



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

SUBMITTED BY: MALDIVES and PAKISTAN

Explanatory memorandum

The proposed Resolution pursues the following aims:

- 1) To remove redundancies and inconsistencies within the IOTC's existing CMMs for sharks, and to improve legal certainty, the proposed Resolution merges, improves (in line with current best practices and standards among RFMOs), and 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 13/06 *On a Scientific and Management Framework on the Conservation of Shark Species Caught in Association with IOTC Managed Fisheries*
 - d) Resolution 12/09 *On the Conservation of Thresher Sharks (Family Alopiidae) Caught in Association with Fisheries in the IOTC Area of Competence*
 - e) Resolution 13/05 *On the Conservation of Whale Sharks (Rhincodon typus)*
- 2) This proposal also implements Resolution 16/10 To promote the implementation of IOTC Conservation and Management Measures with respect to CMMs for sharks, pursuant to which the Commission "shall consider streamlining existing CMMs by;
 - a) Abolishing outdated CMMs and incorporating key elements that remain to be fully implemented into a new CMM.
 - b) Combining multiple CMMs into a single CMM with multiple sections relating to a single broad subject area. Moreover, noting that the legal scrubbing process has stalled (cf. Para. 10 of the Report of the 18th Session of the IOTC Compliance Committee, IOTC-2021-CoC18-R[E]), the proposed Resolution incorporates the non-substantive amendments proposed in the Legal Scrub of IOTC Resolutions and Recommendations to reflect best practices in legal drafting, taking into account comments made by CPCs as well as the Guidance and Recommendations for Preparing IOTC Resolutions and Recommendations (cf. IOTC-2020-WPICMM03_Rev1). Moreover, the proposed amendments introduce terminology that reflects – with some modifications based on comments from CPCs – language from the proposed IOTC Glossary (cf. IOTC-2020-WPICMM03_Rev1).
- 3) Furthermore, this proposal also considers the advice of the 19th Session of the Working Party on Ecosystem and Bycatch and the 26th Session of the Scientific Committee in relation to shark finning and other areas that are relevant to the conservation of sharks.
- 4) The proposed Resolution is structured as follows:
 - Definitions (now including the order of *Rhinopristiformes* in the definition of sharks as they belong to the *Elasmobranchii*, which are listed in UNCLOS Annex I, and are subject to shark finning practices)
 - Application
 - Sharks whose utilisation is prohibited (currently: oceanic whitetip sharks, thresher sharks and whale sharks)

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- Utilisation of other sharks (including prohibition of shark finning and trade in shark fins)
 - By-catch mitigation (now including a prohibition of wire trace as branch lines or leaders, and branch lines running directly off the longline floats or drop lines, known as shark lines in the long-line fishery; this measure is informed by measures of other RFMOs, including WCPFC CMM 2022-04¹)
 - Species-specific requirements (carry over from the CMMs on oceanic whitetip sharks, thresher sharks and whale sharks)
 - Species specific requirements for blue sharks
 - Reporting of catches
 - Scientific work and recommendations (this section merges and updates the various provisions mandating scientific work and recommendations from the IOTC Scientific Committee)
 - Implementation
 - Final provisions

¹ <https://cmm.wcpfc.int/measure/cmm-2022-04>.

RESOLUTION 24/XX**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 Convention area.

FURTHER NOTING the advice of the IOTC Scientific Committee in 2021 that recent studies suggest that longline mortality at haulback of oceanic whitetip sharks is high (50%) in the Indian Ocean.

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;

DEEPLY CONCERNED that most species of the order of *Rhinopristiformes* are categorised as ‘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) “Sharks” means all species belonging to the 8 orders of *Selachimorpha* (*Carcharhiniformes*, *Lamniformes*, *Orectolobiformes*, *Heterodontiformes*, *Squaliformes*, *Squatiformes*, *Hexanchiformes*, and *Pristiophoriformes*) and all species of the order of *Rhinopristiformes*.
 - c) “Blue sharks” means the species *Prionace glauca*.
 - d) “Hammerhead sharks” means all species of the family of *Sphyrnidae*.
 - e) “Oceanic whitetip sharks” means the species *Carcharhinus longimanus*.
 - f) “Mako sharks” means the species *Isurus oxyrinchus* and *Isurus paucus*.

- g) “Silky sharks” means the species *Carcharhinus falciformis*.
- h) “Thresher sharks” means all species of the family *Alopiidae*.
- i) “Whale sharks” means the species *Rhincodon typus*.
- j) “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.
- k) “Shark finning” means removing and retaining all or some of a shark’s fins and discarding its carcass onboard.

APPLICATION

- 2. This Resolution shall apply to all fishing vessels fishing for tuna or tuna-like species in the IOTC area of competence and supply and support vessels flying the flag of a CPC. This Resolution shall not apply to vessels owned or operated by a CPC on non-commercial service conducting research on the efficacy of the management measures contained in this Resolution.

SHARKS WHOSE UTILISATION IS PROHIBITED

- 3. Subject to paragraph 4, CPCs shall take all measures necessary to 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. 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. To obtain the approval, 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 to be submitted to and approved by the IOTC Scientific Committee. 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.
- 5. CPCs shall take all measures necessary to 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.

UTILISATION OF OTHER SHARKS

- 6. Without prejudice to paragraph 3, CPCs shall take the necessary measures to ensure that their vessels:
 - a) fully utilise their entire catches of sharks and do not conduct shark finning;
 - b) do not remove any shark fins on board and land all sharks with their fins naturally attached to the carcass; and
 - c) do not retain on board, transship, or land any shark fin which is not naturally attached to the shark carcass. In order to facilitate on-board storage, including for the purposes of draining blood to avoid ammonisation, shark fins may be partially sliced through and folded against the shark carcass. However, shark fins shall remain attached to a substantial part of the shark, not just some vertebrae, allowing the shark to be easily identified to the species level, and shall not be removed from the carcass until the first point of landing.

BYCATCH MITIGATION

7. Starting on 1 January 2025, CPCs shall ensure that their flag long-line vessels do not:
 - a) use or carry wire trace as branch lines or leaders;
 - b) 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.
8. CPCs shall take all measures necessary to 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 along side to ensure safe identification.
 - b) release, in fisheries in which sharks are unwanted species, sharks alive, especially juveniles and pregnant sharks that are caught incidentally and are not used on board for food and/or subsistence.
9. With the aim to reduce post-release mortality, when a shark is released, the branch line shall be cut as close to the mouth / hook as possible while ensuring the safety of the crew.
10. CPCs shall take all measures necessary to ensure that fishers are aware of and use identification guides (e.g., IOTC Shark and Ray Identification in Indian Ocean Fisheries²) and guidelines on the safe release of sharks which shall be developed by the IOTC Scientific Committee by 31 December 2025 and subsequently submitted to the Commission for consideration and adoption at its annual meeting in 2026.

SPECIES-SPECIFIC REQUIREMENTS FOR BLUE SHARKS

11. Based on the review and the results of the latest stock assessment, updated reported catch information by each CPC and taking into account the IOTC Scientific Committee's advice, the Commission shall consider at its 2025 meeting the adoption of specific conservation and management measures for blue sharks, including a total allowable catch, catch limits for each CPC to be decided taking into account the most recent reported catch information.

SPECIES-SPECIFIC REQUIREMENTS FOR WHALE SHARKS

12. CPCs shall take all measures necessary to 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.
13. CPCs shall take all measures necessary to 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 2024 and subsequently submitted to the Commission for consideration and adoption at its annual meeting in 2025.
14. CPCs shall take all measures necessary to 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:
 - i) the number of individuals;
 - ii) a short description of the interaction, including details of how and why the interaction occurred;
 - iii) the location of the interaction;
 - iv) the steps taken to ensure safe release; and
 - v) an assessment of the life status of the animal on release, including whether the whale shark was released alive but subsequently died.

REPORTING REQUIREMENTS

² <https://iotc.org/science/species-identification-cards>.

15. CPCs shall ensure that all interactions with sharks related to paragraphs 3, 5, 8 and 14 are duly recorded through logbooks and, when an observer is on board, through observer reports. CPCs shall submit this information to the IOTC Executive Secretary by 30 June of the following year and 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.
16. CPCs shall report data for catches of all sharks no later than 30 June of the following year, 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 all available historical data, estimates and status of discards (dead or alive) and size frequencies.
17. The Commission, on advice from the IOTC Scientific Committee, shall develop and consider for adoption at its annual meeting in 2025 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.
18. 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.
19. 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

20. CPCs should implement the FAO International Plan of Action for the Conservation and Management of Sharks (IPOA Sharks).³
21. CPCs should include their National Plans of Action under the IPOA Sharks in their annual Implementation Report.

SCIENTIFIC WORK AND RECOMMENDATIONS

22. The IOTC Scientific Committee shall request that 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 and 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 meeting in 2025, 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 and 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

³ <https://www.fao.org/ipoa-sharks/tools/en/>.

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.

23. CPCs with reported catches and landings of sharks shall as appropriate, 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 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.

24. 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 22. 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 other sharks 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 sharks caught for commercial purposes,
- e) catch limits for each CPC for 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.

25. In providing its recommendations pursuant to paragraph 24, 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

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- 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*.

FINAL PROVISIONS

- 26. This Resolution shall enter into force on 1 January 2025.
- 27. This Resolution supersedes Resolution 18/02 *On Management Measures for the Conservation of Blue Shark Caught in Association with IOTC Fisheries*, Resolution 17/05 *Concerning the Conservation of Sharks Caught in Association with Fisheries Managed by the IOTC*, Resolution 13/05 *On the Conservation of Whale Sharks (*Rhincodon typus*)*, Resolution 13/06 *On a Scientific and Management Framework on the Conservation of Shark Species Caught in Association with IOTC Managed Fisheries*, and 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

