

IOTC-2025-WPEB21(AS)-05

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

PREPARED BY IOTC SECRETARIAT, AUGUST 2025

PURPOSE

To encourage participants at the Working Party on Ecosystems and Bycatch (WPEB21) 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. At the 29th Session of the Commission (S29) held in April 2025, three new CMMs relevant to WPEB were adopted:

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.

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 25/08](#) *On the conservation of sharks caught in association with fisheries managed by IOTC*

This Resolution supersedes 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.

BACKGROUND

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

SHARKS AND RAYS:

Resolution 18/02: *On management measures for the conservation of blue shark caught in association with IOTC fisheries.* This Resolution requires that CPCs firstly implement data collection programmes that ensure improved reporting of accurate blue shark catch, effort, size and discard data to IOTC in full accordance with the Resolution 15/02. In addition, CPCs are encouraged to undertake scientific research on blue shark that would provide information on key biological/ecological/behavioural characteristics, life-history, migrations, post-release survival and guidelines for safe release and identification of nursery grounds, as well as improving fishing practices. Lastly the Commission shall consider, at its 2021 meeting, the adoption of conservation and management measures, to be decided taking into account the most recent reported catch information or bycatch mitigation.

Resolution 17/05: *On the conservation of sharks caught in association with fisheries managed by IOTC.* This resolution includes minimum reporting requirements for sharks, calls for full utilisation of sharks, encourages the release of live sharks in non-targeted fisheries and includes a ratio of fin-to-body weight for shark fins retained onboard a vessel.

Resolution 13/06: *On a scientific and management framework on the Conservation of sharks species caught in association with IOTC managed fisheries.* This Resolution prohibits, as an interim pilot measure, the retention onboard, transhipment, landing or storing any part or whole carcass of oceanic whitetip sharks (*Carcharhinus longimanus*) by all vessels on the IOTC record of authorized vessels or authorised to fish for tuna or tuna-like species, with the exception of observers who are permitted to collect biological samples (vertebrae, tissues, reproductive tracts, stomachs) from oceanic whitetip sharks that are dead at haulback and artisanal fisheries for the purpose of local consumption, and will conduct a review and an evaluation of the interim measure in 2016.

Resolution 13/05: *On the conservation of whale sharks (*Rhincodon typus*).* This Resolution aims to mitigate the interactions between whale sharks and purse seine fishing gear; gather additional information from CPCs on the interaction rates with other fishing gears, in particular gillnets and longlines; and requests that the IOTC SC develop best practice mitigation and handling guidelines for consideration by the Commission at its 18th Session in 2014, to mitigate the impacts of fishing on whale sharks in the IOTC area of competence.

Resolution 12/09: *On the conservation of thresher sharks (family Alopiidae) caught in association with fisheries in the IOTC area of competence.* This Resolution prohibits the retention onboard, transshipment, landing, storing, selling or offering for sale any part or whole carcass of the three species of Thresher sharks (family Alopiidae) by all vessels on the IOTC record of authorised vessels. Observers are permitted to collect biological samples (vertebrae, tissues, reproductive tracts, stomachs) from thresher sharks that are dead at haulback.

Resolution 19/03: *On the conservation of mobulid rays caught in association with fisheries in the IOTC area of competence.* This Resolution 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 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 apart from subsistence vessels. 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.

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 AND EMS:

Resolution 24/04 *On a Regional Observer Scheme.* This Resolution supersedes Resolution 22/04. This Resolution supersedes and is based on Resolution 11/04. 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.

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 24/01: *On climate change as it relates to the Indian Ocean Tuna Commission.* This Resolution supersedes Resolution 22/01. 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 SC will consider and where possible, advise on the potential impacts of climate change on highly migratory fish stocks and any related impacts on developing states and small island developing states. 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 it's 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–2024–WPEB20(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.

ANNEX I

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

RESOLUTION 25/08

ON THE CONSERVATION OF SHARKS CAUGHT IN ASSOCIATION WITH FISHERIES MANAGED BY IOTC

Keywords: sharks, retention ban, full utilisation, naturally attached fins, thresher sharks, oceanic whitetip sharks, whale sharks, blue sharks, bycatch mitigation

The Indian Ocean Tuna Commission (IOTC),

RECOGNISING Resolution 12/01 *On the implementation of the precautionary approach* calls on IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs) to apply the precautionary approach in accordance with Article 5 of the United Nations Fish Stocks Agreement;

CONCERNED by the continued failure of IOTC CPCs to submit complete, accurate and timely catch records for sharks in accordance with existing IOTC Resolutions;

ACKNOWLEDGING the need to improve the collection of species-specific data on catch, discards and trade as a basis for improving the conservation and management of shark stocks and aware that identifying sharks by species is rarely possible when fins have been removed from the carcass;

RECALLING that the IOTC Working Party on Ecosystems and Bycatch agreed in its 2023 report that the precautionary approach would be one way to move forward to mitigate mortality on shark species because the stock assessment of shark species is hindered by data limitations;

RECALLING that United Nations General Assembly Resolution on Sustainable Fisheries, adopted annually by consensus, since 2007 (A/RES/62/177, 63/112, 64/72, 65/38, 66/68, 67/79, 68/71, 69/109, 70/75, 71/123, 72/72, 73/125, 74/18, 75/89, 76/71 and 77/118) calls upon States to take immediate and concerted action to improve the implementation of and compliance with existing regional fisheries management organisation (RFMO) or arrangement (RFMA) measures that regulate shark fisheries and incidental catch of sharks, in particular those measures which prohibit or restrict fisheries conducted solely for the purpose of harvesting shark fins, and, where necessary, to consider taking other measures, as appropriate, such as requiring that all sharks be landed with fins naturally attached;

FURTHER RECALLING that the FAO International Plan of Action for Sharks calls on States to encourage full use of dead sharks, to facilitate improved species-specific catch and landings data and monitoring of shark catches and the identification and reporting of species-specific biological and trade data;

AWARE that despite regional agreements on the prohibition of shark finning, shark fins continue to be removed on board and the rest of the shark carcass discarded into the sea;

EMPHASISING the recent recommendations of IOTC and WCPFC Scientific Committees that the use of fin-to-carcass weight ratios is not a verifiable means of ensuring the eradication of shark finning and that it has proven ineffective in terms of implementation, enforcement and monitoring;

FURTHER EMPHASISING that the IOTC Scientific Committee recommended in its 2023 report that the Commission consider extending measures to prevent finning of sharks such as fins naturally attached including partially attached and tethered for all fisheries or similar, alternative measures (for example, fins artificially attached), providing they had been assessed and endorsed by the IOTC Scientific Committee and Compliance Committee as being equally or more likely to meet the conservation benefit (of a fins naturally attached measure) and are logistically feasible from a compliance monitoring perspective;

OBSERVING the adoption of NEAFC Recommendation 10:2015 *on Conservation of Sharks Caught in Association with Fisheries Managed by the North-East Atlantic Fisheries Commission*, Article 12 of the NAFO Conservation and Enforcement Measures, and GFCM Recommendation 42/2018/2 *on fisheries*

management measures for the conservation of sharks and rays in the GFCM area of application, which establish the fins attached policy as the exclusive option for ensuring the shark finning ban in the NEAFC, NAFO and GFCM fisheries;

COGNISANT of the economic and cultural importance of sharks in the IOTC area of competence, the biological importance of sharks in the marine ecosystem as key predatory species, and the significant vulnerability of many shark species to overfishing due to their biology and to the significant overlap of their spatial distribution with fishing activities;

NOTING the advice of the IOTC Scientific Committee in 2021 that maintaining current catches of blue sharks is likely to result in decreasing biomass and the stock becoming overfished and subject to overfishing in the near future;

RECALLING that blue sharks account for more than 60% of global shark catches and that the Resolution 18/02 *On management measure for the Conservation of blue sharks caught in association with IOTC fisheries* required the Commission to consider, in 2021 the adoption of Conservation and Management Measures for blue sharks, such as catch limits for each CPC taking into account the most recent reported catch information or bycatch mitigation such as a ban on wire trace/shark line for blue shark as appropriate;

FURTHER RECALLING that Resolution 18/02 *On management measure for the Conservation of blue sharks caught in association with IOTC fisheries* has tasked the Scientific Committee to provide advice, if possible, on options for candidate limit, threshold and target reference points for the conservation and management of this species in the IOTC area of competence;

NOTING that the Commission, at its annual Session in 2024, requested the IOTC Scientific Committee to initiate management strategy evaluation (MSE) simulations for blue shark with the aim of developing a Management Procedure for this species;

FURTHER NOTING the advice of the IOTC Scientific Committee in 2021 that the Commission should take a cautious approach to the conservation of shortfin mako sharks and silky sharks by implementing management actions that reduce fishing mortality;

RECALLING the advice of the IOTC Scientific Committee in 2023 that mitigation measures should be taken to reduce at-vessel and post release mortality of oceanic whitetip shark and silky shark, including consideration of potential gear modifications in longline fleets targeting tuna and swordfish, noting that a recent study (Bigelow et al. 2021) concluded in WCPFC that banning both shark lines and wire leaders has the potential to reduce fishing mortality by 40.5% for oceanic whitetip shark and by 30.8% for silky shark;

FURTHER RECALLING that the Working Party on Ecosystems on Bycatch (WPEB) noted in 2024 on the basis of its review of global research that a prohibition on the use of wire leaders and shark lines by longline and other fisheries operating in the IOTC would likely result in a reduction in both the observed catch and the fishing mortality of shark species, and that the WPEB recommended that additional mitigation measures such as, but not limited to, the non-use of wire leaders and shark lines should be implemented;

MINDFUL of the recommendation of the IOTC Scientific Committee in 2024 to consider the research from the 2024 WPEB report should the Commission wish to consider additional mitigation measures to strengthen the conservation of vulnerable sharks, noting that the WPEB literature review highlighted that a prohibition on the use of wire leaders and shark lines by longline and other fisheries operating in the IOTC would likely result in a reduction in both the observed catch and the fishing mortality of shark species;

DEEPLY CONCERNED that the majority of the species of the order of *Rhinopristiformes* are categorised as ‘threatened’ (meaning either vulnerable, endangered or critically endangered) by the IUCN Red List of Threatened Species, while the fins of these species are highly valued in the global shark fin trade,

therefore requiring protection of the order of *Rhinopristiformes* from overexploitation for the fin trade in the same ways as the orders of *Selachimorpha*;

ADOPTS, in accordance with paragraph 1 of Article IX of the IOTC Agreement, the following:

Definitions

1. For the purpose of this Resolution:
 - a. “CPCs” means Contracting Parties or Cooperating Non-Contracting Parties to the IOTC Agreement.
 - b. “IOTC Species” means all species of fish listed in Annex B of the IOTC Agreement.
 - c. “Sharks” means all species belonging to the 8 orders of *Selachimorpha* (*Carcharhiniformes*, *Lamniformes*, *Orectolobiformes*, *Heterodontiformes*, *Squaliformes*, *Squatiniformes*, *Hexanchiformes*, and *Pristiophoriformes*) and all species of the order of *Rhinopristiformes*.
 - d. “Blue sharks” means the species *Prionace glauca*.
 - e. “Hammerhead sharks” means all species of the family of *Sphyrnidae*.
 - f. “Oceanic whitetip sharks” means the species *Carcharhinus longimanus*.
 - g. “Mako sharks” means the species *Isurus oxyrinchus* and *Isurus paucus*.
 - h. “Silky sharks” means the species *Carcharhinus falciformis*.
 - i. “Thresher sharks” means all species of the family *Alopiidae*.
 - j. “Whale sharks” means the species *Rhincodon typus*.
 - k. “Full utilisation” means the retention by the vessel of all parts of the shark except head, guts and skin, to the point of first landing.
 - l. “Shark finning” means removing and retaining all or some of a shark’s fins and discarding its carcass at sea.

Application

2. This Resolution shall apply to all fishing vessels targeting and/or authorised to fish for IOTC Species in the IOTC area of competence and supply vessels¹ flying the flag of a CPC. This Resolution shall not apply to non-commercial vessels and conducting research on the efficacy of the management measures contained in this Resolution.

Shark Species whose Retention is Prohibited

3. Subject to paragraph 4, CPCs shall ensure that their flag vessels do not retain on board, transship, land and store any part or whole carcass of the following sharks:
 - a. oceanic whitetip sharks;
 - b. thresher sharks; and
 - c. whale sharks.
4. Without prejudice to paragraph 3, scientific observers shall be allowed to collect biological samples (vertebrae, tissues, reproductive tracts, stomachs, skin samples, spiral valves, jaws, whole and skeletonised specimens for taxonomic works and museum collections) from sharks listed in paragraph 3, provided that they are dead at haulback and that samples are part of a research project approved by the IOTC Scientific Committee. Approval shall be granted pending the submission to the IOTC Scientific Committee of a detailed document outlining the purpose of the work, number and type of samples intended to be collected and the spatio-temporal distribution of the sampling work must be included in the proposal for the research

project. The IOTC Scientific Committee shall review the research proposal and decide on whether or not to grant approval. Annual progress of the work and a final report on completion of the research project shall be presented to the IOTC Working Party on Ecosystems and Bycatch and the IOTC Scientific Committee.

Full Utilisation of Other Sharks

5. CPCs shall take the measures necessary to require that all sharks retained on board their vessels are fully utilised. CPCs shall ensure that the practice of shark finning is prohibited.
6. In order to implement the obligation in paragraph 5 for sharks landed fresh, CPCs shall require their vessels to land sharks with fins naturally attached to the carcass.
7. Without prejudice to paragraphs 5 and 6, in order to facilitate on-board storage, shark fins may be partially sliced through and folded against the shark carcass as specified in the diagram in **Annex II**, but shall not be removed from the carcass until the first point of landing.
8. In order to implement the obligation in paragraph 5 for sharks landed frozen in 2026, 2027 and 2028, CPCs shall ensure their fleets land or tranship sharks with fins naturally attached to the carcass or to use one and only one of the alternative measures listed below:
 - a. Each individual shark carcass is bound to the corresponding fins using rope or wire; or
 - b. Identical and uniquely numbered tags are attached to each shark carcass and its corresponding fins in a manner that inspectors can easily identify the matching of the carcass and fins at any time. Both the carcasses and fins shall be stored on board in the same hold.
9. If a CPC decides to authorise its vessels to use the alternatives in paragraph 8, it shall:
 - a. notify the Secretariat by 1 September 2025;
 - b. implement enhanced monitoring efforts on any vessels authorised to implement the alternatives;
 - c. ensure that individual shark carcasses and their corresponding fins can be easily identified by inspectors on board the vessel at any time; and
 - d. ensure that these alternatives shall be applied before sharks are stored in fish holds as soon as possible.
10. The Secretariat shall circulate the information received from CPCs under paragraph 9 (a) to all CPCs immediately after the deadline.
11. Each year in their compliance questionnaire, the CPC shall report the information on the implementation of the alternatives in paragraph 8:
 - a. any enforcement difficulties encountered from observer, electronic monitoring, aerial, boarding, and landing inspection reports;
 - b. how monitoring of authorised vessels has been enhanced;
 - c. how many vessels used the alternative measures in the previous year;
 - d. how compliance is enforced at sea and in port, including how possible incidents of disproportionate fin counts, high grading and species substitution have been addressed;
 - e. an explanation of why the fleet has adopted its fin-handling practice; and
 - f. any other information Compliance Committee might deem necessary.
12. The Compliance Committee shall annually review and discuss the information submitted in accordance with paragraph 11 and, as appropriate, advise the Commission on the effectiveness of the alternatives in paragraph 8 to prevent finning, in particular in comparison

to prohibition to remove fins specified in paragraph 5. The Commission shall decide by no later than the 32nd Session on shark finning and alternative measures, and whether any further modifications are required.

13. If in any year a CPC who used the alternative measures does not provide the information to the Compliance Committee in accordance with paragraph 11, then that CPC will no longer be able to use the alternative measures set out in paragraph 8.

Bycatch Mitigation Measures

14. From 1 January 2026, CPCs shall ensure that their flag long-line vessels do not use branch lines running directly off the longline floats or drop lines, known as shark lines. See **Annex I** for a schematic diagram of a shark line.
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 8.
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.
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.
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.
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.
20. In providing advice to the Commission on the outcomes of the fishing trials and their implications for the effectiveness of a prohibition on wire trace on vulnerable shark species in the IOTC area of competence, the SC30 subject to the possible extension in paragraph 18 will also provide advice based on the information in paragraph 19 above, regarding spatial options for the application of a prohibition on wire trace that take account of the distribution of each vulnerable and target shark species.
21. If no CPC has presented research in compliance with the above conditions to the SC in the timeline provided, then from January 1, 2028, unless subject to possible extension in paragraph 18, all CPC shall ensure that their flagged vessels are prohibited from using or carrying² on board wire trace as leaders or branchlines in the IOTC area of competence North of 20 degrees South.

22. CPCs shall ensure that their flag vessels:
 - a. promptly release, to the extent practicable, sharks listed in paragraph 3 if recognised before bringing them on board the vessel or when brought alongside to ensure safe identification;
 - b. release, in fisheries in which sharks are unwanted species, sharks (especially juveniles and pregnant sharks) alive that are caught incidentally and are not used on board for food and/or subsistence.
23. CPCs shall ensure that their flag recreational and sport fishing vessels:
 - a. release alive all caught sharks listed in paragraph 3; and
 - b. are equipped, if they are carrying out fishing with high probability of catching sharks listed in paragraph 3, with instruments suitable to release the animals alive.
24. With the aim to reduce post-release mortality, CPCs shall ensure that their flag vessels, when a shark is released, release the shark as soon as practically possible, taking into consideration the safety of the crew and observer, in accordance with the Minimum Standards for Safe Handling And Live Release Procedures set out in **Annex III**. The IOTC Scientific Committee shall review these Minimum Standards by 31 December 2025 and provide recommendations to the Commission on further improvements of the Minimum Standards for consideration and adoption at its annual Session in 2026.
25. CPCs shall ensure that fishers are aware of and use available identification guides such as the IOTC Shark and Ray Identification in Indian Ocean Fisheries.³

Specific Requirements for Blue Sharks

26. Based on the review and the results of the stock assessment to be conducted in 2025, updated reported catch information by each CPC and taking into account the IOTC Scientific Committee's advice, the Commission shall consider at its 2026 Session specific conservation and management measures for blue sharks, including a total allowable catch, catch limits for each CPC to be decided taking into account among other things, the most recent reported catch information.
27. The IOTC Scientific Committee shall continue the development of a management strategy evaluation framework for Indian Ocean blue shark, and present to the Commission potential harvest control rules, and associated candidate limit, target and threshold reference points.

Specific Requirements for Whale Sharks

28. CPCs shall ensure that their flag vessels do not intentionally set a purse seine net around a whale shark if it is sighted prior to the commencement of the set.
29. CPCs shall ensure that, if a whale shark is unintentionally encircled in a purse seine net, the master of the vessel takes all reasonable steps to ensure its safe release, while taking into consideration the safety of the crew. These steps shall follow the best practice guidelines for the safe release and handling of encircled whale sharks to be developed by the IOTC Scientific Committee by 31 December 2025 and subsequently submitted to the Commission for consideration and endorsement at its annual Session in 2026.
30. CPCs shall ensure that, if a flag purse seine vessel unintentionally encircles a whale shark in a purse seine net or fishing vessels using other gear types have an interaction with a whale shark in association with their fishing activity, the master of the vessel reports the incident to the relevant authority of the flag State, with the following information:
 - a. the number of individuals;

- b. a short description of the interaction, including details of how and why the interaction occurred;
- c. the location of the interaction;
- d. the steps taken to ensure safe release; and
- e. an assessment of the life status of the animal on release, including whether the whale shark was released alive but subsequently died.

Reporting Requirements

- 31. CPCs shall ensure that all interactions with sharks related to paragraphs 3, 15, 22 and 28 are duly recorded through logbooks and, when an observer is on board, through observer reports in accordance with Resolutions 15/01 *On the recording of catch and effort data by fishing vessels in the IOTC area of competence* and 24/04 [superseded by Resolution 25/06] *On a Regional Observer Scheme*. CPCs shall submit this information to the IOTC Executive Secretary according to the timelines specified in Resolution 15/02 *Mandatory Statistical Reporting Requirements for IOTC Contracting Parties and Cooperating Non-contracting Parties (CPCs)* (or any superseding Resolution). CPCs shall additionally report any instances in which whale sharks have been encircled by the purse seine nets of their flagged vessels in their annual Implementation Report.
- 32. CPCs shall report annual data for catches of all sharks in accordance with IOTC data reporting requirements and procedures in Resolution 15/02 *Mandatory statistical requirements for IOTC Members and Cooperating Non-Contracting Parties (CPC's)* (or any superseding Resolution), including estimates and status of discards (dead or alive) and size frequencies. CPCs shall additionally report all available historical data that has not yet been reported.
- 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.
- 34. The Commission shall consider appropriate assistance to developing CPCs for the identification of sharks and the collection of data on their shark catches and assist in reporting of those.
- 35. CPCs shall include in their national Annual Reports to the IOTC Scientific Committee information on the actions they have taken domestically to monitor catches.

National Action Plans

- 36. CPCs should implement the FAO International Plan of Action for the Conservation and Management of Sharks (IPOA Sharks).⁴
- 37. CPCs should include their National Plans of Action under the IPOA Sharks in their annual Implementation Report.

Scientific Work and Recommendations

- 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.

CPCs are encouraged to contribute financially to the implementation of the project.

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.
40. CPCs with reported catches and landings 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, in particular those listed in paragraph 3;
 - b. improve knowledge on key biological/ecological parameters, life-history, behavioural traits, migration patterns, and post-release survival of key shark species, including those listed in paragraph 3 and silky sharks, hammerhead sharks and mako sharks;
 - 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, including those listed in paragraph 3 and silky sharks, hammerhead sharks and mako sharks; and
 - e. improve handling practices for live sharks to maximise post-release survival.

CPCs shall make the results of any such research available to the IOTC Scientific Committee and the IOTC Working Party on Ecosystems and Bycatch.

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, including:
 - a. prohibition of utilisation of additional vulnerable shark species under paragraph 3 of this Resolution as appropriate;
 - b. measures to improve the conservation of sharks whose utilisation is prohibited under paragraph 3, including mitigation measures to reduce the mortality of sharks, improving selectivity of fishing gears, spatial/temporal closures or minimum conservation sizes;
 - c. measures to improve the conservation and management of sharks whose utilisation is not prohibited,

- d. options for candidate limit, threshold and target reference points for the conservation and management of all sharks caught in association with IOTC fisheries, prioritising sharks caught for commercial purposes;
 - e. total allowable catches for sharks caught in association with IOTC fisheries, prioritising sharks caught for commercial purposes;
 - f. spatial/temporal closures or minimum conservation sizes;
 - g. bycatch mitigation measures, including improvements of fishing gear selectivity and reduction of post release mortality via technical devices such as double conveyor belts for the release of incidentally caught shark in purse seine fisheries to increase the probability of survival for released sharks;
 - h. options to reduce post-release mortality sharks to be included in Resolution 15/01 *On the Recording of Catch and Effort Data by Fishing Vessels in the IOTC Area of Competence* (or any superseding Resolution) as species whose catch must be recorded.
42. In providing its recommendations pursuant to paragraph 26, the IOTC Scientific Committee shall take into account, *inter alia*, the following:
- a. full stock assessments on sharks, stock assessments and, in the absence of more robust scientific information, Ecological Risk Assessments (ERAs) by fishing gears, using the best available scientific data/information;
 - b. trend of fishing effort by fishing gear on each shark species;
 - c. effectiveness of conservation and management measures for those fishing gears posing a high risk of incidental catches or other harmful impacts on sharks;
 - d. priority in sharks with high risk;
 - e. review of the practical implementation of the retention ban in paragraph 3;
 - f. feasibility of the implementation of the retention ban in paragraph 3, including identification of shark species;
 - g. impact and bias of conservation and management measures of sharks on fishing operations and shark data/information collected and reported by CPCs; and
 - h. Resolution 12/01 *On the Implementation of the Precautionary Approach*.
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.

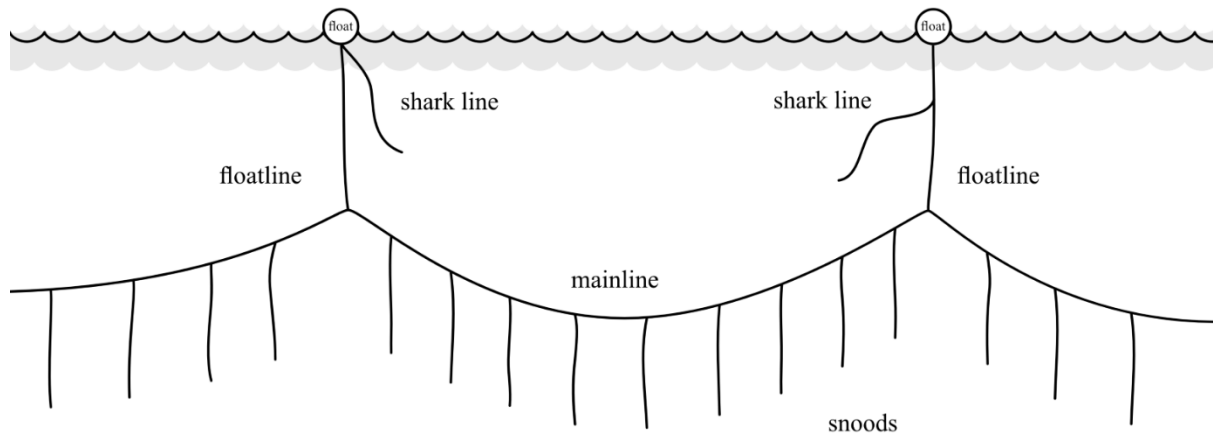
Final Provisions

- 44. This Resolution shall enter into force on 1 January 2026.
- 45. Notwithstanding paragraph 44, paragraph 3(c) of this Resolution shall enter into force on 1 July 2026, and only if the IOTC Scientific Committee explicitly and unambiguously recommends, in accordance with paragraph 43 of this Resolution, a retention ban for whale sharks.
- 46. This Resolution supersedes the following Resolutions:

- a. Resolution 18/02 *On Management Measures for the Conservation of Blue Shark Caught in Association with IOTC Fisheries*;
- b. Resolution 17/05 *Concerning the Conservation of Sharks Caught in Association with Fisheries Managed by the IOTC*;
- c. Resolution 13/05 *On the Conservation of Whale Sharks (Rhincodon typus)*;
- d. Resolution 13/06 *On a Scientific and Management Framework on the Conservation of Shark Species Caught in Association with IOTC Managed Fisheries*; and
- e. Resolution 12/09 *On the Conservation of Thresher Sharks (Family Alopiidae) Caught in Association with Fisheries in the IOTC Area of Competence*.

ANNEX I
SCHEMATIC DIAGRAM OF A SHARK LINE

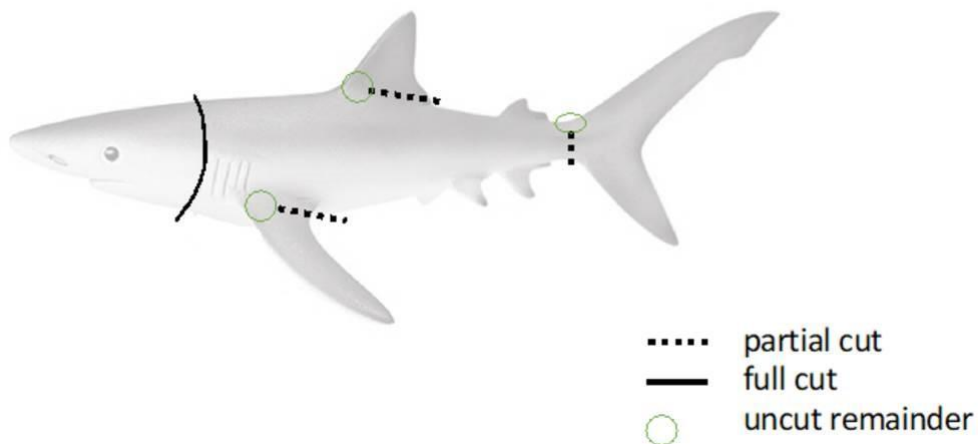
LONGLINE



ANNEX II**FINS NATURALLY ATTACHED**

Naturally attached means that all fins of the shark must be fully and/or partially connected to the body of the shark by connective tissue or cartilage, while at sea. In order to facilitate on-board storage, shark fins may be partially sliced through and folded against the shark carcass, but shall not be removed from the carcass until the first point of landing. Below is a schematic to guide fishers.

1. Only head and guts, as appropriate, may be removed at sea.
2. A partial cut at the level of the base of the dorsal fin and the base of the pectoral fins is permitted.
3. A partial cut at the level of the caudal peduncle of the base, allowing the caudal fin to be folded over the posterior area of the shark's trunk is permitted.
4. A full cut along the abdominal section is permitted in the case of the Blue Shark in the process of gutting, provided the fins remain naturally attached.



ANNEX III

MINIMUM STANDARDS FOR SAFE HANDLING AND LIVE RELEASE PROCEDURES

The primary aim of the following Minimum Standards for Safe Handling and Live Release Procedures is to ensure the highest level of survival of sharks and that, whenever possible, prompt, and effective action will be taken to return the shark to the sea and prioritising that the life and safety of the crew is not compromised and that crew members shall endeavor to avoid hazards in the safe handling and release operations for sharks. The following minimum standards are appropriate for all live sharks when released whether under no-retention policies, or when released voluntarily. These basic guidelines do not replace any stricter safety rules that may have been established by the National Authorities of individual CPCs. To the greatest extent practicable, all sharks being released should remain in the water at all times unless it is necessary to lift sharks for species identification. This includes cutting the line to free the shark while it is still in the water, using bolt cutters or dehooking devices to remove the hook if possible, or cutting the line as close to the hook as possible (and so leaving as little trailing line as possible).

To maximise the efficacy and utility of adopted BHRPs, CPCs should ensure crew are educated and trained by qualified staff on these practices regularly. Illustrated best handling and release practices should be available on the vessels.

Safety first: These minimum standards should be considered in light of safety and practicability for crew. Crew safety should always come first. At a minimum, crew should wear suitable gloves and avoid working around the mouths of sharks.

Be prepared: Tools should be prepared in advance (e.g., canvas or net slings, stretchers for carrying or lifting, large mesh net or grid to cover hatches/hoppers in purse seine fisheries, long handled cutters and dehookers in longline fisheries, etc., listed at the end of this document).

General recommendations for all fisheries

- If operationally safe to do so, stop the vessel or substantially reduce its speed.
- When entangled (in netting, fishing line, etc.), if safe to do so, carefully cut the net/line free from the animal and release to the sea as quickly as possible with no entanglements attached.
- Where feasible, and while keeping the shark in the water, try to measure the length of the shark.
- To prevent bites, place an object, such as a fish or big stick/wooden pole, in the jaw.
- If, for whatever reason, a shark must be brought on the deck then minimise the time it takes to return it to the water to increase survival and reduce risks to the crew.

Longline fisheries specific safe-handling practices

- Bring the shark as close to the vessel as possible without putting too much tension on the branch line to avoid that a released hook or branch line break could shoot hook, weights and other parts toward the vessels and crew at high speed.
- Secure the far side of the longline mainline to the boat to avoid that any remaining gear in the water pulls on the line and the animal.
- If hooked, and the hook is visible in the body or mouth, use a dehooking device or long-handled bolt cutter to remove the hook barb, and then remove the hook.
- If it is not possible to remove the hook or the hook cannot be seen, cut the line of the trace (or snood, leader) as close to the hook as possible (ideally leaving as little line and/or leader material as possible and no weights attached to the animal).

Purse seine fisheries specific safe-handling practices

- If in purse seine net: Scan the net as far ahead as possible to spot the sharks early to react quickly. Avoid lifting them up in the net towards the power block. Reduce vessel speed to slacken the tension of the net and allow the entangled animal to be removed from the net. If necessary, use clippers to cut the net.

If in brail or on deck: Use a purpose-built large-mesh cargo net or canvas sling or similar device. If the vessel layout allows, these sharks could also be released by emptying the brail directly on a hopper and release ramp held up at an angle that connects to an opening on the top deck railing, without need to be lifted or handled by the crew. **DO NOT (all fisheries)**

- To the greatest extent practicable, lift sharks from the water using the branch line, especially if hooked unless it is necessary to lift sharks for species identification.
- Lift sharks using thin wires or cables, or by the tail alone.
- Strike a shark against any surface to remove the animal from the line.
- Attempt to dislodge a hook that is deeply ingested and not visible.
- Try to remove a hook by pulling sharply on the branch line.
- Cut the tail or any other body part.
- Cut or punch holes through the shark.
- Gaff or kick a shark, or insert hands into the gill slits.
- Expose the shark to the sun for extended periods.
- Wrap your fingers, hands or arms in the line when bringing a shark or ray to the boat (may result in serious injury).

Useful tools for safe handling and release

- Gloves (shark skin is rough; ensures safe handling of shark and protects crew's hands from bites)
- Towel or cloth (a towel or cloth soaked in seawater can be placed on the eyes of the shark; used to calm sharks down)
- Dehooking devices (e.g., pig tail dehooker, bolt or plier cutters)
- Shark harness or stretcher (if needed)
- Tail rope (to secure a hooked shark if it needs to be removed from the water)
- Saltwater hose (If anticipated that it may require more than 5 minutes to release a shark, then place a hose into its mouth so seawater is moderately flowing into it. Make sure deck pump has been running several minutes before placing it in a sharks mouth)
- Measuring device (e.g., mark a pole, leader and float, or a measuring tape)
- Data sheet for recording all catch
- Tagging gear (if applicable)