

IOTC–2026–WPEB22(AS)-05

REVIEW OF CURRENT CONSERVATION AND MANAGEMENT MEASURES RELATING TO ECOSYSTEMS AND BYCATCH

PREPARED BY IOTC SECRETARIAT, AUGUST 2026

PURPOSE

To encourage participants at the Working Party on Ecosystems and Bycatch (WPEB22) to review the existing Conservation and Management Measures (CMM) relating to ecosystems and bycatch and as necessary to 1) provide recommendations to the Scientific Committee on whether modifications may be required; and 2) recommend whether other CMMs may be required.

BACKGROUND

Ecosystems and bycatch in the Indian Ocean are currently subject to a range of CMMs adopted by the Commission. At the 30th Session of the Commission (S30) held in May 2026, three new CMMs relevant to WPEB were adopted:

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

This Resolution will supersede Resolution 19/03. It aims to mitigate the interactions between mobulid rays and all fishing vessels flying the flag of a Contracting Party or Cooperating Non-Contracting Party.

The Resolution prohibits the intentional setting on and targeting of these rays and prohibits all vessels retaining onboard, transshipping, landing, storing, any part or whole carcass of mobulid rays caught in the IOTC Area of Competence.

CPCs shall ensure that vessels carrying out subsistence fisheries (that are allowed to retain these animals) do not tranship, sell or offer for sale any part or whole carcass of mobulid rays.

CPCs shall report the information and data collected on interactions (i.e. number of discards and releases) with mobulid rays by vessels through logbooks and/or through observer programs.

Detailed handling and release guidelines were adopted and a list of required tools to be carried onboard is included.

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.

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.

Studies on at-vessel and post-release mortality are encouraged.

The SC shall review the status of mobulids at its annual session in 2027 including the identification of possible hot-spots for conservation and management within and beyond the EEZs of coastal CPCs.

Resolution 26/06: *Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)*

This Resolution will supersede Resolution 15/02 when it comes into force. It sets out the detailed requirements for reporting statistical data to the IOTC Secretariat for all gears and CPCs operating in IOTC fisheries as well as the deadlines for submitting these data. Data required for submission include catch and effort data, size data and data on fishing activities on FADs for all IOTC species as well as non-target species such as sharks, seabirds, marine turtles and cetaceans. It also requires CPCs to report geospatial catch and effort data for surface and longline fisheries differentiated by (i) areas under national jurisdiction, (ii) high seas, and (iii) areas under the national jurisdiction of another coastal state if their vessels operate in those waters. They are also required to provide a historical data time series within 3 years of the Resolution being adopted. CPCs must provide detailed statistics of the fishing vessels that contributed to the catches reported to the IOTC in the calendar year by 2030.

Resolution 26/08: *On promoting the objectives of IOTC through cooperation with the BBNJ agreement (The agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction)*

This Resolution aims to encourage CPCs to:

- ratify, approve or accede to the BBNJ Agreement (if they have not yet done so),
- participate in BBNJ meeting,
- engage with other CPCs to develop proposals for ABMTs within the IOTC Area

The Resolution also requests the IOTC Secretariat and Executive Secretary to continue to engage with the BBNJ process and Secretariat as appropriate to promote coherence and avoid duplication taking into account existing practices and cooperation agreements under the BBNJ Agreement.

There will now be a standing agenda item at the Commission to discuss issues relating to the BBNJ agreement.

CPCs are encouraged to undertake research on conservation and sustainable use of marine biological diversity and ecosystems in the high seas of the IOTC Area in particular with respect to threatened and endangered species and those vulnerable to fisheries under the competence of the IOTC and present these to the WPEB and SC.

OLDER CMMs

Ecosystems and bycatch in the Indian Ocean are currently subject to a range of other CMMs adopted by the Commission:

SHARKS AND RAYS:

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

This Resolution superseded Resolutions 18/02, 17/05, 13/05, 13/06 and 12/09. The Resolution applies to all vessels operating in the IOTC area of competence but does not apply to vessels conducting research on the efficacy of the management measures.

Retention bans

The Resolution prohibits the retention of oceanic whitetip shark, thresher sharks and whale sharks. It does allow the collection of biological samples from these species by scientific observers if they are dead at haulback.

Other species – full utilisation

For other species, CPCs shall require retained sharks to be fully utilised and prohibit shark finning. Sharks must be landed with fins naturally attached. However, fins may be partially sliced through and folded against the carcass to facilitate storage onboard. Two alternative options are also available to CPCs: binding of the fin to the carcass using rope or wire; or attaching uniquely numbered tags to each carcass and its corresponding fins. CPCs must inform the Secretariat if these alternatives are being applied and ensure enhanced monitoring efforts are implemented.

Bycatch mitigation measures

From 2026, longline vessels may not use branch lines running directly off the longline floats or drop lines (shark lines). For any CPCs to be allowed to continue to use wire trace north of 20°S, at least one CPC must undertake scientific fishing trials to assess the effects of leader materials on the mortality of blue sharks and vulnerable shark species (includes OCS, FAL, SMA and threshers). The objective of such trials would be to determine if the use of wire leaders has a higher catch and mortality for these species than when using nylon monofilament leaders. The results of this study should be presented to the SC in 2027.

No later than 2026, the SC will also review available data pertaining to spatial and temporal trends in the relative distribution of the mentioned species, the distribution of total longline fishing effort, and the distribution and level of use of wire and monofilament leaders. In 2027, the SC will provide advice regarding spatial options for the application of a prohibition of wire trace taking into account the distribution of the vulnerable and target shark species.

If no CPC has presented research on the use of branchlines within the timeline required, then from 2028 CPCs wire trace leaders or branchlines shall be prohibited in the IOTC area of competence North of 20°S.

Releasing sharks

Vessels shall release vulnerable shark species (oceanic whitetip shark, thresher sharks and whale sharks) before bringing them onboard or when brought alongside for safe identification and shall release any unwanted shark species caught incidentally and not used on board for food or subsistence. Sharks should be released as soon as practically possible in accordance with the minimum standards for safe handling and live release procedures set out in Annex III of the Resolution. **The SC shall review these standards by 2025 and provide recommendations to the Commission on any further improvements required.**

Blue shark

The Commission will consider specific CMMs for blue shark in 2026 based on the results of the stock assessment to be carried out in 2025. The CMMs may include total allowable catch and catch limits for each CPC. The SC shall continue the development of a MSE framework for blue shark and present potential HCRs and candidate limit, target and threshold reference points to the Commission.

Whale sharks

Vessels may not intentionally set a purse seine around a whale shark if it is sighted prior to the set commencing. If a whale shark is unintentionally encircled, they must take all reasonable steps to ensure its safe release. The incident should be reported to the flag state.

In 2025, the SC shall 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. If this is the case, the SC shall advise the Commission on the appropriateness of applying precautionary management measures in IOTC fisheries.

Reporting requirements

All interactions with sharks in relation to prohibited species being caught, retained sharks, release of sharks and encircling of whale sharks must be recorded through logbooks and observer reports in accordance with Resolutions 15/01 (data collection) and 25/06 (ROS). CPCs shall report annual data for catches of all sharks in accordance with Resolution 15/02.

The Commission with advice from the SC, shall develop mechanisms to encourage CPCs to comply with reporting requirements on sharks, notably the most vulnerable species identified by the SC.

National Action plans

CPCs should implement the FAO International Plan of Action for the Conservation and Management of Sharks (IPOA Sharks) and include these NPOAs under the IPOA sharks in their annual implementation report.

Scientific work and recommendations

The SC shall continue to monitor the status of sharks until comprehensive assessments are possible for all relevant sharks and advise on their vulnerability to overfishing and whether precautionary management is recommended. **The SC shall establish ToRs for a long-term project on sharks to be considered by the Commission in 2026 with the aim to ensuring the collection of data required for performing reliable stock assessments for key species.** 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.

CPCs with reported catches of sharks shall endeavour to undertake research to:

- a) identify ways to make fishing gears more selective and reduce the mortality of incidentally caught sharks;
- b) improve knowledge on key biological/ecological parameters, life-history, behavioural traits, migration patterns, and post-release survival of key shark species,;
- c) facilitate capacity building of CPCs in shark species identification to improve data reporting at species level;
- d) identify key shark mating, pupping and nursery areas; and
- e) improve handling practices for live sharks to maximise post-release survival.

The SC shall annually review the information reported by CPCs and the results of research projects on a gear by gear basis and provide recommendations to the Commission on way to strengthen the conservation and management of sharks within IOTC.

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

This Resolution requires vessels to release shortfin and longfin mako sharks when brought alongside a vessel. Vessels should implement the minimum standards for safe handling and release procedures in order to improve survivability of these species. The species may only be retained when dead at haulback as verified by EMS or an observer. Any retained sharks may not be transhipped, whole or in part. Catches including dead discards and live releases must be recorded and reported to species level in accordance with Resolution 15/01. By 2028, CPCs reporting annual average catches (landing and dead discards) of shortfin mako over 1 tonne between 2020-2023 shall present to WPEB and SC the statistical methodology used to estimate these data. The WPEB and SC shall review and approve the methods or provide feedback for improvements. CPCs are encouraged to undertake scientific research to provide information on key biological parameters. In 2025, the SC shall assess the requirements under Resolution 15/01 and advise the Commission on the necessity and feasibility to extend reporting of shortfin and longfin mako sharks at species level for all gears. The SC shall review the impact of the measures of this Resolution on shortfin mako mortality in 2029. By 2029, the Commission will develop a mechanism to constrain the total levels of mortality including dead discards and post-release mortality, with the objective for the stock to be in the green zone of the Kobe matrix by 2038.

MARINE TURTLES:

Resolution 12/04: *On the conservation of marine turtles.* This Resolution introduced amendments to Resolution 09/06 On Marine Turtles, by removing the term ‘hard-shelled’ to provide equal protection for all marine turtles in the IOTC area of competence and clarify the data reporting requirements for interactions with marine turtles.

SEABIRDS:

Resolution 23/07: *On reducing the incidental bycatch of seabirds in longline fisheries.* This Resolution supersedes Resolution 12/06. The Resolution applies specifically to longliners and the limit of the area in which longline vessels have to implement mitigation measures is south of 25°S to encompass the area of overlap between the distribution area of endangered species of seabirds and the longline fishing grounds. This Resolution builds on the previous Resolution which listed three mitigation measures (i.e., night setting with minimum deck lighting, bird scaring lines and line weighting) considered to be effective. The revised Resolution 23/07 differs from Resolution 12/06 in that CPCs may either use at least two of the three mitigation measure options previously mentioned or may use hook-shielding devices as a stand-alone measure. The Resolution also requires the SC to continue to review and make recommendations to the Commission on advancements and best practice in seabird bycatch mitigation including developing advice to the Commission on best practice branch line weighting by 2024.

CETACEANS:

Resolution 23/06: *On the conservation of cetaceans.* This Resolution supersedes Resolution 13/04 and applies to all vessels on the IOTC record of fishing vessels so does not apply to artisanal vessels operating exclusively in their respective EEZ. The Resolution aims to mitigate the interactions between cetaceans and purse seine and gillnet fishing gear; and gather additional information from CPCs on the interaction rates with other fishing gears, in particular gillnets and longlines. The Resolution also requests that the IOTC SC develop best practice guidelines for the safe release and handling of encircled cetaceans and submit these to the Commission meeting for endorsement by 2025 at the latest and review information on the status of cetaceans in the IOTC area and provide recommendations or advice to the Commission to identify measures that the Commission could take to mitigate negative effects of interactions with cetaceans by IOTC fisheries. Comparing this Resolution to 13/04, the updated Resolution adds in a clause saying that CPCs shall endeavour to ensure that fishermen are aware of and use proper mitigation, identification, handling and releasing techniques and keep on board all necessary equipment for the safe release of cetaceans before the guidelines are endorsed and another encouraging CPCs with national and state legislation for protecting these species to provide information to the SC.

REGIONAL OBSERVER SCHEME, EMS AND DATA COLLECTION AND REPORTING REQUIREMENTS:

Resolution 25/06 *On a Regional Observer Scheme.* This Resolution supersedes and is based on Resolution 24/04. The main change from the previous Resolution is that the timelines for reporting fisheries observer reports and data collected through the ROS will now be harmonised with those for the main IOTC datasets so observer data collecting during a year should be submitted by 30 June the following year. This resolution puts in place a programme comprising national observer schemes to collect verified catch data and other scientific data related to the fisheries for tuna and tuna-like species in the IOTC area. CPCs are required to cover a minimum of 5% of their operations/sets per year on vessels over 24m in length or vessels of all lengths operating outside of their EEZ. The Resolution provides provisions for the use of Electronic Monitoring Systems (EMS) to complement or substitute for human onboard observers once the EMS standards have been adopted. This revision includes a note saying that CPCs may present a list of implementation plans for alternate data collection to the SC which if endorsed by the SC, may be used to record and report mandatory ROS data requirements for by vessels less than 24m in length fishing exclusively in the CPC's EEZ. The Resolution also includes a requirement for the SC to update the ROS observer manual and observer reporting forms including the minimum data fields and provide advice on a training program.

Resolution 16/04: *On the implementation of a pilot project in view of promoting the regional observer scheme of IOTC.* This resolution creates a pilot project aiming to enhance the implementation of the Resolution 11/04 *on a Regional Observer Scheme* (Now Resolution 22/04) and to raise the level of compliance to the implementation of Resolutions 15/01 and 15/02, respectively *on the recording of catch and effort data by fishing vessels in the IOTC area of competence and on mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating non-Contracting parties (CPCs).*

Resolution 23/08 *On Electronic Monitoring Standards for IOTC fisheries.* This Resolution sets out the minimum standards for electronic monitoring in IOTC fisheries and for implementing a Regional Electronic Monitoring Program (REMP). It sets out the rules for the implementation of national electronic monitoring programs by CPCs including the requirement to meet the EM program standard and EM system and data standards and submit Vessel Monitoring plans to the Secretariat and the SC on an annual basis. The Resolution requires the SC to review the Ros minimum data fields no later than 2024 to identify fields that are difficult for EM and/or human observers to collect; provide advice and recommendations to the Commission on the need and use of those identified fields for scientific purposes and provide advice to the Commission on the potential need to develop a separate EM ROS minimum data fields list. CPCs are encouraged to share relevant information, approaches and experiences with the SC and Compliance Committee to support to the implementation of the REMP

and the work of the SC.

Resolution 15/01: *On the recording of catch and effort data by fishing vessels in the IOTC area of competence.*

This Resolution sets out the detailed data recording requirements for all gears and CPCs operating in IOTC fisheries. The Resolution applies to vessels over 24m LOA and those under 24m LOA operating outside the EEZs of their flag states.

To be superseded - Resolution 15/02: *Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating non-Contracting Parties (CPCs).*

This Resolution sets out the detailed requirements for reporting statistical data to the IOTC Secretariat for all gears and CPCs operating in IOTC fisheries as well as the deadlines for submitting these data. Data required for submission include catch and effort data, size data and data on fishing activities on FADs for all IOTC species as well as non-target species such as sharks, seabirds, marine turtles and cetaceans.

OTHER:

Resolution 19/05: *On a ban on discards of bigeye tuna, skipjack tuna, yellowfin tuna and a recommendation for non-targeted species caught by purse seine vessels in the IOTC area of competence.* The Resolution bans the discard of three tropical tuna species, with the exception of fish unfit for human consumption or if no space available to accommodate all fish. This Resolution supersedes Resolution 17/04.

Resolution 12/12: *To prohibit the use of large-scale driftnets on the high seas in the IOTC area.* This Resolution banned the use of large-scale driftnets (more than 2.5 km long) on the high seas within the IOTC area of competence. Paragraph 6 of this Resolution states that “The IOTC shall periodically assess whether additional measures should be adopted and implemented to ensure that large-scale driftnets are not used on the high seas in the Convention Area. The first such assessment shall take place in 2012.”.

Resolution 18/04: *On bioFAD experimental project.* This Resolution acknowledges and supports the Biodegradable FAD (BIOFAD) project with the objective of reducing the impact and the amount of synthetic marine debris of the use of non-biodegradable FAD in the ecosystem. The Project Consortium will make available to the IOTC Scientific Committee the results of the project at the latest two months in advance of its 2020 meeting. The Scientific Committee will analyse the outcomes of the project and provide scientific advice on possible additional FAD management options for consideration by the Commission in 2021.

Resolution 18/09: *On a scoping study of socio-economic indicators of IOTC fisheries.* This Resolution specifies the terms of reference for a scoping study of socio-economic aspects of IOTC fisheries. Pursuant to Article XII.5 of the Agreement, the Commission shall review the results of the scoping study and determine if a permanent Working Party on the Socio-Economic Aspects of the Fisheries the IOTC Area of the Competence is needed, at its 23rd Session in 2019.

Resolution 19/02: *Procedures on a Fish Aggregating Devices (FADs) Management Plan.* This Resolution sets a limit of 300 buoys to be set by any purse seine vessel at a time and the requirement for CPCs to submit information to the Secretariat on the number of operational buoys followed by vessels by type, 1x1 grid area and month strata. CPCs are also required to submit FAD management plans to the Commission for analysis by the Compliance Committee and these should include initiatives to investigate the minimise the capture of small bigeye and yellowfin tuna and non-target species associated with fishing on FADs as well as guidelines to prevent the loss or abandonment of FADs. The Resolution also states that vessels are required to use non-entangling FAD designs and

natural or biodegradable materials to construct them.

Resolution 25/01 *On climate change as it relates to the Indian Ocean Tuna Commission.* This Resolution supersedes and expands on Resolution 24/01. This Resolution requires that the Commission shall take into account scientific information available from the Scientific Committee and other relevant international processes on the relationship between climate change, tuna fisheries and tuna stocks, bycatch and ecosystems. The Commission will support further research into the relationship between climate change, fisheries for IOTC species, bycatch and the ecosystem. The SC will consider and where possible, advise on the potential impacts of climate change on IOTC species and any related impacts on developing states and SIDs. **The WPEB will include climate change as a standing agenda item.** The SC will consider how climate change and fishing activities may be related and provide advice on the potential implications for these relationships for the conservation and management of IOTC species, bycatch and ecosystems. Capacity building programs in developing coastal states are also to be supported by the Commission and SC. The SC shall review and consider any climate change information and advice from its working parties and provide advice to the Commission and suggest further steps that may be taken to integrate climate change considerations into its decision-making processes.

DISCUSSION

As part of best practice, the WPEB is obliged to review existing CMMs and consider whether their science-based components need to be revised. If this is the case, then the WPEB should provide clear, science-based recommendations for the Scientific Committee's consideration.

RECOMMENDATION

That the WPEB **NOTE** paper IOTC–2026–WPEB22(AS)–05 which aimed to encourage the WPEB to review the existing Conservation and Management Measures (CMMs) relating to the WPEB, and as necessary to 1) provide recommendations to the Scientific Committee on whether modifications may be required; and 2) recommend whether other CMMs may be required.