

(para. 12) Except for those CPCs that have clearly demonstrated that intentional and/or incidental catches of mobulid rays do not occur in their IOTC fisheries, CPCs shall develop, with the assistance from the IOTC Secretariat where required, catch monitoring plans for mobulid ray catches and interactions by their flag fishing vessels carrying out subsistence and artisanal fisheries. CPCs shall report their catch monitoring plans, including their scientific and operational rationale, to the Working Party on Ecosystems and Bycatch and in the national scientific reports to the IOTC Scientific Committee by 2027.

(para. 13) At its 30th Session in 2027, the IOTC Scientific Committee shall review the soundness of the catch monitoring plans submitted by CPCs, as well as the rationale and evidence provided by CPCs that have not submitted such plans and shall provide advice to CPCs and the Commission. CPCs required to develop a catch monitoring plan shall improve their catch monitoring plan in accordance with the advice of the IOTC Scientific Committee and shall implement this updated catch monitoring plan from 2029 onwards.

(para. 16) The IOTC Scientific Committee shall review the status of mobulid rays in the IOTC Area of Competence and provide management advice to the Commission for its consideration at its annual Session in 2027, including the identification of possible hot-spots for conservation and management of mobulid rays within and beyond the EEZs of coastal CPCs.

DISCUSSION

Participants at the WPEB22 are requested to consider the priorities set by the Commission via its Conservation and Management Measures, and the Scientific Committee, and revise its Program of Work to match those priorities.

RECOMMENDATION/S

That the WPEB:

- 1) **NOTE** paper IOTC–2026–WPEB22(AS)–10, which encouraged the WPEB to further develop and refine its Program of Work for 2027–2031 to align with the requests and directives from the Commission and Scientific Committee.
- 2) **RECOMMEND** a revised Program of Work for 2027–2031 to the Scientific Committee for its consideration and potential endorsement.

WORKING PARTY ON ECOSYSTEMS AND BYCATCH PROGRAM OF WORK (2026–2030)

The Program of Work consists of the following, noting that a timeline for implementation would be developed by the SC once it has agreed to the priority projects across all of its Working Parties:

- **Table 1:** Priority topics for obtaining the information necessary to develop stock status indicators for bycatch in the Indian Ocean; and
- **Table 2:** Stock assessment schedule.

Table 1. Priority topics for obtaining the information necessary to develop stock status indicators for bycatch species in the Indian Ocean

Topic in order of priority	Sub-topic and project	Timing				
		2026	2027	2028	2029	2030
Connectivity, movements, habitat use and post release mortality*	Electronic tags (PSATs, SPOT, Splash MiniPAT) to assess the efficiency of management resolutions on non-retention species (BSH in LL, marine turtles and rays in GIL and PS, whale sharks) and to determine connectivity, movement rates, mortality estimates and genetic studies					
1. Fisheries data collection and development of alternative inputs into assessments	1.1 Catch composition reconstruction (initial focus Sri Lanka, Pakistan, India and Indonesia)					
	1.1.1 Historical data mining for the key species and IOTC fleets (e.g., as artisanal gillnet and longline coastal fisheries) including workshops.					
	1.1.2 Historical data mining and development of baseline catch history series for key species, including blue shark and shortfin mako shark, through the collection and integration of information on catch, effort, and spatial distribution of fleets, as well as mining statistics for sharks not reported to species level.					
	1.1.3 CPUE standardisation and review of additional abundance indicators series for each key shark species and fishery in the Indian Ocean					

	1.2 Investigation of sampling options to explore different indices of abundance for sharks such as CKMR. Identify CPCs who may be able to collaborate.					
2. Shark research and management strategy	2.1 Workshop to update and revise shark research plan with a small working group					
	2.2 Prioritising shark research based on previous work and including analysing gaps in knowledge to address the requests from the Commission contained within Resolution 25/08.					
	2.3 Implementation of work suggested by shark research plan					
3. Studies and training focused on gillnet bycatch mitigation	3.1 Focused GN bycatch mitigation workshop – training, monitoring, determine study design 3.2 Studies trialling gillnet mitigation measures such as: LED lights, sub-surface setting ...					

Other Future Research Requirements (not in order of priority)

Topic	Sub-topic and project	2024	2025	2026	2027	2028
1. Review and improve data collection for mobulid rays	1.1 Mobulid ID guide revision and translation. ID guides to be updated with help of CPC scientists					

2. Bycatch mitigation measures	2.1 Gears					
	2.1.1 Undertake a series of gear specific workshops focusing on multi-taxa bycatch issues					
	2.1.2 Develop studies on bycatch mitigation measures for the main gears using in the IOTC area (operational, technological aspects and best practices)					
	2.2 Sharks					
	a) Harmonise and finalise guidelines and protocols for safe handling and release of sharks and rays caught in IOTC fisheries					
	2.3 Sea turtles					
	2.3.1 Res. 12/04 (para. 11) Part I. The IOTC Scientific Committee shall request the IOTC Working Party on Ecosystems and Bycatch to:					
	a) Develop recommendations on appropriate mitigation measures for gillnet, longline and purse seine fisheries in the IOTC area; [mostly completed for LL and PS]					
	b) Develop regional standards covering data collection, data exchange and training					
	2.3.2 Res. 12/04 (para. 17) The IOTC Scientific Committee shall annually review the information reported by CPCs pursuant to this measure and, as necessary, provide recommendations to the Commission on ways to strengthen efforts to reduce marine turtle interactions with IOTC fisheries.					
	2.3.3 Regional workshop to review the effectiveness of marine turtle mitigation measures					
	2.3.4 Harmonise and finalise guidelines and protocols for safe handling and release of sea turtles caught in IOTC fisheries					
	2.3 Seabirds					
	2.3.1 Bycatch assessment for seabirds taking into account the information from the various ongoing initiatives in the IO and adjacent oceans					

	2.3.2 Study on cryptic mortality of seabirds in tuna LL fisheries.					
	2.3.3 Study post release survival rates for seabirds and harmonise and finalise guidelines and protocols for safe handling and release of seabirds caught in IOTC fisheries					
	2.4 Cetaceans					
	2.4.1 Testing mitigation methods for cetacean bycatch in tuna drift gillnet fisheries					
	2.4.2 Harmonise and finalise guidelines and protocols for safe handling and release of cetaceans caught in IOTC fisheries					
	2.4.3. Intersessional meeting to discuss cetacean guidelines, ERA, Data gaps.					
3. CPUE standardisation / Stock Assessment / Other indicators	3.1 Develop standardised CPUE series for each key shark species and fishery in the Indian Ocean:					
	3.1.1 Development of CPUE guidelines for standardisation of CPC data.					
	3.1.2 Blue shark: Priority fleets: TWN,CHN LL, EU,Spain LL, Japan LL; Indonesia LL; EU,Portugal LL					
	3.1.3 Shortfin mako shark: Priority fleets: Longline and Gillnet fleets					
	3.1.4 Oceanic whitetip shark: Priority fleets: Longline fleets; purse seine fleets					

	3.1.5 Silky shark: Priority fleets: Purse seine fleets				
	3.2 Joint CPUE standardization across the main LL fleets for silky shark, using detailed operational data				
	3.3 Stock assessment and other indicators				
4. Ecosystems	4.1 Develop a plan for Ecosystem Approach to Fisheries (EAF) approaches in the IOTC, in conjunction with the Common Oceans Tuna Project.				
	4.1.2 Workshop for CPCs on continuing efforts to the development of an EAF including delineation of candidate eco regions within IOTC.				
	4.1.3 Practical Implementation of EBFM with the development and testing of ecosystem report cards.				
	4.1.4 Evaluation of EBFM plan in IOTC area of competence by the WPEB to review its elements components and make any corrective measures.				
	4.2 Assessing the impacts of climate change and socio- economic factors on IOTC fisheries				
	4.3 Evaluate alternative approaches to ERAs to assess ecological risk				
	4.4 Progress on Climate webpage on IOTC website and liaise with WPDCS for technical implementation				
	Support for the development and refinement of ecoregions in the Indian Ocean:				
	Development of a pilot study (focused on two ecoregions: one coastal, the Somali Current ecoregion and one oceanic, the Indian Ocean Gyre ecoregion)				
Ecoregions development					

Development of Indian Ocean Digital Atlas	Facilitate the discussions with WPDCS to consolidate the Indian Ocean Digital Atlas project with stakeholders				

Table 2. Draft: Assessment schedule for the IOTC Working Party on Ecosystems and Bycatch 2026–2030 (adapted from IOTC–2025–SC28–R).

*Indicator analysis can include data poor stock assessment method and indicators to complement CPUE

Note: the assessment schedule may be changed dependent on the annual review of fishery indicators, or SC and Commission requests.

<i>Working Party on Ecosystems and Bycatch</i>					
Species	2026	2027	2028	2029	2030
-	Data preparatory meeting	-	-	Data preparatory meeting	Data preparatory meeting
Blue shark	-	–	–	–	Full assessment
Oceanic whitetip shark	Indicator analysis*	-	–		Indicator analysis*
Scalloped hammerhead shark	Indicator analysis*	–	–	–	–
Shortfin mako shark	-			Full assessment	
Silky shark	Indicator analysis*	-	Indicator analysis*	-	–
Bigeye thresher shark	-	Indicator analysis*	-	–	–
Pelagic thresher shark	-	Indicator analysis*	-	–	–
Porbeagle shark	-	Indicator analysis*		–	–
Mobulid Rays	-	Interactions/ Indicators	-	Interactions/ Indicators	–
Marine turtles	-	–	Indicators	–	Indicators
Seabirds	Presentation of the draft Seabird workplan. Review branch line weighting protocols	Review of mitigation measures in Res. 23/07	–	Development of draft workplan	

Marine Mammals	-	–	–	Review of mitigation measures Review of handling guidelines	
Ecosystem Approach to Fisheries Management (EAFM) approaches	Pilot ecosystem fisheries overviews for selected ecoregions				
Series of multi-taxa bycatch mitigation workshops	Focus: tbd	Focus: tbd	Focus: tbd	Focus: gillnets	Focus: tbd
Shark research plan update	Shark research plan update workshop				