



OUTCOMES OF THE SIXTEENTH SESSION OF THE COMMISSION

PREPARED BY: IOTC SECRETARIAT, 14 NOVEMBER 2012

PURPOSE

To inform the Scientific Committee (SC) of the decisions and requests made by the Commission at its Sixteenth Session, held from 22–26 April 2012, specifically relating to the work of the SC.

BACKGROUND

At the 16th Session, the Commission **CONSIDERED** and **ADOPTED** 12 proposals as Conservation and Management Measures (CMM) and renewed a further 3 existing Resolutions (15 in total consisting of 13 Resolutions and 2 Recommendations), as detailed below:

Resolutions

On the implementation of the precautionary approach

- 1) The Commission **ADOPTED** Resolution 12/01 *On the Implementation of the Precautionary Approach* ([Appendix A](#)). This Resolution establishes the general principles that would guide the application of the precautionary approach in the context of the IOTC. The basic tenet being: do not take actions that would have an unacceptably high risk of compromising the health of the resource or its environment in the long term. The provisions also include ecosystem considerations in the form of impacts on non-target and associated or dependent species and their environment, or the effects of unanticipated environmental events.

Data confidentiality policy and procedures

- 2) The Commission **ADOPTED** Resolution 12/02 *Data Confidentiality Policy and Procedures* ([Appendix B](#)). This Resolution introduced amendments to Resolution 98/02 Data confidentiality policy and procedures by incorporating certain data collected under the IOTC Regional Observer Program as well as tagging data held at the Secretariat. In adopting this Resolution, Japan conveyed its understanding that “since Japan has only one purse seine vessel operating in the Indian Ocean, the scientific observer data obtained from this purse seiner shall not be made public.” This Resolution supersedes Resolution 98/02.

On catch and effort recordings by fishing vessels in the IOTC area of competence

- 3) The Commission **ADOPTED** Resolution 12/03 *On Catch and Effort Recordings by Fishing Vessels in the IOTC Area of Competence* ([Appendix C](#)). This Resolution consolidates Resolution 08/04 *concerning the recording of catch by longline fishing vessels in the IOTC area*, Resolution 10/03 *concerning the recording of catch by fishing vessels in the IOTC area* and Recommendation 11/06 *recording of catch by fishing vessels in the IOTC area of competence* in order to simplify recording requirements and include a clear list of bycatch species or group of species. These requirements include seabirds and marine turtles as per the IOTC requirements for target species. The Resolution also incorporates minimum recording requirements for gillnets, pole and line, handline and trolling into the existing requirements for longline and purse seine. Specific requirements in the provision of nominal catch data for a number of shark species are also included. Furthermore, this Resolution strengthens the provisions for catch and effort, and size data to be applicable to shark species as well as other bycatch, noting that this data can be derived from logbook and/or observer data. This Resolution supersedes Resolutions 08/04, 10/03 and Recommendation 11/06.

On the conservation of marine turtles

- 4) The Commission **ADOPTED** Resolution 12/04 *On the Conservation of Marine Turtles* ([Appendix D](#)). 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. The Resolution also introduces mandatory recording and reporting by CPCs (including through logbooks and observer programs) and provide to the IOTC Secretariat no later than 30 June of the following year in accordance with Resolution 10/02 (or any subsequent revision), all data on their vessels’ interactions with marine turtles. The data shall include the level of logbook or observer coverage and an estimation of total mortality of marine turtles incidentally caught in their fisheries. This Resolution supersedes Recommendation 05/08 and Resolution 09/06.

On establishing a programme for transshipment by large-scale fishing vessels

- 5) The Commission **ADOPTED** Resolution 12/05 *On establishing a programme for transshipment by large-scale fishing vessels* ([Appendix E](#)). This Resolution introduced amendments to Resolution 11/05 *On Establishing a Programme for Transshipment by Large-scale Fishing Vessels*, by incorporating sharks and additional elements to be completed prior to a receiver vessel accepting an at-sea-transshipment. This Resolution supersedes Resolution 11/05.

On reducing the incidental bycatch of seabirds in longline fisheries

- 6) The Commission **ADOPTED** Resolution 12/06 *On Reducing the Incidental Bycatch of Seabirds in Longline Fisheries* ([Appendix F](#)). This Resolution introduced amendments to Resolution 10/06 *On Reducing the Incidental Bycatch of Seabirds in Longline Fisheries* by amending the specifications for the design and deployment of bird scaring lines in order to achieve reductions in the level of seabird bycatch, taking into account the different requirements depending on the size of the longline fishing vessel. Mitigation measures considered not effective such as blue-dyed squid bait, management of offal discharge and line-setter or line-shooter, are removed as alternative measures. The amendments harmonise the measure with that adopted by ICCAT in 2011 which lists only three mitigation measures (i.e. night setting with minimum deck lighting, bird scaring lines and line weighting) considered to be effective. Japan expressed its expectation that CPCs having longliners operating south of 25 degrees south will fully implement this Resolution in accordance with the agreed timeline. This Resolution will supersede Resolution 10/06 and Recommendation 05/09 on 1 July 2014.

Concerning a record of licensed foreign vessels fishing for IOTC species in the IOTC area of competence and access agreement information

- 7) The Commission **ADOPTED** Resolution 12/07 *Concerning a Record of Licensed Foreign Vessels Fishing for IOTC Species in the IOTC Area of Competence and Access Agreement Information* ([Appendix G](#)). This Resolution requires that information on all vessels operating under private or government-to-government agreements be provided to the Commission. This Resolution supersedes Resolution 10/07.

On a fish aggregating devices (FADs) management plan

- 8) The Commission **ADOPTED** Resolution 12/08 *On a Fish Aggregating Devices (FADs) Management Plan* ([Appendix H](#)). This Resolution requires all CPCs fishing on FADs to submit Management Plans for their use by purse seiners and bait boat vessels.

On the conservation of thresher sharks (family Alopiidae) caught in association with fisheries in the IOTC area of competence

- 9) The Commission **ADOPTED** Resolution 12/09 *On the Conservation of Thresher Sharks (Family Alopiidae) Caught in Association with Fisheries in the IOTC Area of Competence* ([Appendix I](#)). This Resolution introduced amendments to Resolution 10/12 *On the Conservation of Thresher Sharks (Family Alopiidae) Caught in Association with Fisheries in the IOTC Area of Competence*, that allow observers to collect biological samples (vertebrae, tissues, reproductive tracts, stomachs) from thresher sharks that are dead at haulback. This Resolution supersedes Resolution 10/12.

To promote implementation of Conservation and Management Measures already adopted by IOTC

- 10) The Commission **ADOPTED** Resolution 12/10 *To Promote Implementation of Conservation and Management Measures Already Adopted by IOTC* ([Appendix J](#)). This Resolution establishes a special fund for capacity building in order to ensure compliance with conservation and management measures adopted by IOTC. It also builds upon Resolution 11/01 *Development of a Compendium of Resolutions and Recommendations*.

On the implementation of a limitation of fishing capacity of Contracting Parties and Cooperating non-Contracting Parties

- 11) The Commission **ADOPTED** Resolution 12/11 *On the implementation of a limitation of fishing capacity of Contracting Parties and Cooperating non-Contracting Parties* ([Appendix K](#)). The Commission **NOTED** that Resolution 09/02 *On the implementation of a limitation of fishing capacity of Contracting Parties and Cooperating non-Contracting Parties* called on CPCs to implement a limitation on their fishing capacity on tropical tunas, swordfish and albacore stocks, while allowing for the inclusion of vessels under construction during specific reference years, and those proposed by the developing States in their fleet development plans was applicable during the years 2010 and 2011 (para. 11). The Resolution states that “*the Commission shall review its implementation at the 2012 IOTC Session.*” The Commission **AGREED** to extend the applicability of the Resolution for an additional two year period. This Resolution supersedes Resolution 09/02.

Resolution 12/12 To prohibit the use of large-scale driftnets on the high seas in the IOTC area

12) The Commission **ADOPTED** Resolution 12/12 *To prohibit the use of large-scale driftnets on the high seas in the IOTC area* ([Appendix L](#)). The 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.*” The Commission **AGREED** to extend the assessment of this Resolution for an additional two year period. This Resolution supersedes Resolution 09/05.

Resolution 12/13 For the Conservation and Management of Tropical Tunas Stocks in the IOTC Area of Competence

13) The Commission **ADOPTED** Resolution 12/13 *For the Conservation and Management of Tropical Tunas Stocks in the IOTC Area of Competence* ([Appendix M](#)). The Commission **NOTED** that Resolution 10/01 *For the Conservation and Management of Tropical Tunas Stocks in the IOTC Area of Competence* established a closure of a defined area for purse seine vessels from 1st November to 1st December and for longline vessels from 1st February to 1st March in order to reduce the fishing pressure on yellowfin and bigeye tunas. Paragraph 10 of Resolution 12/13 makes the following request of the SC, and hence the WPTT:

10. *The Scientific Committee will provide at its 2011, 2012 and 2013 Plenary sessions:*
- a) *an evaluation of the closure area, specifying in its advice if a modification is necessary, its basic scientific rationale with an assessment of the impact of such a closure on the tropical tuna stocks, notably yellowfin and bigeye tuna.*
 - b) *an evaluation of the closure time periods, specifying in its advice if a modification is necessary, its basic scientific rationale with an assessment of the impact of such a closure on the tropical tuna stocks, notably yellowfin and bigeye tuna.*
 - c) *an evaluation of the impact on yellowfin and bigeye tuna stocks by catching juveniles and spawners taken by all fisheries. The Scientific Committee shall also recommend measures to mitigate the impacts on juvenile and spawners.*

Finally, paragraph 13 of this Resolution states that “*the Commission shall adopt an allocation quota system or any other relevant measure for the yellowfin and bigeye tunas at its plenary session in 2012*”. The Commission **AGREED** to extend the applicability of this Resolution for an additional two year period. This Resolution supersedes Resolution 10/01.

Recommendations***On interim target and limit reference points for the major IOTC species***

14) The Commission **ADOPTED** Recommendation 12/14 *On Interim Target and Limit Reference Points for the Major IOTC Species* ([Appendix N](#)). This Recommendation establishes provisional target reference points that are compatible with the attainment of the Maximum Sustainable Yield (MSY). The limit reference points (that indicate high risk to the conditions of the stocks) are set at a biomass reduction to 40%–50% of the MSY level, or a fishing pressure that exceeds by 30–50% the level that would produce the MSY.

On best available science

15) The Commission **ADOPTED** Recommendation 12/15 *On Best Available Science* ([Appendix O](#)). This Recommendation outlines actions necessary to preserve and promote the independence and excellence of the Scientific Committee and its Working Parties by, inter alia, securing independent and objective input, improving the quality of presentation of the scientific results to the managers, and strengthening peer review mechanisms.

DISCUSSION

The Commission also considered the following proposals as CMMs, but consensus could not be reached and they were not adopted. Additional information on the following proposals can be found on the IOTC website: http://iotc.org/English/meetings/comm/history/doc_meeting_S16.php

On the conservation of whale sharks (Rhincodon typus) caught in association with fisheries managed by the IOTC

1) The Commission **CONSIDERED** a proposal on the conservation of whale sharks (*Rhincodon typus*), but agreement could not be reached and the proposal was deferred until the next meeting of the Commission. The proposal aimed to mitigate the interactions between whale sharks with purse seine fishing gear; gather additional information from CPCs on the interaction rates with other fishing gears, in particular gillnets and

longlines; and requested that the IOTC SC develop best practice mitigation and handling guidelines for consideration by the Commission at its 17th Session in 2013, to ameliorate the impacts of fishing on whale sharks in the IOTC area of competence. Australia emphasized that there was scientific evidence from both the Indian and Pacific Oceans regarding the high level of interaction and subsequent mortality of whale sharks with purse seine fishing operations referenced in the proposal which justified precautionary conservation action for the species. However, Japan indicated that it could not support the proposal in principle as no scientific basis was provided by the SC. All other CPCs who intervened on the proposal expressed their support. Australia and the Maldives expressed their disappointment that the proposal was not adopted given the many and varied benefits to coastal state economics in the Indian Ocean.

On the conservation of cetaceans caught in association with fisheries managed by the IOTC

- 2) The Commission **CONSIDERED** a proposal on the conservation of cetaceans, but agreement could not be reached and the proposal was deferred until the next meeting of the Commission. The proposal aimed to mitigate the interactions between cetaceans and purse seine fishing gear; gather additional information from CPCs on the interaction rates with other fishing gears, in particular gillnets and longlines; and request that the IOTC SC develop best practice mitigation and handling guidelines for consideration by the Commission at its 17th Session in 2013, to ameliorate the impacts of fishing on cetaceans in the IOTC area of competence. As with the proposal on whale sharks, Australia emphasized that the proposal provided scientific evidence from both the Indian and Pacific Oceans regarding the high level of interaction and subsequent mortality of cetaceans with purse seine fishing operations which justified precautionary conservation action for the species. Japan did not support the proposal as no scientific basis was provided by the SC. All CPCs who intervened were in support of adopting the proposal as a Resolution. Australia proposed that the voting procedure be used to reach a decision on the cetacean proposal, but Japan raised a fundamental legal question, i.e., the IOTC Agreement provides no mandate to manage sharks and cetaceans, and therefore believed that adoption of Conservation and Management Measures for these species should be based on a consensus. Australia indicated that the IOTC has on numerous occasions in the past made decisions on bycatch caught in association with tuna fisheries and expressed its deep concern of the direction Japan was taking on this and other bycatch matters.

On the conservation of sharks

- 3) The Commission **CONSIDERED** a proposal on the conservation of sharks, but agreement could not be reached and the proposal was deferred until the next meeting of the Commission. This proposal was to introduce amendments to Resolution 05/05 *On the Conservation of Sharks*, that require sharks to be landed with their fins attached to their respective carcass, to promote full utilisation of shark protein for food, and to facilitate the collection of critical data by species i.e. nominal catch, required to undertake rigorous assessments of the impact of fishing on these populations. The proposal also prohibited the use of wire trace on longline fishing vessels as a proven mitigation measure that will ameliorate the impact of fisheries for tuna and tuna-like species on shark populations throughout the IOTC area of competence. Japan, China and the Republic of Korea indicated that this proposal, which called for fins to be landed attached, was not operationally feasible at this point in time and that insufficient scientific justification for the ban on wire trace was provided to the Commission from the SC.

On the conservation of hammerhead sharks (family Sphyrnidae), oceanic whitetip sharks (Carcharhinus longimanus) and silky sharks (Carcharhinus falciformis) caught in association with fisheries in the IOTC area of competence

- 4) The Commission **CONSIDERED** a proposal on the conservation of hammerhead sharks (Family Sphyrnidae), oceanic whitetip sharks (*Carcharhinus longimanus*) and silky sharks (*Carcharhinus falciformis*) caught in association with fisheries in the IOTC area of competence, but agreement could not be reached and the element for silky shark was withdrawn. The proposal was then split into two proposals, i) on the conservation of oceanic whitetip sharks (*Carcharhinus longimanus*) caught in association with fisheries in the IOTC area of competence and ii) on the conservation of hammerhead sharks (Family Sphyrnidae) caught in association with fisheries in the IOTC area of competence. Japan, China and the Republic of Korea indicated that they could not support the proposal concerning oceanic whitetip and silky sharks on grounds that there were insufficient scientific justifications for the prohibition of retention of these shark species. Agreement could not be reached and the proposals were deferred until the next meeting of the Commission.

On an IOTC tropical tunas - yellowfin, bigeye, skipjack - catch documentation programme

- 5) The Commission **CONSIDERED** a proposal on an IOTC tropical tunas - yellowfin, bigeye, skipjack - catch documentation programme but agreement could not be reached and the proposal was deferred until the next meeting of the Commission.

On penalties to be applied in case of non fulfilment of reporting obligations in the IOTC

- 6) The Commission **CONSIDERED** a proposal on penalties to be applied in case of non fulfilment of reporting obligations in the IOTC but agreement could not be reached and it was deferred until the next meeting of the Commission.

Requests from the Commission

Finally, at the 16th Session of the Commission, Members made several comments on the recommendations made by the Scientific Committee, which participants are asked to **note** (extracts from the S16 report):

- 1) The Commission addressed the list of recommendations made by the SC (Appendix V) [*of the S16 Report*] in its 2011 report that related specifically to the Commission or concerned the work of the Secretariat. The Commission **ENDORSED** the list of recommendations, noting the following: (para. 28 of the S16 report).

National Reports

- 2) Noting that at its 15th Session, the Commission expressed concern regarding the limited submission of National Reports to the SC in 2010, and stressed the importance of all CPCs providing the reports, the Commission **NOTED** that in 2011, 25 reports were provided by CPCs, up from 15 in 2010 and 14 in 2009. In congratulating the 25 CPCs who provided a report in 2011, the Commission also stressed the importance of the submission of National Reports by all CPCs and **REQUESTS** those who did not meet their reporting obligations in this regard, to provide a National Report to the SC in 2012. (para. 29 of the S16 report).

Status of the stocks

- 3) The Commission **NOTED** the latest stock status and management advice for each of the species under the IOTC mandate as well as several shark species or species groups directly impacted by fisheries for tuna and tuna-like species, contained in the stock status table provided at Appendix VI [*of the S16 Report*]. (para. 30 of the S16 report).
- 4) The Commission **NOTED** that although a new albacore stock assessment was undertaken in 2011, there remains considerable uncertainty about the relationship between abundance and the standardized CPUE series, and about the total catches over the past decade. Noting that the WPTmT and SC had limited confidence in the assessment undertaken in 2011, the Commission **REQUESTS** that a new stock assessment be carried out on albacore using different stock assessment methods and revised catch estimates. (para. 31 of the S16 report).
- 5) The Commission **NOTED** the comments from Japan, suggesting that the SC should not be providing advice on topics for which the Commission had not specifically requested advice and from the European Union suggesting that the Scientific Committee should not prepare text of proposals for new Resolutions. However, other Members indicated that the SC should be able to provide advice on the range of issues under its mandate, as stated in Rule X of the IOTC Rules of Procedure for the Scientific Committee. (para. 32 of the S16 report).

Kobe II Strategy Matrix

- 6) The Commission **NOTED** the provision by the SC of the Kobe II strategy matrix for bigeye tuna, skipjack tuna, yellowfin tuna and swordfish (IO and SWIO) and recognized that it is a useful and necessary tool for management. The Commission **REQUESTS** that such matrices shall be provided for all stock assessments by the species Working Parties, and for these to be included in the report of the SC in 2012 and all future reports. (para. 33 of the S16 report).

Ecological Risk Assessment – Sharks

- 7) The Commission reiterated its previous **REQUESTS** that an Ecological Risk Assessment (ERA) approach be applied to the various shark species considered at risk by fishing activities in the Indian Ocean, and for the Working Party on Ecosystems and Bycatch to undertake appropriate analyses under the guidance of relevant experts in 2012. (para. 34 of the S16 report).

On data

- 8) The Commission **NOTED** the paucity of catch statistics for the main species of sharks, by major fisheries (gears), for the period 1950–2010, as provided in the SC report (Appendix VI: Tables a–c [*of the SC14 Report*]). Although some CPCs have reported more detailed data on sharks in recent years, including time-area catches and effort, and length frequency data for the main commercial shark species, the Commission expressed strong **CONCERN** that the information on retained catches and discards of sharks contained in the IOTC database remains very incomplete. (para. 35 of the S16 report).

- 9) The Commission **NOTED** the statement from the SC that despite the mandatory reporting requirements detailed in Resolutions 05/05, 08/04, 09/06, 10/02, 10/03, and 10/06, as well as the provisions of Recommendation 11/06, bycatch data remain largely unreported by CPCs. The SC requested that the Commission address this non-compliance by taking steps to develop mechanisms which would ensure that CPCs fulfil their bycatch reporting obligations. (para. 36 of the S16 report).
- 10) The Commission **NOTED** some minor improvements in the quantity of fisheries statistics available to the SC and its Working Parties in 2011 but reiterated its concerns about the lack of fisheries data from some gears and fleets for target and bycatch species. Specifically, many fisheries statistics are missing or incomplete for some industrial and artisanal fisheries, as identified by the SC in Appendix VIII of the SC14 report: “*Consolidated recommendations to CPCs on improved data collection, monitoring, reporting and research*”. As such, the Commission **REQUESTS** that all CPCs identified in Appendix VIII of the SC14 report, to improve their data collection and reporting to the IOTC, especially taking into account that the Commission has initiated the consultation process on developing criteria for a quota allocation system. (para. 37 of the S16 report).

Regional observer scheme (ROS)

- 11) The Commission **NOTED** the concern expressed by the SC regarding the low level of implementation and reporting to the IOTC Secretariat of both the observer trip reports and the list of accredited observers since the start of the ROS in July 2010 (9 CPCs provided a list of accredited observers and 38 reports were submitted from 6 CPCs). (para. 38 of the S16 report).
- 12) The Commission **AGREED** that such a low level of implementation and reporting is detrimental to the work of the SC, in particular regarding the estimation of incidental catches of non-targeted species, as requested by the Commission. (para. 39 of the S16 report).
- 13) The Commission **URGED** all IOTC CPCs to urgently implement the requirements of Resolution 11/04 *on a Regional Observer Scheme*, which states that: “*The observer shall, within 30 days of completion of each trip, provide a report to the CPCs of the vessel. The CPCs shall send within 150 days at the latest each report, as far as continuous flow of report from observer placed on the longline fleet is ensured, which is recommended to be provided with 1°x1° format to the Executive Secretary, who shall make the report available to the Scientific Committee upon request. In a case where the vessel is fishing in the EEZ of a coastal state, the report shall equally be submitted to that Coastal State.*” (para. 11), **NOTING** that the timely submission of observer trip reports to the Secretariat is necessary for the SC to carry out the tasks assigned to it by the Commission, including the analysis of accurate and high resolution data¹, in particular for bycatch, which would allow the scientists to better assess the impacts of fisheries for tuna and tuna-like species on bycatch species. (para. 40 of the S16 report).
- 14) The Commission **NOTED** that the implementation of the ROS is not a simple task and CPCs should continue to work towards full implementation of the scheme as prescribed in Resolution 11/04. Solving the difficulties experienced in the training and deployment of observers, would benefit from collaborative arrangements among CPCs. (para. 41 of the S16 report).

Evaluation of data collection and reporting systems

- 15) The Commission **NOTED** the actions undertaken by the IOTC Secretariat to address the request from the Commission to report on the ability of coastal countries in the IOTC region to report catch data for their artisanal fisheries in close-to-real time, in particular catch data for yellowfin tuna and bigeye tuna. Two timeframes for the reporting of close-to-real-time catches were defined, depending on the type of fishery. For industrial fisheries, close-to-real-time reporting of catches is considered to occur when catches are reported within 30 days of the day of capture. For artisanal fisheries, close-to-real-time reporting of catches is considered to occur when catches are reported within 60 days of the day of capture. Artisanal fisheries are defined as those undertaken by vessels (or any other types of fishing crafts) with length overall (LOA) less than 24m and operating full time within the EEZ of their flag states. (para. 42 of the S16 report).
- 16) The Commission **NOTED** the deficiencies in data collection and reporting in the majority of the countries assessed noting that the reporting of catches as per the timeframes specified will not be possible in eleven out of the eighteen countries evaluated. Those countries will require a substantial investment of resources (time and money) to streamline their statistical systems if data is to be reported in the proposed timeframes in the future. Overall an estimated 35% of the combined catches of yellowfin tuna and bigeye tuna will not be reported in time unless countries address the issues identified as a matter of priority. In the event of catches

¹ Noting the data confidentiality requirements defined in Resolution 12/02

not being reported, the catches will need to be estimated. The use of such an approach will require the adoption of more conservative measures, to account for the uncertainty in the estimates, and mitigate the risk of exceeding any future catch limits set by the Commission. (para. 43 of the S16 report).

- 17) The Commission **NOTED** that in the case of the purse seine fleets, the catches recorded in logbooks are corrected for species composition after a delay of approximately three months, thus CPCs having purse seine vessels could provide preliminary estimates in a shorter timeframe based on the best information available. However, the catches estimated close-to-real time may slightly differ from the final catches estimated for these fleets. (para. 44 of the S16 report).

Science budget

- 18) The Commission **NOTED** the concerns raised by the SC regarding requests made by the Commission to the SC each year without clearly identifying the task to be undertaken, its priority against other tasks previously or simultaneously assigned to the SC and without assigning a budget to fund the request made. (para. 45 of the S16 report).

The entire Report of the 16th Session of the Commission may be downloaded from the IOTC website in English or French.

English: [http://www.iotc.org/files/proceedings/2012/s/IOTC-2012-S16-R\[E\].pdf](http://www.iotc.org/files/proceedings/2012/s/IOTC-2012-S16-R[E].pdf) [2.3mb]

French: [http://www.iotc.org/files/proceedings/2012/s/IOTC-2012-S16-R\[F\].pdf](http://www.iotc.org/files/proceedings/2012/s/IOTC-2012-S16-R[F].pdf) [2.3mb]

Recommendation/s

That the Scientific Committee:

- 1) **NOTE** the outcomes of the Sixteenth Session of the Commission, including the 15 Conservation and Management Measures (13 Resolutions and 2 Recommendations) adopted during the Session.
- 2) **AGREE** to develop advice in response to each of the requests made to the SC by the Commission at its 16th Session.

APPENDICES

Appendix A: [Resolution 12/01 On the Implementation of the Precautionary Approach](#)

Appendix B: [Resolution 12/02 Data Confidentiality Policy and Procedures](#)

Appendix C: [Resolution 12/03 On Catch and Effort Recordings by Fishing Vessels in the IOTC Area of Competence](#)

Appendix D: [Resolution 12/04 On the Conservation of Marine Turtles](#)

Appendix E: [Resolution 12/05 On establishing a programme for transshipment by large-scale fishing vessels](#)

Appendix F: [Resolution 12/06 On Reducing the Incidental Bycatch of Seabirds in Longline Fisheries](#)

Appendix G: [Resolution 12/07 Concerning a Record of Licensed Foreign Vessels Fishing for IOTC Species in the IOTC Area of Competence and Access Agreement Information](#)

Appendix H: [Resolution 12/08 On a Fish Aggregating Devices \(FADs\) Management Plan](#)

Appendix I: [Resolution 12/09 On the Conservation of Thresher Sharks \(Family Alopiidae\) Caught in Association with Fisheries in the IOTC Area of Competence](#)

Appendix J: [Resolution 12/10 To Promote Implementation of Conservation and Management Measures Already Adopted by IOTC](#)

Appendix K: [Resolution 12/11 On the implementation of a limitation of fishing capacity of Contracting Parties and Cooperating non-Contracting Parties](#)

Appendix L: [Resolution 12/12 To prohibit the use of large-scale driftnets on the high seas in the IOTC area](#)

Appendix M: [Resolution 12/13 For the Conservation and Management of Tropical Tunas Stocks in the IOTC Area of Competence](#)

Appendix N: [Recommendation 12/14 On Interim Target and Limit Reference Points for the Major IOTC Species](#)

Appendix O: [Recommendation 12/15 On Best Available Science](#)

APPENDIX A
RESOLUTION 12/01
ON THE IMPLEMENTATION OF THE PRECAUTIONARY APPROACH

The Indian Ocean Tuna Commission (IOTC),

RECALLING that Article 5, paragraph c, of the Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea of December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA), establishes the application of the precautionary approach as a general principle for sound fisheries management;

FURTHER RECALLING that Article 6, and Annex II, of UNFSA provide guidelines for the implementation of the precautionary approach, including the adoption of provisional reference points when information for establishing reference points is absent or poor;

NOTING that Article 7.5 of the FAO Code of Conduct for Responsible Fisheries also recommends the implementation of the precautionary approach, *inter alia*, on the basis of stock-based target and limit reference points;

NOTING that recommendations 37 and 38 of the Performance Review Panel, adopted by the Commission as Resolution 09/01, indicate that pending the amendment or replacement of the IOTC Agreement to incorporate modern fisheries management principles, the Commission should implement the precautionary approach as set forth in the UNFSA;

MINDFUL that Paragraph 29.6 of the FAO Guidelines for the Eco-labelling of Fish and Fishery Products from Marine Capture Fisheries, revision 1, 2009, and other eco-certification initiatives highlight the implementation of the precautionary approach as an important criterion to assess the sustainability of a fishery;

RECALLING the time–area closure adopted by the Commission towards the conservation of tropical tuna stocks, described in Resolution 10/01;

RECALLING that the IOTC Scientific Committee has initiated a process of management strategy evaluation to focus the provision of scientific advice on the information needs of the Commission;

RECOGNISING the need to ensure the sustainability of fisheries for tunas and tuna-like species for food security, livelihoods, economic development, multispecies interactions and environmental impacts in its decisions;

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

1. To apply the precautionary approach, in accordance with relevant internationally agreed standards, in particular with the guidelines set forth in the UNFSA, and to ensure the sustainable utilization of fisheries resources as set forth in Article V of the IOTC Agreement.
2. In applying the precautionary approach, the Commission shall adopt, after due consideration of the advice supplied by the Scientific Committee,
 - a) stock-specific reference points (including, but not necessarily limited to, target and limit reference points²), relative to fishing mortality and biomass, and
 - b) associated harvest control rules³, that is, management actions to be taken as the reference points for stock status are approached or if they are breached

Reference points and harvest control rules shall be determined so that, according to the best available science, the risk of a negative impact on the sustainability of Indian Ocean resources of tuna and tuna-like species is minimized.

² Target Reference Points corresponds to a state of a fishery and / or a resource which is considered desirable; Limit Reference Points indicates the limit beyond which the state of a fishery and / or a resource is not considered desirable. Source: <http://www.fao.org/fi/glossary> (accessed 25 April 2012).

³ Harvest Control Rule: A rule that describes how harvest is intended to be controlled by management in relation to the state of some indicator of stock status. Source: <http://www.fao.org/fi/glossary> (accessed 25 April 2012).

3. In the determination of appropriate reference points and harvest control rules, consideration must be given to major uncertainties, including the uncertainty about the status of the stocks relative to the reference points, uncertainty about biological, environmental and socio-economic events and the effects of fishing activities on non-target and associated or dependent species.
4. If an unanticipated event, such as a natural phenomenon has a significant adverse impact on the status of a stock or its associated environment, the Commission shall adopt conservation and management measures on an emergency basis to ensure that fishing activity does not exacerbate such adverse impacts.
5. Initially and as an interim measure, the Commission may adopt provisional reference points and harvest control rules, taking into account the advice of the Scientific Committee; such measures would remain current until such time as the Commission chooses to update them.
6. Instruct the Scientific Committee to assess, through the management strategy evaluation process, the performance of reference points, including any interim reference points, and of potential harvest control rules to be applied as the status of the stocks approaches the reference points.
7. After completion of the management strategy evaluation, the Scientific Committee should provide the Commission with recommended reference points for all major stocks, and cast future advice on the status of the stocks relative to the adopted reference points, on the basis of the best available scientific evidence.
8. The Scientific Committee will report on the progress of the management strategy evaluation process at the Commission Session in 2014, with a view to confirming or updating any interim reference points and associated harvest control rules.

APPENDIX B
RESOLUTION 12/02
DATA CONFIDENTIALITY POLICY AND PROCEDURES

The Indian Ocean Tuna Commission (IOTC),

RECOGNIZING the need for confidentiality at the commercial and organisational levels for data submitted to the IOTC.

CONSIDERING the provisions set forth in Resolution 10/02 *mandatory statistical requirements for IOTC Members and Cooperating non-Contracting Parties (CPCs)*,

CONSIDERING the provisions set forth in Resolution 11/04 *on a regional observer scheme*,

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

1. The following policy and procedures on confidentiality of data will apply:

DATA SUBMITTED TO THE SECRETARIAT

2. The policy for releasing catch-and-effort, length-frequency and observer data will be as follows:

Standard stratification

- a) Catch-and-effort and length-frequency data grouped by 5° longitude by 5° latitude by month for longline and 1° longitude by 1° latitude by month for surface fisheries stratified by fishing nation are considered to be in the public domain, provided that the catch of no individual vessel can be identified within a time/area stratum. In cases when an individual vessel can be identified, the data will be aggregated by time, area or flag to preclude such identification, and will then be in the public domain.

Finer level stratification

- b) Catch-and-effort and length-frequency data grouped at a finer level of time-area stratification will only be released with written authorisation from the sources of the data. Each data release will require the specific permission of the IOTC Executive Secretary.
 - c) Observer data grouped by 1° longitude by 1° latitude for surface fisheries and by 5° longitude by 5° latitude for longline, stratified by month and by fishing nation are considered to be in the public domain, provided that the activities /catch of no individual vessel can be identified within a time/area stratum.
 - d) A Working Party will specify the reasons for which the data are required.
 - e) Individuals requesting the data are required to provide a description of the research project, including the objectives, methodology and intentions for publication. Prior to publication, the manuscript should be cleared by the IOTC Executive Secretary. The data are released only for use in the specified research project and the data must be destroyed upon completion of the project. However, with authorisation from the sources of the data, catch-and-effort and length-frequency data may be released for long-term usage for research purposes, and in such cases the data need not be destroyed.
 - f) The identity of individual vessels will be hidden in fine-level data unless the individual requesting this information can justify its necessity.
 - g) Both Working Parties and individuals requesting data shall provide a report of the results of the research project to the IOTC for subsequent forwarding to the sources of the data.
3. The policy for releasing tagging data will be as follows:
 - a) Detailed tagging and recovery data are considered to be in the public domain, with the exception of any vessel names or identifiers and detailed information about the person who recovered the tag (name and address), however, requests for tagging data should be made to the IOTC Executive Secretary through the application form provided at **Annex I**.

PROCEDURES FOR THE SAFEGUARD OF RECORDS

4. Procedures for safeguarding records and databases will be as follows:
 - a) Access to logbook-level information or detailed observer data will be restricted to IOTC staff requiring these records for their official duties. Each staff member having access to these records will be required to sign an attestation recognising the restrictions on the use and disclosure of the information.
 - b) Logbook and observer records will be kept locked, under the specific responsibility of the Data Manager. These sheets will only be released to authorised IOTC personnel for the purpose of data input, editing or verification. Copies of these records will be authorised only for legitimate purposes and will be subjected to the same restrictions on access and storage as the originals.
 - c) Databases will be encrypted to preclude access by unauthorised persons. Full access to the database will be restricted to the Data Manager and to senior IOTC staff requiring access to these data for official purposes, under the authority of the IOTC Executive Secretary. Staff entrusted with data input, editing and verification will be provided with access to those functions and data sets required for their work.

DATA SUBMITTED TO WORKING PARTIES AND THE SCIENTIFIC COMMITTEE

5. Data submitted to Working Parties and the Scientific Committee will be retained by the Secretariat or made available for other analyses only with the permission of the source.
6. The above rules of confidentiality will apply to all members of Working Parties and the Scientific Committee.
7. This Resolution supersedes Resolution 98/02 *Data Confidentiality Policy and Procedures*.

Annex I

TAGGING DATA USERS APPLICATION FORM

To the Executive Secretary of the Indian Ocean Tuna Commission

I wish to submit the following request to receive and analyse data from the Indian Ocean Tuna Tagging Programme. I have read the above Data Users Policy, noting in particular, the matters relating to data confidentiality and providing an appropriate acknowledgement in the case of any publications arising from the use of these data, and agree to all the conditions listed.

Name of the institution/s requesting the data and contact details for the head researcher
Project outline
Specifications of the data required
Names and positions of the staff accessing the data (<i>Note, the Secretariat expects to be informed of any changes to the data users list</i>)
Intentions with respect to publication of the results of the proposed work

Signature and date:

Name:

Position:

Organisation:

Approved / Not Approved

Signature and date:

IOTC Executive Secretary:

APPENDIX C
RESOLUTION 12/03
ON THE RECORDING OF CATCH AND EFFORT BY FISHING VESSELS IN THE IOTC AREA OF
COMPETENCE

The Indian Ocean Tuna Commission (IOTC),

RECALLING the commitment made by members under Article V of the IOTC Agreement to keep under review the conditions and trends of the stocks and to gather, analyse and disseminate scientific information, catch and effort statistics and other data relevant to the conservation and management of the stocks and to fisheries based on the stocks covered by the Agreement;

CONSIDERING the provisions set forth in Resolution 10/02 Mandatory Statistical Requirements for IOTC Members and Co-operating Non-Contracting Parties (CPCs), and in particular paragraph 3, which sets out the catch and effort reporting requirements for surface fisheries, longline and coastal fisheries;

ACKNOWLEDGING that the IOTC Science Committee has repeatedly stressed the importance of the timeliness and accuracy of data submissions for members;

ALSO RECALLING the outcomes of the 9th Session of the IOTC Scientific Committee held in Victoria, Seychelles from 6 to 10 November 2006 where it was agreed that a standardised logbook would be advantageous and agreed on the minimum requirements for all purse seine and bait boat fleets operating in the IOTC area of competence in order to harmonize data gathering and provide a common basis for scientific analysis for all IOTC Contracting Parties and Cooperating non-Contracting Parties (CPCs);

FURTHER RECALLING the recommendations adopted by the KOBE II Workshop on Bycatch, held in Brisbane, Australia, 23–25 June 2010; in particular that RFMOs should consider adopting standards for bycatch data collection which, at a minimum, allows the data to contribute to the assessment of bycatch species population status and evaluation of the effectiveness of bycatch measures, and that the data should allow the RFMOs to assess the level of interaction of the fisheries with bycatch species;

ALSO CONSIDERING the deliberations of the 12th Session of the IOTC Scientific Committee held in Victoria, Seychelles from 30 November to 4 December 2009;

FURTHER CONSIDERING the deliberations of the 13th Session of the IOTC Scientific Committee held in Victoria, Seychelles from 6 to 10 December 2010, that recommended three options, one of which is mandatory reporting of a revised list of shark species in logbooks to improve the data collection and statistics on sharks in the IOTC Area of competence;

FURTHER CONSIDERING the deliberations of the 14th Session of the IOTC Scientific Committee held in Mahé, Seychelles from 12 to 17 December 2011, that proposed a list of shark species for all gears and recommended minimum recording requirements for handline and trolling gears in the IOTC Area of competence;

FURTHER CONSIDERING the works of the small task force created by the IOTC Scientific Committee during its 10th Session held in Seychelles in November 2007, to harmonise the various forms currently used by the fleets and the IOTC Scientific Committee agreement on the minimum standard requirements for all purse seine, longline and gillnet fleets as well as the produced logbook template;

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

1. Each flag CPC shall ensure that all purse seine, longline, gillnet, pole and line, handline and trolling fishing vessels flying its flag and authorized to fish species managed by IOTC be subject to a data recording system.
2. The measure shall apply to all purse seine, longline, gillnet, pole and line, handline and trolling fishing vessels over 24 metres length overall and those under 24 metres if they fish outside the EEZs of their flag States within the IOTC area of competence. The data recording systems for developing CPCs vessels less than 24 metres operating within the EEZ of coastal States are subject to Paragraph 9. The vessels of less than 24 metres operating within the EEZ of developed CPCs shall apply this measure.

3. All vessels shall keep a bound paper or electronic logbook to record data that includes, as a minimum requirement, the information and data in the logbook set forth in Annex I, II and III.
4. Annex I includes information on vessel, trip and gear configuration for purse seine, longline, gillnet and pole and line, and shall only be completed once for each trip, unless the gear configuration changes during the trip.
5. Annex II contains information for purse seine, longline, gillnet and pole and line operations and catch, which shall be completed for each set/shot/operation of the fishing gear.
6. Annex III contains specifications for handline and trolling gears.
7. The logbook shall be completed by the Master of the fishing vessel to the flag State administration, as well as to the coastal State administration where the vessel has fished in that coastal State's EEZ. Only the part of the logbook corresponding to the activity deployed in the coastal State EEZ shall be provided to the coastal State administration where the vessel has fished in that coastal State's EEZ.
8. The flag State and the States which receive this information shall provide all the data for any given year to the IOTC Secretariat by June 30th of the following year on an aggregated basis. The confidentiality rules set out in Resolution 12/02 *Data Confidentiality Policy and Procedures* for fine-scale data shall apply.
9. Noting the difficulty in implementing a data recording system on fishing vessels from developing CPCs, the data recording systems for vessels less than 24 metres of developing CPCs operating inside the EEZ shall be implemented progressively by 1 July 2014.
10. The Commission shall consider development of special program to facilitate implementation of this Resolution by developing CPCs. Furthermore, developed and developing CPCs are encouraged to work together to identify opportunities for capacity building to assist the long-term implementation of this Resolution.
11. This Resolution supersedes Resolutions 08/04, 10/03 and Recommendation 11/06.

ANNEX I

Record once per trip (unless gear configuration changes)

1.1 REPORT INFORMATION

1. Date of the submission of logbook
2. Name of reporting person

1.2 VESSEL INFORMATION

1. Vessel name and/or registration number
2. IMO number, where available
3. IOTC number
4. Call sign: if call sign is not available, other unique identifying code such as fishing licence number should be used
5. Vessel size: gross tonnage and overall length (meters)

1.3 CRUISE INFORMATION

For multiday fishing operations record the:

1. Departure date (at your location) and port
2. Arrival date (at your location) and port

1.4 OTHER REQUIRED INFORMATION

Longline (Gear Configuration):

1. Average branch line length (meters): straight length in meters between snap and hook (**Figure 1**)
2. Average float line length (meters): straight length in meters from the float to the snap
3. Average length between branch (meters): straight length of main line in meters between successive branch lines

4. Main line material classified into four categories:
 - a) Thick rope (Cremona rope)
 - b) Thin rope (Polyethylene or other materials)
 - c) Nylon braided
 - d) Nylon monofilament
5. Branch line material classified into two categories:
 - a) Nylon
 - b) Other (such as wire)

Purse Seine:**(Gear configuration):**

1. Length of the purse seine net
2. Height of the purse seine net
3. Total number of FADs deployed per trip: refer to the Resolution 12/08 *On a Fish Aggregating Devices (FADs) Management Plan*

(Search information):

1. Days searched
2. Spotter plane used (Yes/No)
3. Supply vessel used (Yes/No), if yes what is the name and registration number of the supply vessel

Gillnet (Gear Configuration):

1. Overall length of net (metres): record the total overall length of the net onboard
2. Mesh size of net (millimetres): record the size of the mesh size used during the trip
3. Depth of assembled net (meters): height on assembled net in meters
4. Netting material: e.g. nylon braid, nylon monofilament, etc

Pole and line (Gear Configuration):

1. Number of fishermen

ANNEX II
Record once per set/shot/operation

Note: for all gears in this annex use the follow format for date and time

For date: when recording date of the set/shot/operation: record the YYYY/MM/DD

For time: record 24hr time as either the local time, GMT or national time and clearly specify which time has been used.

2.1 OPERATION

For longline:

1. Date of set
2. Position in latitude and longitude: either position at noon or position of start of gear or area code of operation (e.g. Seychelles EEZ, High seas, etc) may be optionally used
3. Time of starting setting the gear
4. Number of hooks between floats: if there are different hooks counts between floats in a single set then record the most representative (average) number
5. Total number of hooks used in the set
6. Number of light–sticks used in the set
7. Type of bait used in the set: e.g. fish, squid, etc
8. Optionally, sea surface temperature at noon with one decimal point (XX.X°C)

For purse seine:

1. Date of set
2. Type of event: **fishing set** or **deployment of a new FAD**
3. Position in latitude and longitude and time of event, or if no event during the day, at noon
4. If fishing set: specify if the set was successful, nil, well; type of school (free swimming school or FAD associated. If FAD associated, specify the type (e.g. log or other natural object, drifting FAD, anchored FAD, etc.)
5. Optionally, sea surface temperature at noon with one decimal point (XX.X°C)

For gillnet:

1. Date of set: record the date for each set of day at sea (for days without sets)
2. Total length of net (meters): length floatline used for each set in meters
3. Start fishing time: record the time when starting each set
4. Start and end position in latitude and longitude: record start and end latitude and longitude that represent the area that your gear is set between or, if no set, record the latitude and longitude at noon for days without sets
5. Depth at which net is set (meters): approximate depth at which the gillnet is set

For Pole and Line:

1. Date of operation: record the day
2. Position in latitude and longitude at noon
3. Number of fishing poles used during that day
4. Start fishing time (record the time immediately after bait fishing is complete and the vessel heads to the ocean for fishing. For multiple days, the time at which search starts should be recorded) and end fishing time (record the time immediately after fishing is complete from the last school). On multiple days this is the time fishing stopped from the last school

5. Type of school: FAD associated and/or free school

2.2 CATCH

1. Catch weight (kg) or number by species per set/shot/fishing event for each of the species and form of processing in section 2.3:
 - a) For longline by number and weight
 - b) For purse seine by weight
 - c) For gillnet by weight
 - d) For pole and line by weight or number

2.3 SPECIES

For Longline:

Primary Species	FAO code	Other Species	FAO code
Southern bluefin tuna (<i>Thunnus maccoyii</i>)	SBF	Shortbill spearfish (<i>Tetrapturus angustirostris</i>)	SSP
Albacore (<i>Thunnus alalunga</i>)	ALB	Blue shark (<i>Prionace glauca</i>)	BSH
Bigeye tuna (<i>Thunnus obesus</i>)	BET	Mako sharks (<i>Isurus</i> spp.)	MAK
Yellowfin tuna (<i>Thunnus albacares</i>)	YFT	Porbeagle shark (<i>Lamna nasus</i>)	POR
Skipjack tuna (<i>Katsuwonus pelamis</i>)	SKJ	Hammerhead sharks (<i>Sphyrna</i> spp.)	SPN
Swordfish (<i>Xiphius gladius</i>)	SWO	Other bony fishes	
Striped marlin (<i>Tetrapturus audax</i>)	MLS	Other sharks	SKH
Blue marlin (<i>Makaira nigricans</i>)	BUM	Seabirds (in number) ¹	
Black marlin (<i>Makaira indica</i>)	BLM	Marine Mammals (in number)	
Indo–Pacific sailfish (<i>Istiophorus platypterus</i>)	SFA	Optional species to be recorded	
		Thresher sharks (<i>Alopias</i> spp.)	THR
		Oceanic whitetip shark (<i>Carcharhinus longimanus</i>)	OCS
		Tiger shark (<i>Galeocerdo cuvier</i>)	TIG
		Crocodile shark (<i>Pseudocarcharias kamoharai</i>)	PSK
		Great white shark (<i>Carcharodon carcharias</i>)	WSH
		Mantas and devil rays (<i>Mobulidae</i>)	MAN
		Pelagic stingray (<i>Pteroplatytrygon violacea</i>)	PSL
		Other rays	

For Purse Seine:

Primary Species	FAO code	Other species	FAO code
Albacore (<i>Thunnus alalunga</i>)	ALB	Marine turtles (in number)	
Bigeye tuna (<i>Thunnus obesus</i>)	BET	Marine mammals (in number)	
Yellowfin tuna (<i>Thunnus albacares</i>)	YFT	Whale sharks (<i>Rhincodon typus</i>) (in number)	RHN

¹ When a CPC is fully implementing the observer program the provision of seabird data is optional

Skipjack tuna (<i>Katsuwonus pelamis</i>)	SKJ	Optional species to be recorded	FAO code
Other IOTC species		Oceanic whitetip shark (<i>Carcharhinus longimanus</i>)	OCS
		Silky sharks (<i>Carcharhinus falciformis</i>)	FAL
		Thresher sharks (<i>Alopias</i> spp.)	THR
		Mantas and devil rays (<i>Mobulidae</i>)	MAN
		Other sharks	SKH
		Other rays	
		Other bony fish	

For Gillnet:

Primary Species	FAO code	Other Species	FAO code
Albacore (<i>Thunnus alalunga</i>)	ALB	Shortbill spearfish (<i>Tetrapturus angustirostris</i>)	SSP
Bigeye tuna (<i>Thunnus obesus</i>)	BET	Blue shark (<i>Prionace glauca</i>)	BSH
Yellowfin tuna (<i>Thunnus albacares</i>)	YFT	Mako sharks (<i>Isurus</i> spp.)	MAK
Skipjack tuna (<i>Katsuwonus pelamis</i>)	SKJ	Porbeagle shark (<i>Lamna nasus</i>)	POR
Longtail tuna (<i>Thunnus tonggol</i>)	LOT	Hammerhead sharks (<i>Sphyrna</i> spp.)	SPN
Frigate tuna (<i>Auxis thazard</i>)	FRI	Other sharks	
Bullet tuna (<i>Auxis rochei</i>)	BLT	Other bony fish	
Kawakawa (<i>Euthynnus affinis</i>)	KAW	Marine turtles (in number)	
Narrow barred Spanish mackerel (<i>Scomberomorus commerson</i>)	COM	Marine mammals (in number)	
Indo–Pacific king mackerel (<i>Scomberomorus guttatus</i>)	GUT	Whale sharks (<i>Rhincodon typus</i>) (in number)	RHN
Swordfish (<i>Xiphias gladius</i>)	SWO	Seabirds (in number) ²	
Indo–Pacific sailfish (<i>Istiophorus platypterus</i>)	SFA	Optional species to be recorded	
Marlins (<i>Tetrapturus</i> spp, <i>Makaira</i> spp.)	BIL	Thresher sharks (<i>Alopias</i> spp.)	THR
Southern bluefin tuna (<i>Thunnus maccoyii</i>)	SBF	Oceanic whitetip shark (<i>Carcharhinus longimanus</i>)	OCS
		Tiger shark (<i>Galeocerdo cuvier</i>)	TIG
		Crocodile shark (<i>Pseudocarcharias kamoharai</i>)	PSK
		Mantas and devil rays (<i>Mobulidae</i>)	MAN
		Pelagic stingray (<i>Pteroplatytrygon violacea</i>)	PSL
		Other rays	

For Pole and Line:

Primary Species	FAO code	Other Species	FAO code
------------------------	-----------------	----------------------	-----------------

² When a CPC is fully implementing the observer program the provision of seabird data is optional

Albacore (<i>Thunnus alalunga</i>)	ALB	Other bony fish	
Bigeye tuna (<i>Thunnus obesus</i>)	BET	Sharks	
Yellowfin tuna (<i>Thunnus albacares</i>)	YFT	Rays	
Skipjack tuna (<i>Katsuwonus pelamis</i>)	SKJ	Marine turtles (in number)	
Frigate and bullet tuna (<i>Auxis</i> spp.)	FRZ		
Kawakawa (<i>Euthynnus affinis</i>)	KAW		
Longtail tuna (<i>Thunnus tonggol</i>)	LOT		
Narrow barred Spanish mackerel (<i>Scomberomorus commerson</i>)	COM		
Other IOTC species			

2.4 REMARKS

1. Discard of tuna, tuna-like fish and sharks to be recorded by species in weight (kg) or number for all gears should be recorded in the remarks³
2. Any interactions with whale sharks (*Rhincodon typus*), marine mammals, and seabirds should be recorded in the remarks
3. Other information is also written in the remarks

Note: The species included in the logbooks are regarded as minimum requirement. Optionally other frequently caught shark and/or fish species should be added as required across different areas and fisheries.

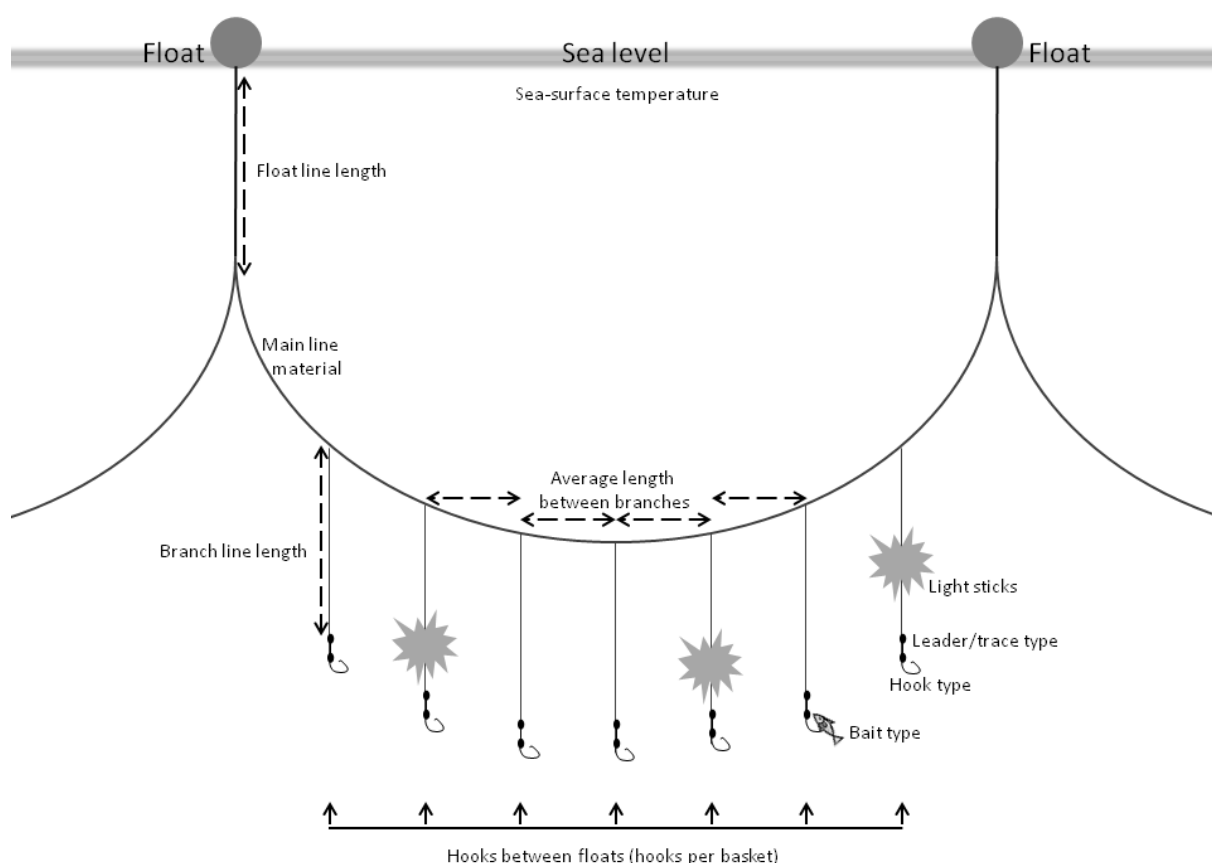


Figure 1. Longline (Gear Configuration): Average branch line length (meters): straight length in meters between snap and hook.

³ Recall the Recommendation 10/13 *On the implementation of a ban on discards of skipjack tuna, yellowfin tuna, bigeye tuna and non-target species caught by purse seiners*

ANNEX III
Specifications for handline and trolling

Note: for all gears in this annex use the follow format for date and time

For date: when recording date of the set/shot/operation: record the YYYY/MM/DD

For time: record 24hr time as either the local time, GMT or national time and clearly specify which time has been used.

I - HANDLINE

All logbook information shall be recorded by day; where more than one fishing event is recorded for the same day, it is advisable to record each fishing event separately

Record once in one cruise, or month where daily operation

1.1 REPORT INFORMATION

1. Fishing day (or Date of submission of the logbook, where multiple fishing days)
2. Name of reporting person

1.2 VESSEL INFORMATION

1. Vessel name and registration number and IMO number, where available
2. IOTC number, where available
3. Fishing License number
4. Vessel size: Gross tonnage and/or length overall (in metres)

1.3 CRUISE INFORMATION

1. Departure date and port
2. Arrival date and port

2.1 OPERATION

1. Date of fishing
Record the date of fishing. Each fishing day should be recorded separately
2. Number of fishermen
Record the number of fishermen on the boat by fishing day
3. Number of Fishing Gear
Record the number of fishing lines used during the fishing day. If the exact number is not available a range may be used i) 5 or less lines, ii) 6–10 lines; iii) 11 or more lines
4. Number and type of school (Anchored or drifting FAD, marine mammal, free, other) fished
Record the number and type of school fished (i.e. anchored FAD, drifting FAD, marine mammal associated or free) fished during the day
5. Position of the catch
Position in latitude and longitude: either position at noon or position of start of gear or area code of operation (e.g. Seychelles EEZ, High seas, etc) may be optionally used. Record the latitude and longitude at noon for non-fishing days, where not in port

Where information is recorded by day, record the 1° x 1° area(s) where fishing took place
6. Bait

Record the type of bait used (e.g. fish, squid), where applicable

2.2 CATCH

Catch in number and/or weight (kg) by species

1. Catch number and/or Weight

For each species shown in section 2.3 caught and retained, record the number and estimated live weight (kg), per fishing day

2. Discard number and/or Weight

For each species shown in section 2.3 caught and not retained record the number and estimated live weight (kg) discarded, per fishing day

2.3 SPECIES

Primary Species	FAO code
Yellowfin tuna (<i>Thunnus albacares</i>)	YFT
Bigeye tuna (<i>Thunnus obesus</i>)	BET
Skipjack tuna (<i>Katsuwonus pelamis</i>)	SKJ
Indo-Pacific sailfish (<i>Istiophorus platypterus</i>)	SFA
Black marlin (<i>Makaira indica</i>)	BLM
Other billfish	
Longtail tuna (<i>Thunnus tonggol</i>)	LOT
Kawakawa (<i>Euthynnus affinis</i>)	KAW
Frigate tuna/Bullet tuna (<i>Auxis</i> spp.)	FRZ
Narrow barred Spanish mackerel (<i>Scomberomorus commerson</i>)	COM
Indo-Pacific king mackerel (<i>Scomberomorus guttatus</i>)	GUT
Sharks	
Other fishes	
Rays	
Marine turtles (by number)	

2.4 REMARKS

1. Other relevant information is also written in the remarks

Note: These species included in the logbook are regarded as minimum requirement. Optionally other species should be added as species may differ depending on the area fished and type of fishery

II - TROLLING VESSELS

All logbook information shall be recorded by day; where more than one fishing event is recorded for the same day, it is advisable to record each fishing event separately

Record once in one cruise

1.1 REPORT INFORMATION

1. Fishing day (or Date of submission of the logbook, where multiple fishing days)
2. Name of reporting person

1.2 VESSEL INFORMATION

1. Vessel name and registration number and IMO number, where available
2. IOTC number, where available
3. Fishing License number
4. Vessel size: Gross tonnage and/or length overall (in metres)

1.3 CRUISE INFORMATION

1. Departure date and port
2. Arrival date and port

2.1 OPERATION

1. Date of fishing

Record the date of fishing. Each fishing day should be recorded separately

2. Number of fishermen

Record the number of fishermen on the vessel by fishing day

3. Number of Fishing Gear

Record the number of lines used during the fishing day. If the exact number is not available a range may be used i) 3 or less lines, ii) more than 3 lines

4. Number and type of school (Anchored or drifting FAD, marine mammal, free, other) fished

Record the number and type of school fished (i.e. anchored FAD, drifting FAD, marine mammal associated or free) fished during the day

5. Position of the catch

Position in latitude and longitude: either position at noon or position of start of gear or area code of operation (e.g. Seychelles EEZ, High seas, etc) may be optionally used. Record the latitude and longitude at noon for non-fishing days, where not in port

Where information is recorded by day, record the 1° x 1° area(s) where fishing took place

6. Bait

Record the type of bait or indicate if lures are used

2.2 CATCH

Catch in number and/or weight (kg) by species

1. Number and/or Weight of fish retained

For each species shown in section 2–3 caught and retained, record the number or estimated live weight (kg), per fishing day

2. Discard number and/or Weight

For each species shown in section 2-3 caught and not retained record the number and estimated live weight (kg) discarded, per fishing day

2.3 SPECIES

Primary Species	FAO code
Yellowfin tuna (<i>Thunnus albacares</i>)	YFT
Bigeye tuna (<i>Thunnus obesus</i>)	BET
Skipjack tuna (<i>Katsuwonus pelamis</i>)	SKJ

Albacore (<i>Thunnus alalunga</i>)	ALB
Swordfish (<i>Xiphias gladius</i>)	SWO
Blue marlin (<i>Makaira nigricans</i>)	BUM
Black marlin (<i>Makaira indica</i>)	BLM
Striped marlin (<i>Tetrapturus audax</i>)	MLS
Indo-Pacific sailfish (<i>Istiophorus platypterus</i>)	SFA
Other billfish	
Longtail tuna (<i>Thunnus tonggol</i>)	LOT
Kawakawa (<i>Euthynnus affinis</i>)	KAW
Frigate tuna/Bullet tuna (<i>Auxis</i> spp.)	FRZ
Narrow barred Spanish mackerel (<i>Scomberomorus commerson</i>)	COM
Indo-Pacific king mackerel (<i>Scomberomorus guttatus</i>)	GUT
Sharks	
Other fishes	
Rays	
Marine turtles	

2.4 REMARKS

1. Other relevant information is also written in the remarks

Note: These species included in the logbook are regarded as minimum requirement. Optionally other species should be added as species may differ depending on the area fished and type of fishery.

APPENDIX D
RESOLUTION 12/04
ON THE CONSERVATION OF MARINE TURTLES

The Indian Ocean Tuna Commission (IOTC),

RECALLING Recommendation 05/08 *On Sea Turtles* and Resolution 09/06 *On Marine Turtles*;

FURTHER RECALLING that marine turtles, including all species in the family Cheloniidae and *Dermochelys coriacea* (leatherback turtles) are listed in Appendix I of the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) and that all species of marine turtles are listed on Appendix I or II of *Convention on the Conservation of Migratory Species of Wild Animals*;

AWARE that the populations of the six species of marine turtles under the *Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia* (IOSEA MoU) are listed as Vulnerable, Endangered or Critically endangered on the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species;

RECOGNISING that the 26th FAO–COFI Session in March 2005 adopted the *Guidelines to Reduce Sea Turtle Mortality in Fishing Operations* (hereinafter referred to as “the FAO Guidelines”) and recommended their implementation by regional fisheries bodies and management organizations;

RECOGNISING that some fishing operations carried out in the Indian Ocean can adversely impact marine turtles and the need to implement measures to manage the adverse effects of fishing in the Indian Ocean on marine turtles;

ACKNOWLEDGING the activities undertaken to conserve marine turtles and the habitats on which they depend within the framework of the IOSEA MoU in particular its *Resolution to Promote the Use of Marine Turtle Bycatch Reduction Measures by IOSEA Signatory States* adopted by the Fifth Meeting of the Signatory States;

NOTING the Scientific Committee’s concern that the lack of data from Contracting Parties and cooperating non-Contracting Parties (CPCs) on the interactions and mortality of marine turtles from fisheries under the mandate of the IOTC undermines the ability to estimate levels of turtle bycatch and consequently IOTC’s capacity to respond and manage adverse effects of fishing on marine turtles;

FURTHER NOTING the Scientific Committee’s concern that the expansion of gillnet fishing from traditional fishing grounds into high seas might increase the interaction with marine turtles and lead to increased mortality;

CONVINCED of the need to strengthen Resolution 09/06 *On Marine Turtles* to ensure that the resolution applies equally to all marine turtle species and that CPCs annually report all interactions and mortalities of marine turtles in fisheries under the mandate of the IOTC;

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

1. This Resolution shall apply to all fishing vessels on the IOTC Record of Fishing Vessels.
2. Contracting Parties and Cooperating non-Contracting Parties (hereinafter referred to as “CPCs”) will implement, as appropriate, the FAO Guidelines.
3. CPCs shall collect (including through logbooks and observer programs) and provide to the IOTC Secretariat no later than 30 June of the following year in accordance with Resolution 10/02 (or any subsequent revision), all data on their vessels’ interactions with marine turtles. The data shall include the level of logbook or observer coverage and an estimation of total mortality of marine turtles incidentally caught in their fisheries.
4. CPCs shall report to the Scientific Committee information on successful mitigation measures and other impacts on marine turtles in the IOTC area, such as the deterioration of nesting sites and swallowing of marine debris.
5. CPCs shall report to the Commission in the annual implementation report, in accordance with Article X of the IOTC Agreement, their progress of implementation of the FAO Guidelines and this Resolution.

6. CPCs shall require fishermen on vessels targeting species covered by the IOTC Agreement to bring aboard, if practicable, any captured marine turtle that is comatose or inactive as soon as possible and foster its recovery, including aiding in its resuscitation, before safely returning it to the water. CPCs shall ensure that fishermen are aware of and use proper mitigation, identification, handling and de-hooking techniques and keep on board all necessary equipment for the release of marine turtles, in accordance with handling guidelines in the IOTC Marine Turtle Identification Cards.
7. CPCs with gillnet vessels that fish for species covered by the IOTC Agreement shall:
 - a) Require that operators of such vessels record all incidents involving marine turtles during fishing operations in their logbooks¹ and report such incidents to the appropriate authorities of the CPC
8. CPCs with longline vessels that fish for species covered by the IOTC Agreement shall:
 - a) Ensure that the operators of all longline vessels carry line cutters and de-hookers in order to facilitate the appropriate handling and prompt release of marine turtles caught or entangled, and that they do so in accordance with IOTC Guidelines. CPCs shall also ensure that operators of such vessels follow the handling guidelines in the IOTC Marine Turtle Identification Cards
 - b) Where appropriate, encourage the use of whole finfish bait
 - c) Require that operators of such vessels record all incidents involving marine turtles during fishing operations in their logbooks² and report such incidents to the appropriate authorities of the CPC
9. CPCs with purse seine vessels that fish for species covered by the IOTC Agreement shall:
 - a) Ensure that operators of such vessels, while fishing in the IOTC area:
 - i. To the extent practicable, avoid encirclement of marine turtles, and if a marine turtle is encircled or entangled, take practicable measures to safely release the turtle in accordance with the handling guidelines in the IOTC Marine Turtle Identification Cards
 - ii. To the extent practicable, release all marine turtles observed entangled in fish aggregating devices (FADs) or other fishing gear
 - iii. If a marine turtle is entangled in the net, stop net roll as soon as the turtle comes out of the water; disentangle the turtle without injuring it before resuming the net roll; and to the extent practicable, assist the recovery of the turtle before returning it to the water
 - iv. Carry and employ dip nets, when appropriate, to handle marine turtles
 - b) Encourage such vessels to adopt FAD designs that reduce the incidence of entanglement of marine turtles according to international standards
 - c) Require that operators of such vessels record all incidents involving marine turtles during fishing operations in their logbooks³ and report such incidents to the appropriate authorities of the CPC
10. All CPCs are requested to:
 - a) Where appropriate undertake research trials of circle hooks, use of whole finfish for bait, alternative FAD designs, alternative handling techniques, gillnet design and fishing practices and other mitigation methods which may improve the mitigation of adverse effects on marine turtles
 - b) Report the results of these trials to the Scientific Committee (SC), at least 30 days in advance of the annual meetings of the SC
11. The Scientific Committee shall request the Working Party on Ecosystems and Bycatch to:

¹ This information should include, where possible, details on species, location of capture, conditions, actions taken on board and location of release.

² This information should include, where possible, details on species, location of capture, conditions, actions taken on board and location of release

³ This information should include, where possible, details on species, location of capture, conditions, actions taken on board and location of release

- a) Develop recommendations on appropriate mitigation measures for gillnet, longline and purse seine fisheries in the IOTC area
- b) Develop regional standards covering data collection, data exchange and training
- c) Develop improved FAD designs to reduce the incidence of entanglement of marine turtles, including the use of biodegradable materials

The recommendations of the Working Party on Ecosystems and Bycatch shall be provided to the Scientific Committee for consideration at its annual session in 2012. In developing its recommendations, the Working Party on Ecosystems and Bycatch shall examine and take into account the information provided by CPCs in accordance with paragraph 10 of this measure, other research available on the effectiveness of various mitigation methods in the IOTC area, mitigation measures and guidelines adopted by other relevant organizations and, in particular, those of the Western and Central Pacific Fisheries Commission. The Working Party on Ecosystems and Bycatch will specifically consider the effects of circle hooks on target species catch rates, marine turtle mortalities and other bycatch species.

12. At its annual session in 2013 the Commission shall consider the recommendations of the Scientific Committee, together with socio-economic considerations, with a view to adopting further measures to mitigate interactions with marine turtles in fisheries covered by the IOTC Agreement.
13. In researching new mitigation methods, consideration should be given to ensuring that methods do not cause greater harm than they prevent and do not adversely impact other species (particularly threatened species) and/or the environment.
14. CPCs are encouraged to collaborate with the IOSEA and take into account the IOSEA MoU including the provisions of the Conservation and Management Plan in the implementation of bycatch mitigation measures for marine turtles.
15. The IOTC and IOSEA secretariats are encouraged to intensify their collaboration and exchange of information on marine turtle issues in accordance with the protocols agreed by the Commission.
16. CPCs are encouraged to support developing countries in their implementation of the FAO Guidelines and this Resolution.
17. The Scientific Committee shall annually review the information reported by CPCs pursuant to this measure and, as necessary, provide recommendations to the Commission on ways to strengthen efforts to reduce marine turtle interactions with IOTC fisheries.
18. This Resolution supersedes Recommendation 05/08 *On Sea Turtles* and Resolution 09/06 *On Marine Turtles*.

APPENDIX E
RESOLUTION 12/05

ON ESTABLISHING A PROGRAMME FOR TRANSHIPMENT BY LARGE-SCALE FISHING VESSELS

The Indian Ocean Tuna Commission (IOTC),

TAKING ACCOUNT of the need to combat illegal, unregulated and unreported (IUU) fishing activities because they undermine the effectiveness of the conservation and management measures already adopted by IOTC;

EXPRESSING GRAVE CONCERN that organized tuna laundering operations have been conducted and a significant amount of catches by IUU fishing vessels have been transhipped under the names of duly licensed fishing vessels;

IN VIEW THEREFORE OF THE NEED to ensure the monitoring of the transhipment activities by large-scale longline vessels in the IOTC area of competence, including the control of their landings;

TAKING ACCOUNT of the need to collect catch data of such large scale long-line tuna to improve the scientific assessments of those stocks;

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

SECTION 1. GENERAL RULE

1. Except under the programme to monitor transshipments at sea outlined below in Section 2, all transhipment operations of tuna and tuna like species and sharks caught in association with tuna and tuna-like fisheries in the IOTC area of competence (hereinafter referred to as “tuna and tuna like species and sharks”) must take place in port.
2. The flag Contracting Party, Cooperating non Contracting Party (CPCs) shall take the necessary measures to ensure that large scale tuna vessels (hereafter referred as the “LSTVs”) flying their flag comply with the obligations set out in Annex 1 when transhipping in port.

SECTION 2. PROGRAMME TO MONITOR TRANSHIPMENTS AT SEA

3. The Commission hereby establishes a programme to monitor transhipment at sea which applies only to large-scale tuna longline fishing vessels (hereafter referred to as the “LSTLVs”) and to carrier vessels authorised to receive transhipments from these vessels at sea. No at-sea transhipment of tuna and tuna like species and sharks by fishing vessels other than LSTLVs shall be allowed. The Commission shall review and, as appropriate, revise this Resolution.
4. The CPCs that flag LSTLVs shall determine whether or not to authorize their LSTLVs to tranship at sea. However, if the flag CPC authorizes the at-sea transhipment by its flag LSTLVs, such transhipment shall be conducted in accordance with the procedures defined in Sections 3, 4 and 5, and annexes 2 and 3 below.

SECTION 3. RECORD OF VESSELS AUTHORISED TO RECEIVE TRANSHIPMENTS-AT-SEA IN THE IOTC AREA OF COMPETENCE

5. The Commission shall establish and maintain an IOTC Record of Carrier Vessels authorized to receive tuna and tuna-like species and sharks at sea in the IOTC area of competence from LSTLVs. For the purposes of this Resolution, carrier vessels not entered on the record are deemed not to be authorized to receive tuna and tuna-like species and sharks in at-sea transhipment operations.
6. Each CPC shall submit, electronically where possible, to the IOTC Executive Secretary the list of the carrier vessels that are authorized to receive at-sea transhipments from its LSTLVs in the IOTC area of competence. This list shall include the following information:
 - a) The flag of the vessel
 - b) Name of vessel, register number
 - c) Previous name (if any)

- d) Previous flag (if any)
 - e) Previous details of deletion from other registries (if any)
 - f) International radio call sign
 - g) Type of vessels, length, gross tonnage (GT) and carrying capacity
 - h) Name and address of owner(s) and operator(s)
 - i) Time period authorised for transhipping
7. Each CPC shall promptly notify the IOTC Executive Secretary, after the establishment of the initial IOTC Record, of any addition to, any deletion from and/or any modification of the IOTC Record, at any time such changes occur.
 8. The IOTC Executive Secretary shall maintain the IOTC Record and take measures to ensure publicity of the record and through electronic means, including placing it on the IOTC website, in a manner consistent with confidentiality requirements notified by CPCs for their vessels.
 9. Carrier vessels authorized for at-sea transshipment shall be required to install and operate a Vessel Monitoring System (VMS).

SECTION 4. AT-SEA TRANSHIPMENT

10. Transshipments by LSTLVs in waters under the jurisdiction of the CPCs are subject to prior authorization from the Coastal State concerned. CPCs shall take the necessary measures to ensure that LSTLVs flying their flag comply with the following conditions:

Flag State Authorization

11. LSTLVs are not authorized to tranship at sea, unless they have obtained prior authorization from their flag State.

Notification obligations

Fishing vessel:

12. To receive the prior authorization mentioned in paragraph 11 above, the master and/or owner of the LSTLV must notify the following information to its flag State authorities at least 24 hours in advance of an intended transshipment:
 - a) The name of the LSTLV and its number in the IOTC Record of Vessels
 - b) The name of the carrier vessel and its number in the IOTC Record of Carrier Vessels authorized to receive transshipments in the IOTC area of competence, and the product to be transhipped
 - c) The tonnage by product to be transhipped
 - d) The date and location of transshipment
 - e) The geographic location of the catches
13. The LSTLV concerned shall complete and transmit to its flag State, not later than 15 days after the transshipment, the IOTC transshipment declaration, along with its number in the IOTC Record of Fishing Vessels, in accordance with the format set out in **Annex 2**.

Receiving carrier vessel:

14. Before starting transshipment, the master of the receiving carrier vessel shall confirm that the LSTLV concerned is participating in the IOTC programme to monitor transshipment at sea (which includes payment of the fee in paragraph 13 of **Annex 3**) and has obtained the prior authorization from their flag State referred to in paragraph 11. The master of the receiving carrier vessel shall not start such transshipment without such confirmation.

15. The master of the receiving carrier vessel shall complete and transmit the IOTC transhipment declaration to the IOTC Secretariat and the flag CPC of the LSTLV, along with its number in the IOTC Record of Carrier Vessels authorized to receive transhipment in the IOTC area of competence, within 24 hours of the completion of the transhipment.
16. The master of the receiving carrier vessel shall, 48 hours before landing, transmit an IOTC transhipment declaration, along with its number in the IOTC Record of Carrier Vessels authorized to receive transhipment in the IOTC area of competence, to the competent authorities of the State where the landing takes place.

Regional Observer Programme

17. Each CPC shall ensure that all carrier vessels transhipping at sea have on board an IOTC observer, in accordance with the IOTC Regional Observer Programme in **Annex 3**. The IOTC observer shall observe the compliance with this Resolution, and notably that the transhipped quantities are consistent with the reported catch in the IOTC transhipment declaration.
18. Vessels shall be prohibited from commencing or continuing at-sea transhipping in the IOTC area of competence without an IOTC regional observer on board, except in cases of “force majeure” duly notified to the IOTC Secretariat.

SECTION 5 GENERAL PROVISIONS

19. To ensure the effectiveness of the IOTC Conservation and Management Measures pertaining to species covered by Statistical Document Programs:
 - a) In validating the Statistical Document, flag CPCs of LSTLVs shall ensure that transhipments are consistent with the reported catch amount by each LSTLV
 - b) The flag CPC of LSTLVs shall validate the Statistical Documents for the transhipped fish, after confirming that the transhipment was conducted in accordance with this Resolution. This confirmation shall be based on the information obtained through the IOTC Observer Programme
 - c) CPCs shall require that the species covered by the Statistical Document Programs caught by LSTLVs in the IOTC area of competence, when imported into the territory of a Contracting Party, be accompanied by statistical documents validated for the vessels on the IOTC record and a copy of the IOTC transhipment declaration
20. The CPCs shall report annually before 15 September to the IOTC Executive Secretary:
 - a) The quantities by species transhipped during the previous year
 - b) The list of the LSTLVs registered in the IOTC Record of Fishing Vessels which have transhipped during the previous year
 - c) A comprehensive report assessing the content and conclusions of the reports of the observers assigned to carrier vessels which have received transhipment from their LSTLVs
21. All tuna and tuna-like species and sharks landed or imported into the CPCs either unprocessed or after having been processed on board and which are transhipped, shall be accompanied by the IOTC transhipment declaration until the first sale has taken place.
22. Each year, the IOTC Executive Secretary shall present a report on the implementation of this Resolution to the annual meeting of the Commission which shall review compliance with this Resolution.
23. The Secretariat shall, when providing CPCs with copies of all raw data, summaries and reports in accordance with paragraph 10 of **Annex 3** to this Resolution, also indicate evidence indicating possible infraction of IOTC regulations by LSTLVs/carrier vessels flagged to that CPC. Upon receiving such evidence, each CPC shall investigate the cases and report the results of the investigation back to the Secretariat three months prior to the Compliance Committee meeting. The Secretariat shall circulate among CPCs the list of names and flags of the LSTLVs/Carrier vessels that were involved in such possible infraction as well as the response of the flag CPCs 80 days prior to the Compliance Committee meeting.

24. Resolution 11/05 *On establishing a programme for transhipment by large-scale fishing vessels* is superseded by this Resolution.

ANNEX 1 Conditions relating to in-port transhipment by LSTVs

General

1. Transhipment operations in port may only be undertaken in accordance with the procedures detailed below:

Notification obligations

2. Fishing vessel:
- 2.1. Prior to transhipping, the Captain of the LSTV must notify the following information to the port State authorities, at least 48 hours in advance:
- a) the name of the LSTV and its number in the IOTC record of fishing vessels
 - b) the name of the carrier vessel, and the product to be transhipped
 - c) the tonnage by product to be transhipped
 - d) the date and location of transhipment
 - e) the major fishing grounds of the tuna and tuna-like species and sharks catches
- 2.2. The Captain of a LSTV shall, at the time of the transhipment, inform its Flag State of the following:
- a) The products and quantities involved
 - b) the date and place of the transhipment
 - c) the name, registration number and flag of the receiving carrier vessel
 - d) the geographic location of the tuna and tuna-like species and sharks catches
- 2.3. The captain of the LSTV concerned shall complete and transmit to its flag State the IOTC transhipment declaration, along with its number in the IOTC Record of Fishing Vessels, in accordance with the format set out in Annex 2 not later than 15 days after the transhipment.

Receiving vessel:

3. Not later than 24 hours before the beginning and at the end of the transhipment, the master of the receiving carrier vessel shall inform the port State authorities of the quantities of tuna and tuna-like species and sharks transhipped to his vessel, and complete and transmit the IOTC transhipment declaration, to the competent authorities within 24 hours.

Landing State:

4. The master of the receiving carrier vessel shall, 48 hours before landing, complete and transmit an IOTC transhipment declaration, to the competent authorities of the landing State where the landing takes place.
5. The port State and the landing State referred to in the above paragraphs shall take the appropriate measures to verify the accuracy of the information received and shall cooperate with the flag CPC of the LSTV to ensure that landings are consistent with the reported catches amount of each vessel. This verification shall be carried out so that the vessel suffers the minimum interference and inconvenience and that degradation of the fish is avoided.
6. Each flag CPC of the LSTV shall include in its annual report each year to IOTC the details on the transshipments by its vessels.

ANNEX 2

IOTC Transhipment declaration

Carrier Vessel	Fishing Vessel
Name of the Vessel and Radio Call Sign:	Name of the Vessel and Radio Call Sign:
Flag:	Flag:
Flag State license number:	Flag State license number:
National Register Number, if available:	National Register Number, if available:
IOTC Register Number, if available:	IOTC Register Number, if available:

Day Month Hour Year |2_|0_|_|_| Agent's name: Master's name of LSTV: Master's name of Carrier:

Departure |_|_| |_|_| |_|_| from |_____|

Return |_|_| |_|_| |_|_| to |_____| Signature: Signature: Signature:

Transhipment |_|_| |_|_| |_|_| |_____|

Indicate the weight in kilograms or the unit used (e.g. box, basket) and the landed weight in kilograms of this unit: |_____| kilograms

LOCATION OF TRANSHIPMENT

Species	Port		Sea	Type of product											
				Whole	Gutted	Headed	Filletted								

If transhipment effected at sea, IOTC Observer Name and Signature:

ANNEX 3**IOTC Regional Observer Programme**

1. Each CPC shall require carrier vessels included in the IOTC Record of Carrier Vessels authorised to receive transhipments in the IOTC area of competence and which tranship at sea, to carry an IOTC observer during each transhipment operation in the IOTC area of competence.
2. The IOTC Executive Secretary shall appoint the observers and shall place them on board the carrier vessels authorized to receive transhipments in the IOTC area of competence from LSTLVs flying the flag of Contracting Parties and of Cooperating non-Contracting Parties that implement the IOTC observer program.

Designation of the observers

3. The designated observers shall have the following qualifications to accomplish their tasks:
 - a) sufficient experience to identify species and fishing gear
 - b) satisfactory knowledge of the IOTC conservation and management measures
 - c) the ability to observe and record information accurately
 - d) a satisfactory knowledge of the language of the flag of the vessel observed

Obligations of the observer

4. Observers shall:
 - a) have completed the technical training required by the guidelines established by IOTC
 - b) not be, to the extent possible, nationals of the flag State of the receiving carrier vessel
 - c) be capable of performing the duties set forth in point 5 below
 - d) be included in the list of observers maintained by the Secretariat of the Commission
 - e) not be a crew member of an LSTLV or an employee of an LSTLV company
5. The observer tasks shall be in particular to:
 - a) On the Fishing Vessel intending to tranship to the carrier vessel and before the transhipment takes place, the observer shall:
 - i. check the validity of the fishing vessel's authorisation or licence to fish tuna and tuna-like species and sharks in the IOTC area of competence;
 - ii. check and note the total quantity of catch on board, and the quantity to be transferred to the carrier vessel;
 - iii. check that the VMS is functioning and examine the logbook;
 - iv. verify whether any of the catch on board resulted from transfers from other vessels, and check documentation on such transfers;
 - v. in the case of an indication that there are any violations involving the fishing vessel, immediately report the violations to the carrier vessel master,
 - vi. report the results of these duties on the fishing vessel in the observers report.
 - b) On the Carrier Vessel:

Monitor the carrier vessel's compliance with the relevant Conservation and Management Measures

adopted by the Commission. In particular the observers shall:

- i. record and report upon the transshipment activities carried out
 - ii. verify the position of the vessel when engaged in transshipping
 - iii. observe and estimate products transhipped
 - iv. verify and record the name of the LSTLV concerned and its IOTC number
 - v. verify the data contained in the transshipment declaration
 - vi. certify the data contained in the transshipment declaration
 - vii. countersign the transshipment declaration
 - viii. issue a daily report of the carrier vessels transshipping activities
 - ix. establish general reports compiling the information collected in accordance with this paragraph and provide the captain the opportunity to include therein any relevant information
 - x. submit to the Secretariat the aforementioned general report within 20 days from the end of the period of observation
 - xi. exercise any other functions as defined by the Commission
6. Observers shall treat as confidential all information with respect to the fishing operations of the LSTLVs and of the LSTLVs owners and accept this requirement in writing as a condition of appointment as an observer.
 7. Observers shall comply with requirements established in the laws and regulations of the flag State which exercises jurisdiction over the vessel to which the observer is assigned.
 8. Observers shall respect the hierarchy and general rules of behaviour which apply to all vessel personnel, provided such rules do not interfere with the duties of the observer under this program, and with the obligations of vessel personnel set forth in paragraph 9 of this program.

Obligations of the flag States of carrier vessels

9. The responsibilities regarding observers of the flag States of the carrier vessels and their captains shall include the following, notably:
 - a) Observers shall be allowed access to the vessel personnel and to the gear and equipment
 - b) Upon request, observers shall also be allowed access to the following equipment, if present on the vessels to which they are assigned, in order to facilitate the carrying out of their duties set forth in paragraph 5:
 - i. Satellite navigation equipment
 - ii. Radar display viewing screens when in use
 - iii. Electronic means of communication
 - c) Observers shall be provided accommodation, including lodging, food and adequate sanitary facilities, equal to those of officers
 - d) Observers shall be provided with adequate space on the bridge or pilot house for clerical work, as well as space on deck adequate for carrying out observer duties; and
 - e) The flag States shall ensure that captains, crew and vessel owners do not obstruct, intimidate, interfere with, influence, bribe or attempt to bribe an observer in the performance of his/her duties
10. The IOTC Executive Secretary, in a manner consistent with any applicable confidentiality requirements, shall provide to the flag State of the carrier vessel under whose jurisdiction the vessel transhipped and to the flag CPC of the LSTLV, copies of all available raw data, summaries, and reports pertaining to the trip four months

prior to the Compliance Committee meeting.

Obligations of LSTLV during transhipment

11. Observers shall be allowed to visit the fishing vessel, if weather conditions permit it, and access shall be granted to personnel and areas of the vessel necessary to carry out their duties set forth in paragraph 5.
12. The IOTC Executive Secretary shall submit the observer reports to the Compliance Committee and to the Scientific Committee.

Observer fees

13. The costs of implementing this program shall be financed by the flag CPCs of LSTLVs wishing to engage in transhipment operations. The fee shall be calculated on the basis of the total costs of the program. This fee shall be paid into a special account of the IOTC Secretariat and the IOTC Executive Secretary shall manage the account for implementing the program.
14. No LSTLV may participate in the at-sea transhipment program unless the fees, as required under paragraph 13, have been paid.

APPENDIX F
RESOLUTION 12/06
ON REDUCING THE INCIDENTAL BYCATCH OF SEABIRDS IN LONGLINE FISHERIES

The Indian Ocean Tuna Commission (IOTC),

RECALLING Resolution 10/06 *On reducing incidental bycatch of seabirds in longline fisheries*, and in particular, its paragraph 8;

RECOGNISING the need to strengthen mechanisms to protect seabirds in the Indian Ocean, and to harmonize them with ICCAT measures that will enter into force no later than July 2013;

TAKING INTO ACCOUNT the United Nations Food and Agriculture Organization (FAO) International Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries (IPOA-Seabirds);

NOTING the recommendations of the IOTC Scientific Committee, in agreement with the Working Party on Ecosystems and Bycatch (WPEB) on measures to mitigate seabird interactions as outlined in their 2007, 2009 and 2011 Reports;

ACKNOWLEDGING that to date some IOTC Members and Cooperating non-Contracting Parties (hereinafter referred to as “CPCs”) have identified the need for, and have either completed or are near finalizing, their National Plan of Action on Seabirds;

RECOGNISING the global concern that some species of seabirds, notably albatrosses and petrels, are threatened with extinction;

NOTING that the Agreement on the Conservation of Albatrosses and Petrels, which opened for signatures at Canberra on 19 June 2001, has entered into force;

NOTING that the ultimate aim of the IOTC and the CPCs is to achieve a zero bycatch of seabirds for fisheries under the purview of the IOTC, especially threatened albatrosses and petrel species in longline fisheries;

BEARING in mind studies undertaken in other longline tuna fisheries, demonstrating the economical benefit of measures to mitigate incidental bycatch of seabirds, by significantly increasing catches of targeted species;

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

1. CPCs shall record data on seabird incidental bycatch by species, notably through scientific observers in accordance with Resolution 11/04 and report these annually. Observers shall to the extent possible take photographs of seabirds caught by fishing vessels and transmit them to national seabird experts or to the IOTC Secretariat, for confirmation of identification.
2. CPCs that have not fully implemented the provisions of the IOTC Regional Observer Scheme outlined in paragraph 2 of Resolution 11/04 shall report seabird incidental bycatch through logbooks, including details of species, if possible.
3. CPCs shall provide to the Commission as part of their annual reports, information on how they are implementing this measure.
4. CPCs shall seek to achieve reductions in levels of seabird bycatch across all fishing areas, seasons, and fisheries through the use of effective mitigation measures, while giving due consideration to the safety of crew members and the practicability of mitigation measures.
5. In the area south of 25 degrees South latitude, CPCs shall ensure that all longline vessels use at least two of the three mitigation measures in **Table 1**. These measures should also be considered for implementation in other areas, as appropriate, consistent with scientific advice.
6. Mitigation measures used pursuant to paragraph 5 shall conform to the minimum technical standards for these measures, as shown in **Table 1**.

7. The design and deployment for bird scaring lines should also meet the additional specifications provided in **Annex 1**.
8. The Scientific Committee, based notably on the work of the WPEB and information from CPCs, will analyse the impact of this Resolution on seabird bycatch no later than for the 2016 meeting of the Commission. It shall advise the Commission on any modifications that are required, based on experience to date of the operation of the Resolution and/or further international studies, research or advice on best practice on the issue, in order to make the Resolution more effective.
9. The Commission should hold a workshop in the intersessional period before the entry into force of this Resolution to facilitate its implementation, particularly focusing on how to address safety and practical concerns. CPCs shall ensure that fishers make a trial of the safety and practicality of these measures for review at the workshops with a view of resolving their concerns and assuring the orderly implementation, including training for and adaptation to these measures. A second workshop should be held, if necessary to explain the science, theory and application of the line weighting measure.
10. This Resolution shall enter into force on 1 July 2014.
11. As of 1 July 2014, the Resolution 10/06 *on reducing incidental bycatch of seabirds in longline fisheries* and the Recommendation 05/09 *on incidental mortality of seabirds* are superseded by this Resolution.

Table 1. Mitigation measures

Mitigation	Description	Specification
Night setting with minimum deck lighting	No setting between nautical dawn and before nautical dusk. Deck lighting to be kept to a minimum.	Nautical dusk and nautical dawn are defined as set out in the Nautical Almanac tables for relevant latitude, local time and date. Minimum deck lighting should not breach minimum standards for safety and navigation.
Bird-scaring lines (Tori lines)	Bird-scaring lines shall be deployed during the entire longline setting to deter birds from approaching the branch line.	<p>For vessels greater than or equal to 35 m:</p> <ul style="list-style-type: none"> • Deploy at least 1 bird-scaring line. Where practical, vessels are encouraged to use a second tori pole and bird scaring line at times of high bird abundance or activity; both tori lines should be deployed simultaneously, one on each side of the line being set. • Aerial extent of bird-scaring lines must be greater than or equal to 100 m. • Long streamers of sufficient length to reach the sea surface in calm conditions must be used. • Long streamers must be at intervals of no more than 5m. <p>For vessels less than 35 m:</p> <ul style="list-style-type: none"> • Deploy at least 1 bird-scaring line. • Aerial extent must be greater than or equal to 75 m. • Long and/or short (but greater than 1 m in length) streamers must be used and placed at intervals as follows: <ul style="list-style-type: none"> ○ Short: intervals of no more than 2 m. ○ Long: intervals of no more than 5 m for the first 55 m of bird scaring line. <p>Additional design and deployment guidelines for bird-scaring lines are provided in Annex 1 of this Resolution.</p>
Line weighting	Line weights to be deployed on the snood prior to setting.	Greater than a total of 45 g attached within 1 m of the hook or; Greater than a total of 60 g attached within 3.5 m of the hook or; Greater than a total of 98 g weight attached within 4 m of the hook.

Annex 1**Supplemental Guidelines for Design and Deployment of Tori Lines****Preamble**

Minimum technical standards for deployment of tori lines are found in **Table 1** of this Resolution, and are not repeated here. These supplemental guidelines are designed to assist in the preparation and implementation of tori line regulations for longline vessels. While these guidelines are relatively explicit, improvement in tori line effectiveness through experimentation is encouraged, within the requirements of **Table 1** in the Resolution. The guidelines take into account environmental and operational variables such as weather conditions, setting speed and ship size, all of which influence tori line performance and design in protecting baits from birds. Tori line design and use may change to take account of these variables provided that line performance is not compromised. On-going improvement in tori line design is envisaged and consequently review of these guidelines should be undertaken in the future.

Tori line design (see Figure 1)

1. An appropriate towed device on the section of the tori line in the water can improve the aerial extension.
2. The above water section of the line should be sufficiently light that its movement is unpredictable to avoid habituation by birds and sufficiently heavy to avoid deflection of the line by wind.
3. The line is best attached to the vessel with a robust barrel swivel to reduce tangling of the line.
4. The streamers should be made of material that is conspicuous and produces an unpredictable lively action (e.g. strong fine line sheathed in red polyurethane tubing) suspended from a robust three-way swivel (that again reduces tangles) attached to the tori line.
5. Each streamer should consist of two or more strands.
6. Each streamer pair should be detachable by means of a clip so that line stowage is more efficient.

Deployment of tori lines

1. The line should be suspended from a pole affixed to the vessel. The tori pole should be set as high as possible so that the line protects bait a good distance astern of the vessel and will not tangle with fishing gear. Greater pole height provides greater bait protection. For example, a height of around 7 m above the water line can give about 100 m of bait protection.
2. If vessels use only one tori line it should be set to windward of sinking baits. If baited hooks are set outboard of the wake, the streamer line attachment point to the vessel should be positioned several meters outboard of the side of the vessel that baits are deployed. If vessels use two tori lines, baited hooks should be deployed within the area bounded by the two tori lines.
3. Deployment of multiple tori lines is encouraged to provide even greater protection of baits from birds.
4. Because there is the potential for line breakage and tangling, spare tori lines should be carried onboard to replace damaged lines and to ensure fishing operations can continue uninterrupted. Breakaways can be incorporated into the tori line to minimize safety and operational problems should a longline float foul or tangle with the in-water extent of a streamer line.
5. When fishers use a bait casting machine (BCM), they must ensure coordination of tori line and machine by: i) ensuring the BCM throws directly under the tori line protection, and ii) when using a BCM (or multiple BCMs) that allows throwing to both port and starboard, two tori lines should be used.
6. When casting branchline by hand, fishers should ensure that the baited hooks and coiled branchline sections are cast under the tori line protection, avoiding the propeller turbulence which may slow the sink rate.
7. Fishers are encouraged to install manual, electric or hydraulic winches to improve ease of deployment and retrieval of tori lines.

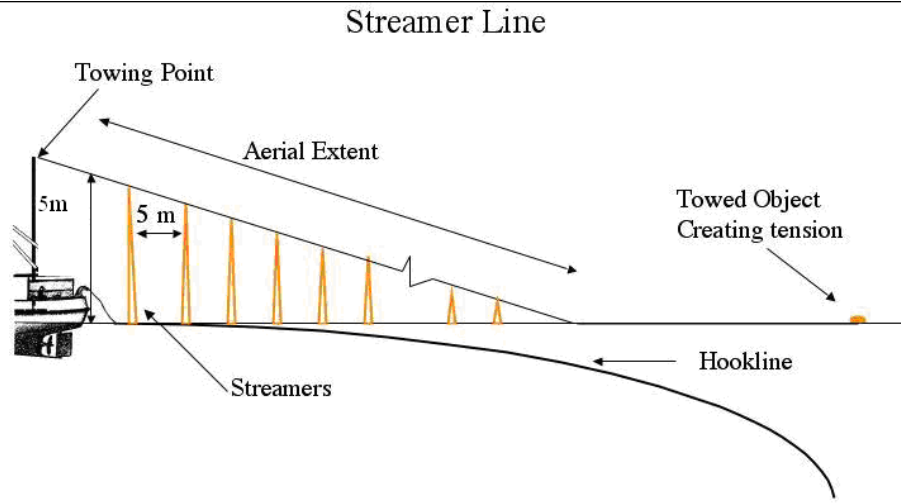


Figure 1. Diagram of Bird Scaring Streamer Line.

APPENDIX G**RESOLUTION 12/07****CONCERNING A RECORD OF LICENSED FOREIGN VESSELS FISHING FOR IOTC SPECIES IN THE IOTC AREA OF COMPETENCE AND ACCESS AGREEMENT INFORMATION****The Indian Ocean Tuna Commission (IOTC),**

RECOGNISING that coastal States have sovereign rights in a 200-nautical mile exclusive economic zone (EEZ) with respect to their natural resources;

CONCIOUS of the provisions of Article 62 of the United Nations Convention on the Law of the Sea;

NOTING that the information on vessels licensed to fish in the exclusive economic zone (EEZ) of IOTC Members and Cooperating non-Contracting Parties (CPCs), constitutes a means to identify potential unreported fishing activities;

MINDFUL of the recommendation 17 of the Performance Review Panel, as listed in Resolution 09/01 *on the performance review follow-up*, that the obligation incumbent to a flag State to report data for its vessels be included in a separate Resolution from the obligation incumbent on Members to report data on the vessels of third countries they licence to fish in their EEZs.

AWARE of the data reporting requirements for all CPCs and the importance of complete statistical reporting to the work of the Scientific Community, its Working Parties and the Commission;

MINDFUL of the need to ensure transparency among CPCs, in particular to facilitate joint efforts to combat illegal, unreported, and unregulated fishing;

RECALLING the duties of CPCs concerning IUU fisheries as stated in the Resolution 11/03 *establishing a list of vessels presumed to have carried out illegal, unreported and unregulated fishing in the IOTC area of competence*; which requires CPCs to ensure that their vessels do not conduct fishing activities within areas under the national jurisdiction of other States without authorisation and/or infringe the coastal State's laws and resolutions;

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

PRIVATE ACCESS AGREEMENTS:

1. All CPCs which issue licenses to foreign flag vessels to fish in their EEZ for species managed by the IOTC in the IOTC Area of Competence (hereinafter referred to as "the Area"), shall submit to the Secretary, by 15 February every year, a list of all foreign flag vessels to which such licences have been issued during the previous year.
2. This list shall contain the following information for each vessel:
 - IOTC Number
 - Name and registration number
 - IMO number, if available
 - The flag at the time of issuing the licence
 - International radio call sign (if any)
 - Vessel type, length, and gross tonnage (GT)
 - Name and address of owner, and/or charterer and/or operator
 - Main target species
 - Period of licence

GOVERNMENT TO GOVERNMENT ACCESS AGREEMENTS:

3. In cases where coastal CPCs allow foreign-flagged vessels to fish in waters in their EEZ in the IOTC Area for species managed by IOTC through a CPC-to-CPC agreement, CPCs involved in the referred agreement shall jointly notify the Commission prior to beginning fishing activities of the existence of such agreements and provide to the Commission information concerning these agreements, including:
 - a) The CPCs involved in the agreement
 - b) The time period or periods covered by the agreement
 - c) The number of vessels and gear types authorized and vessel information requested in paragraph 2 above
 - d) The stock or species authorized for harvest, including any applicable catch limits
 - e) The CPC's quota or catch limit to which the catch will be applied, where applicable
 - f) Monitoring, control, and surveillance measures required by the flag CPC and coastal CPC involved
 - g) Data reporting obligations stipulated in the agreement, including those between the parties involved, as well as those regarding information that must be provided to the Commission
 - h) A copy of the written agreement
4. For agreements in existence prior to the entry into force of this Resolution, the information specified in paragraph 3 shall be provided, at the latest, 60 days in advance of the 2013 Commission meeting.
5. When an access agreement is modified in a manner that changes any of the information specified in paragraph 3, these changes shall be promptly notified to the Commission.
6. The Secretariat shall report the information specified in this Resolution annually to the Commission at its annual meeting.
7. This Resolution shall be consistent with domestic confidentiality requirements of the coastal CPC and the flag CPC concerned.
8. IOTC Resolution 10/07 *Concerning a record of licenced vessels fishing for tunas and swordfish in the IOTC Area* is superseded by this Resolution.

APPENDIX H
RESOLUTION 12/08
PROCEDURES ON A FISH AGGREGATING DEVICES (FADS) MANAGEMENT PLAN

The Indian Ocean Tuna Commission (IOTC),

BEARING IN MIND that the Agreement for the implementation of the Provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA) encourages coastal States and fishing States on the high seas to collect and share, in a timely manner, complete and accurate data concerning fishing activities on, inter alia, vessel position, catch of target and non-target species and fishing effort;

NOTING that the United Nations Food and Agricultural Organization (FAO) Code of Conduct for Responsible Fishing provides that States should compile fishery-related and other supporting scientific data relating to fish stocks covered by subregional or regional fisheries management organisations and provide them in a timely manner to the organisation;

RECOGNIZING that all gears deployed to target resources under IOTC competence should be managed to ensure sustainability of fishing operations;

AWARE that the Commission is committed to adopt conservation measures to reduce juvenile bigeye and yellowfin tuna mortalities from fishing effort on Fish Aggregating Devices (FADs);

AWARE that the availability of adequate information is fundamental to carrying out the objectives of the IOTC Agreement laid down in its Article V;

NOTING that the Scientific Committee advised the Commission to conduct an investigation of the feasibility and impacts of a temporary FAD closure as well as other measures in the context of Indian Ocean fisheries and stocks;

RECALLING that the objective of the IOTC Agreement is to ensure, through appropriate management, the conservation and optimum utilization of stocks covered by the mentioned Agreement and encouraging sustainable development of fisheries based on such stocks and minimizing the level of bycatches;

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

1. CPCs having vessels fishing on Fish Aggregating Devices (FADs) shall submit, to the Commission, by the end of 2013, Management Plans for the use of FADs by their purse seiners and bait boat vessels. The Plans shall at a minimum meet the Suggested Guidelines for Preparation for FAD Management Plans for each CPC (Annex 1). For the purposes of this Resolution, the term Fish Aggregation Device (FAD) means drifting or anchored floating or submerged objects deployed by fishermen for the purpose of aggregating target tuna species.
2. The Management Plans shall include initiatives or surveys to investigate, and to the extent possible minimize the capture of small bigeye and yellowfin tuna and non-target species associated with fishing on FADs.
3. These Plans shall be analysed by the Compliance Committee at its 2014 session. The information provided in these Plans will be submitted to the Commission, consistent with the IOTC standards for the provision of catch and effort data and will be made available for analysis to the Scientific Committee on the aggregation level set by Resolution 10/02, and under the confidentiality rules set by Resolution 12/02.
4. From 2015 on, CPCs shall submit to the Commission, 60 days before the Annual Meeting, a report on the management of FADs, including any reviews of the initially submitted Management Plans.
5. The Scientific Committee will analyse the information, when available, and provide scientific advice on additional FAD management options for consideration by the Commission in 2015.

Annex 1**GUIDELINES FOR PREPARATION OF FISH AGGREGATING DEVICE (FAD) MANAGEMENT PLANS**

To support obligations in respect of the FAD Management Plan (FAD–MP) to be submitted to the IOTC Secretariat by CPCs with fleets fishing in the IOTC area of competence, associated to FAD (anchored or drifting), FAD–MP should include:

- An objective
- Scope:
 - Description of its application with respect to:
 - Vessel-types and support and tender vessels
 - FAD types (anchored (AFAD) AND drifting (DFAD))
 - FAD numbers and/or FADs beacons numbers to be deployed (per FAD type)
 - reporting procedures for AFAD and DFAD deployment
 - catch reporting from FAD sets (consistent with the IOTC’s Standards for the provision of and Effort Data)
 - distance between AFADs
 - incidental bycatch reduction and utilization policy
 - consideration of interaction with other gear types
 - plans for monitoring and retrieval of lost FADs
 - statement or policy on “FAD ownership”
- Institutional arrangements for management of the FAD Management Plans:
 - Institutional responsibilities
 - application processes for FAD and /or FAD beacons deployment approval
 - Obligations of vessel owners and masters in respect of FAD and /or FAD beacons deployment and use
 - FAD and/or FADs beacons replacement policy
 - reporting obligations
 - observer acceptance obligations
- FAD construction specifications and requirements
 - FAD design characteristics (a description)
 - FAD markings and identifiers, including FADs beacons
 - Lighting requirements
 - radar reflectors
 - visible distance
 - radio buoys (requirement for serial numbers)
 - satellite transceivers (requirement for serial numbers)
- Applicable areas
 - Details of any closed areas or periods e.g. territorial waters, shipping lanes, proximity to artisanal fisheries, etc
- Applicable period for the FAD–MP
- Means for monitoring and reviewing implementation of the FAD–MP

APPENDIX I
RESOLUTION 12/09
ON THE CONSERVATION OF THRESHER SHARKS (FAMILY ALOPIIDAE) CAUGHT IN
ASSOCIATION WITH FISHERIES IN THE IOTC AREA OF COMPETENCE

The Indian Ocean Tuna Commission (IOTC),

RECALLING that the IOTC Resolution 05/05 concerning the conservation of sharks caught in association with fisheries managed by IOTC;

CONSIDERING that thresher sharks of the family Alopiidae are caught as bycatch in the IOTC area of competence;

NOTING that at its 2009 meeting, the Working Party on Ecosystems and Bycatch recognized that full stock assessments on sharks may not be possible because of data limitations and that it is essential that some stock assessment evaluation should be carried out;

NOTING that the international scientific community points out that the bigeye thresher shark (*Alopias superciliosus*) is particularly endangered and vulnerable;

CONSIDERING that it is difficult to differentiate between the various species of thresher sharks without taking them onboard and that such action might jeopardize the survival of the captured individuals;

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

1. This measure shall apply to all fishing vessels on the IOTC Record of Authorised Vessels.
2. Fishing Vessels flying the flag of an IOTC Member or Cooperating non-Contracting Party (CPCs) are prohibited from retaining on board, transshipping, landing, storing, selling or offering for sale any part or whole carcass of thresher sharks of all the species of the family Alopiidae, with the exception of paragraph 7.
3. CPCs shall require vessels flying their flag to promptly release unharmed, to the extent practicable, thresher sharks when brought along side for taking on board the vessel.
4. CPCs shall encourage their fishers to record and report incidental catches as well as live releases. These data will be then kept at the IOTC Secretariat.
5. Recreational and sport fishing shall release alive all caught animals of thresher sharks of all the species of the family Alopiidae. In no circumstances specimen shall be retained on board, transhipped, landed, stored, sold or offered for sale. The CPCs shall ensure that both recreational and sport fishermen carrying out fishing with high risk of catching thresher sharks are equipped with instruments suitable to release alive the animals.
6. CPCs shall, where possible, implement research on sharks of the species *Alopias* spp, in the Convention area in order to identify potential nursery areas. Based on this research, CPCs shall consider additional management measures, as appropriate.
7. 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 thresher sharks that are dead at haulback, provided that the samples are part of the research project approved by the Scientific Committee (or Working Party on Ecosystems and Bycatch (WPEB)). In order 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. Annual progress of the work and a final report on completion of the project shall be presented to the WPEB and the Scientific Committee.
8. The Contracting Parties, Co-operating non-Contracting Parties, especially those directing fishing activities for sharks, shall submit data for sharks, as required by IOTC data reporting procedures.
9. This Resolution supersedes Resolution 10/12 *On the Conservation of Thresher Sharks (Family Alopiidae) Caught in Association with Fisheries in the IOTC Area of Competence*.

APPENDIX J
RESOLUTION 12/10
TO PROMOTE IMPLEMENTATION OF CONSERVATION AND MANAGEMENT MEASURES ALREADY
ADOPTED BY IOTC

The Indian Ocean Tuna Commission (IOTC),

CONCERNED that IOTC Members and Cooperating Non-Contracting Parties (hereinafter referred to as “CPCs”), particularly developing CPCs, seem to find difficulties in implementing Conservation and Management Measures already adopted by the IOTC;

NOTING that among other things the major reasons for this situation could be:

- Lack of human and financial capacity to implement Conservation and Management Measures,
- Frequent addition of new such measures and modifications to existing ones,
- Complicated structure of Resolutions adopted by IOTC,
- Duplication of Resolutions on one subject.

CONSIDERING that streamlining of IOTC work and enhancement of capacity building are necessary to drastically promote implementation of Conservation and Management Measures;

FURTHER CONCERNED that little progress has been made by the WG on Compendium which was established by Resolution 11/01;

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

ESTABLISHMENT OF FUND FOR CAPACITY BUILDING

1. The Commission shall establish a special fund for capacity building in order to ensure compliance with Conservation and Management Measures adopted by the IOTC. This special fund shall be financed by voluntary contributions. The Secretariat shall contact international organizations, donor agencies and non-governmental organizations to seek voluntary financial contribution.
2. Using the special fund, the Commission shall, during the next three years (2012–2014), focus on, inter alia, (i) how to improve data collection in developing CPCs and (ii) implementation of Conservation and Management Measures.
3. At its plenary meeting in 2015, the Commission shall decide the next priority area for the period from 2015 to 2017.

LIMITATION TO THE NUMBER OF PROPOSALS TO BE CONSIDERED

4. The Commission may consider limiting the number of new proposals to be considered at one plenary meeting.

STREAMLINING OF RESOLUTIONS

5. The Commission shall consider streamlining existing Resolutions by:
 - a) Abolishing outdated Resolutions and then incorporating their important key elements into a latest one
 - b) Combining multiple Resolutions into one
6. For the purpose of paragraph 5 above, CPCs shall submit proposals by two months prior to each annual meeting. The annual meeting shall decide concrete actions on such streamlining.

APPENDIX K
RESOLUTION 12/11
ON THE IMPLEMENTATION OF A LIMITATION OF FISHING CAPACITY OF CONTRACTING PARTIES AND COOPERATING NON-CONTRACTING PARTIES

The Indian Ocean Tuna Commission (IOTC),

NOTING that the IOTC Scientific Committee during its Eleventh Session agreed that the total overcapacity is a major concern in all Oceans;

RECALLING the adoption by IOTC in 2003 of the Resolution 03/01 on the limitation of fishing capacity of IOTC Contracting Parties and Cooperating Non Contracting Parties; the adoption in 2006 of the Resolutions of the Resolution 06/05 on limitation of fishing capacity, in terms of number of vessels, of IOTC Contracting Parties and Cooperating Non Contracting Parties, and the adoption in 2007 of the Resolution 07/05 *on limitation of fishing capacity of IOTC Contracting Parties and Cooperating Non Contracting Parties in terms of number of vessels targeting swordfish and Albacore*;

RECOGNISING that FAO International Plan of Action for the Management of the Fishing Capacity (IPOA) provides, in its Objectives and Principles that "States and Regional Fisheries Organisations confronted with an overcapacity problem, where capacity is undermining achievement of long-term sustainability outcomes, should endeavour initially to limit at present level and progressively reduce the fishing capacity applied to affected fisheries";

TAKING INTO ACCOUNT the need to have due regard for the interests of all Members concerned, in conformity with the rights and obligations of those Members under international law and in particular, to the rights and obligations of developing countries of the Indian Ocean rim with respect to entry into the high-seas fisheries in the IOTC area of competence;

RECOGNISING the need to ensure the proper implementation of the Resolutions 03/01, 06/05 and 07/05, in order to allow the stabilisation of the level of fishing capacity active on the stocks of high commercial value under the IOTC responsibility, and to facilitate the work of the Scientific Committee to be able to provide the Commission with sound scientific advice;

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

1. Contracting Parties and Cooperating non-Contracting Parties (CPCs) shall notify to the IOTC Secretariat, by 31 December 2009, the lists of vessels, by gear type, over 24 meters overall length and over, and under 24 meters if the fished outside their EEZs, and corresponding overall capacity in GT, which have actively fished in accordance with the provision of IOTC Resolution 07/04:
 - for tropical tunas during the year 2006¹
 - for swordfish and albacore during the year 2007

Both lists shall include the vessel at that time considered under administrative process of construction.

2. In notifying their vessels fishing for tropical tunas in the area in 2006, and for swordfish and albacore in 2007, the CPCs shall confirm that they have verified the effective presence and fishing activities of their vessels in the IOTC area in 2006 and in 2007, through their VMS records, catch reports, port calls, or other means. The IOTC Secretariat shall have access to such information upon request.
3. This provision does not apply to those vessels included in the lists, but considered under administrative process of construction in 2006 and in 2007.

¹ Acknowledging that the catch levels and vessels presence in 2006 of certain Members is not representative of their historical presence, and consequently that these Members may increase the number of vessels present during the period of application of the Resolution to a maximum level operating in a season or year since 2000. These Members shall provide the Commission the identified number of vessels and corresponding capacity in GT by 31 December 2009.

4. Within the period of application of this Resolution, CPCs may change the number of their vessels, by gear type, provided that they can either demonstrate to the Commission, under the advice of the Scientific Committee that the change in the number of vessels, by gear type, does not lead to an increase of fishing effort on the fish stocks involved or where they are directly limiting catches using individual transferable quotas under a comprehensive national management plan which has been provided to the Commission.
5. CPCs shall ensure that where there is a proposed transfer of capacity to their fleet that the vessels to be transferred are on the IOTC Record of Vessels or on the Record of Vessels of other tuna Regional Fisheries Management Organizations. No vessels on the List of IUU Vessels of any Regional Fisheries Management Organization may be transferred.
6. The other CPCs which had the objective of developing their fleets following the provisions of IOTC Resolution 03/01, through the introduction to the IOTC of a fleet development plan, shall confirm, by 31 December 2009, *inter alia*, the type, size, gear and origin of the vessels included in the Fleet Development Plans and the programming (precise calendar for the forthcoming 10 years) of their introduction into the fisheries). All future fishing efforts shall be in accordance with such development Plans of the concerned CPCs.
7. The CPCs which have introduced a Fleet Development Plan, and have confirmed the information on the vessels included in those plans according to the provision of paragraph 3, shall implement their Plans according to their programming. Regarding CPCs which fail to introduce vessels in accordance with their Fleet Development Plans, the IOTC Compliance Committee and the Commission will give annual consideration to the problems related to the implementation of Fleet Development Plans.
8. The IOTC Compliance Committee shall verify, at any IOTC Plenary Session, the compliance of CPCs with the provisions of this Resolution, including the implementation, according to the notified programming, of the Fleet Development Plans.
9. In relation to the foregoing, the Commission will give due consideration to the interests of the developing coastal States, in particular small islands developing States and territories within the IOTC area of competence.
10. This Resolution is applicable during the years 2012 and 2013. The Commission shall review its implementation at the 2014 IOTC Session.
11. This Resolution supersedes Resolution 09/02 *on the implementation of a limitation of fishing capacity of Contracting Parties and Cooperating Non-Contracting Parties*.

APPENDIX L

RESOLUTION 12/12

TO PROHIBIT THE USE OF LARGE-SCALE DRIFTNETS ON THE HIGH SEAS IN THE IOTC AREA

The Indian Ocean Tuna Commission (IOTC),

RECALLING that the United Nations General Assembly (UNGA) Resolution 46/215 calls for a global moratorium on large-scale high seas driftnet fishing;

NOTING that a number of vessels continue to engage in large-scale high seas driftnet fishing in the Indian Ocean area (IOTC area of competence);

MINDFUL that any vessel fishing with large-scale driftnets on the high seas in the IOTC area of competence, or configured to conduct large-scale high seas driftnet operations, has the capacity to take species of concern to the IOTC and is likely to undermine the effectiveness of IOTC Conservation and Management Measures;

NOTING with concern that recent information indicates that such vessels are interacting more frequently with highly migratory species, such as tunas, swordfish, sharks, and other species covered by the IOTC Agreement; and that associated “ghost fishing” by lost or discarded driftnets have serious detrimental effects on these species of concern and the marine environment;

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

1. The use of large-scale driftnets¹ on the high seas within the IOTC area of competence shall be prohibited.
2. Each Contracting Party and Cooperating Non-Contracting party (hereinafter referred to as CPCs) shall take all measures necessary to prohibit their fishing vessels from using large-scale driftnets while on the high seas in the IOTC area of competence.
3. A CPC-flagged fishing vessel will be presumed to have used large-scale driftnets on the high seas in the IOTC area of competence if it is found operating on the high seas in the IOTC area of competence and is configured² to use large-scale driftnets.
4. Paragraph 3 shall not apply to a CPC-flagged vessel duly authorized to use large-scale driftnets in their EEZs. While on the high seas in the IOTC area of competence all of such driftnets and related fishing equipment shall be stowed or secured in such a manner that they are not readily available to be used for fishing.
5. CPCs shall include in their Annual Reports a summary of monitoring, control, and surveillance actions related to large-scale driftnet fishing on the high seas in the IOTC area of competence.
6. 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 IOTC area of competence. The first such assessment shall take place in 2013.
7. Nothing in this measure shall prevent CPCs from applying more stringent measures to regulate the use of large-scale driftnets.
8. This Resolution supersedes Resolution 09/05 *to prohibit the use of large-scale driftnets on the high seas in the IOTC area.*

¹ “Large-scale driftnets” are defined as gillnets or other nets or a combination of nets that are more than 2.5 kilometers in length whose purpose is to enmesh, entrap, or entangle fish by drifting on the surface of, or in, the water column.

² “Configured” to use large-scale drift-nets means having on board assembled gear that collectively would allow the vessel to deploy and retrieve large-scale driftnets.

APPENDIX M
RESOLUTION 12/13
FOR THE CONSERVATION AND MANAGEMENT OF TROPICAL TUNAS STOCKS IN THE IOTC
AREA OF COMPETENCE

The Indian Ocean Tuna Commission (IOTC),

RECOGNISING that based on past experience in the fishery, the potential production from the resource can be negatively impacted by excessive fishing effort;

TAKING INTO ACCOUNT the available scientific information and advice, in particular the IOTC Scientific Committee conclusions whereby the yellowfin and bigeye tuna stocks might have been over or fully exploited in recent years;

RECOGNISING that during the 12th IOTC scientific meeting held in Seychelles from 30 November to 04 December 2009, the Scientific Committee recommended that yellowfin and bigeye tuna catches should not exceed the MSY levels which have been estimated at 300,000 tonnes for yellowfin and at 110,000 tonnes for bigeye tuna;

ACKNOWLEDGING that the implementation of a TAC without a quota allocation would result in an inequitable distribution of the catches and fishing opportunities among the IOTC Members and Cooperating non-Contracting Parties (CPCs) and non-CPCs;

FURTHER RECOGNISING that the tuna artisanal fisheries sector needs strengthening in terms of catch statistics reporting in order to more closely follow the catch situations and notwithstanding improvement in the industrial fishery catch statistics reporting requirements;

NOTING the importance of applying the precautionary approach for the management of the tropical tuna and swordfish stock, in particular yellowfin and bigeye tuna in the Indian Ocean;

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

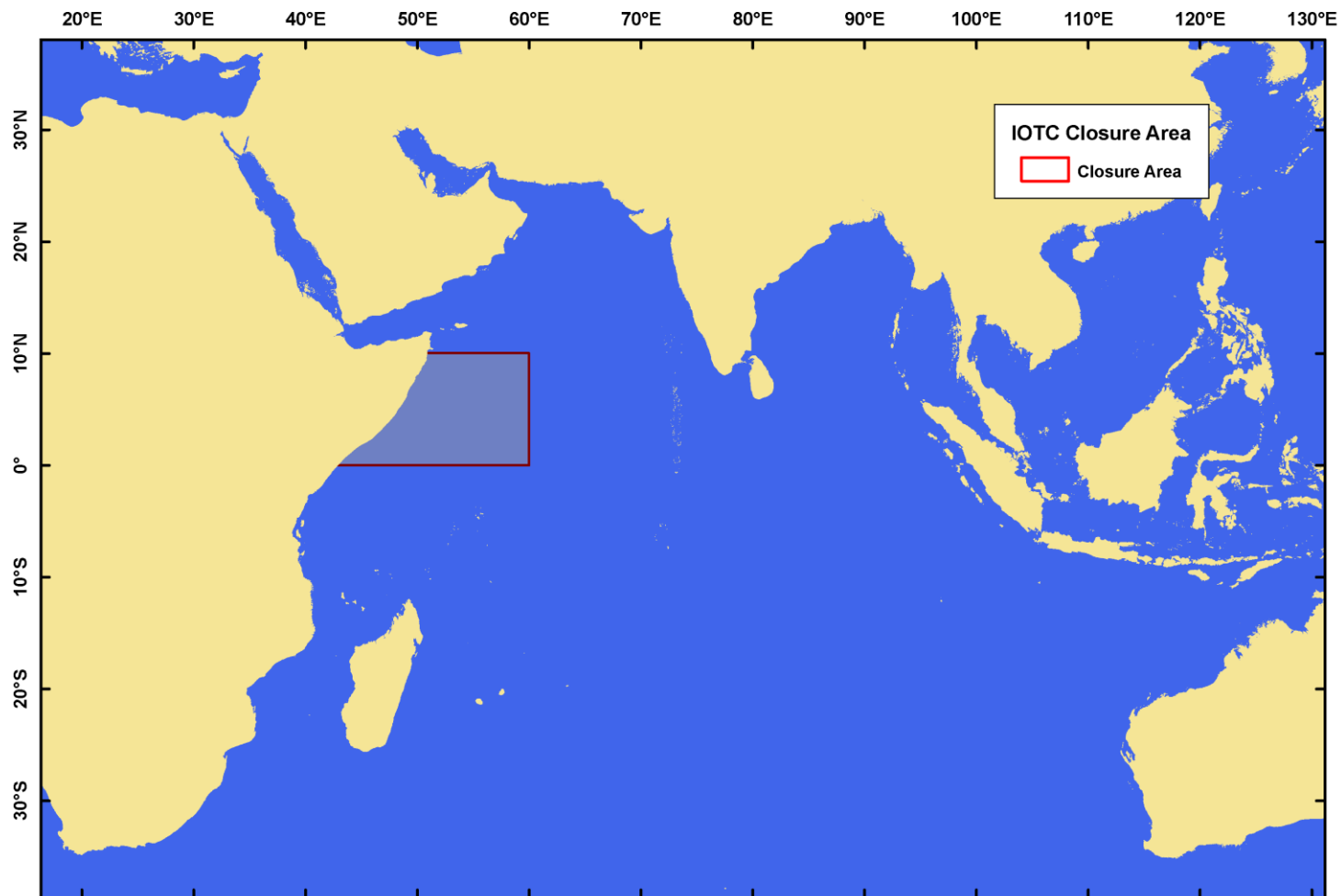
1. This resolution is applicable in 2011, 2012, 2013 and 2014 to all vessels of 24 meters overall length and over, and under 24 meters if they fish outside their EEZ, fishing within the IOTC area of competence.
2. With the view to decreasing the pressure on the main targeted stocks and in particular on the yellowfin tuna and bigeye tuna in the IOTC area of competence for the years 2011, 2012, 2013 and 2014, the area defined by the following coordinates (Annex1) will be closed for longline vessels in each year from 0000 hours on 1 February to 2400 hours on 1 March, and for purse-seine vessels in each year from 0000 hours on 1 November to 2400 hours on 1 December:

0 ° - 10° North

40° and 60° East
3. All vessels fishing within the IOTC area of competence in 2011, 2012, 2013 and 2014, regardless of the flag under which they operate or whether they change flag during the year, shall observe the area and period closure.
4. CPCs flag states shall monitor the compliance of their vessels with this Resolution, notably through VMS, and will provide a summary of VMS records related to their fleet operation in the previous year for the consideration of the Compliance Committee.
5. Fishing vessels that do not comply with IOTC Resolution 06/03 "*On establishing a vessel monitoring system programme*" are not allowed to be active in the IOTC area of competence.
6. Landings, transshipments and commercial transactions of all species, and their products, that have been positively identified as originating from fishing activities that contravene this resolution, are prohibited.
7. Each CPC shall no later than 45 days before the date of entry into force of a closure:

- a) take the necessary legal and administrative measures to implement the closure
 - b) inform all interested parties and their national tuna and tuna-like species industries of the closure
 - c) inform the IOTC Secretary that these steps have been taken
8. In order to have a more extensive knowledge of the exploitation rate of these species and also the assessment of the feasibility of near real time reporting, the IOTC CPCs agree to implement as soon as possible a pilot project within the framework of the port sampling programme under Resolution 11/04, with a view to enhancing the gathering of catch data related to the activities of the artisanal fishery sector and to establishing a catch reporting system.
- The pilot project shall be implemented for a 12 months period by the IOTC Secretariat in collaboration with the CPCs concerned.
- The pilot project will contribute relevant information to the work of the Scientific Committee in future revision of stock estimates and in the assessment of the reporting requirements in respect of catch quota reporting, particularly in the artisanal fisheries.
- The Scientific Committee will examine the results of the pilot project at its 2011 meeting and provide management advice to the Commission.
9. The Scientific Committee will provide at its 2010, 2011 and 2012 plenary Session any appropriate management options based on the Kobe II matrix (Annex 2) for the consideration of the Commission.
10. The Scientific Committee will provide at its 2011, 2012 and 2013 Plenary sessions:
- d) an evaluation of the closure area, specifying in its advice if a modification is necessary, its basic scientific rationale with an assessment of the impact of such a closure on the tropical tuna stocks, notably yellowfin and bigeye tuna
 - e) an evaluation of the closure time periods, specifying in its advice if a modification is necessary, its basic scientific rationale with an assessment of the impact of such a closure on the tropical tuna stocks, notably yellowfin and bigeye tuna
 - f) an evaluation of the impact on yellowfin and bigeye tuna stocks by catching juveniles and spawners taken by all fisheries. The Scientific Committee shall also recommend measures to mitigate the impacts on juvenile and spawners
 - g) any other advice on possible different management measures based on the Kobe II matrix, on the main targeted species under the IOTC competence
11. CPCs shall implement the following action plan:
- a) establishment of an allocation system (Quota) or any other relevant measures based on the Scientific Committee recommendations for the main targeted species under the IOTC competence
 - b) advice on the best reporting requirement of the artisanal tuna fisheries and implementation of an appropriate data collection system
 - c) the pilot project as specified in paragraph 8
12. A technical committee meeting shall be held prior to the Commission Plenary session in 2011 to discuss on allocation criteria for the management of the tuna resources of the Indian Ocean and recommend an allocation quota system or any other relevant measures. CPCs are encouraged to submit proposals one month prior to the meeting.
13. The Commission shall adopt an allocation quota system or any other relevant measure for the yellowfin and bigeye tunas at its plenary session in 2012.
14. This Resolution supersedes Resolution 10/01 *for the conservation and management of tropical tunas stocks in the IOTC area of competence.*

Annex 1



Annex 2

Strategy Matrix for Setting Management Measures

Management Target	Time Frame	Probability of Meeting Target			Data Rich/ Data Poor
		A%	B%	C%	
<Fishing Mortality Target>	In x years				
	In y years				
	In z years				

Management Target	Time Frame	Probability of Meeting Target			Data Rich/ Data Poor
		A%	B%	C%	
<Biomass Target>	In x years				
	In y years				
	In z years				

Management Target		Probability of Maintaining Status Quo			Data Rich/ Data Poor
		A%	B%	C%	
<Status Quo>					

APPENDIX N
RECOMMENDATION 12/14
ON INTERIM TARGET AND LIMIT REFERENCE POINTS

The Indian Ocean Tuna Commission (IOTC),

RECALLING that Article 6, paragraph 3, of the Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea of December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA), establishes the application of precautionary reference points as a general principle for sound fisheries management;

FURTHER RECALLING that Annex II, of UNFSA provides guidelines for the application of precautionary reference points in the conservation and management of straddling fish stocks and highly migratory fish stocks, including the adoption of provisional reference points when information for establishing reference points is absent or poor;

NOTING that Article 7.5.3 of the FAO Code of Conduct for Responsible Fisheries also recommends the implementation of stock specific target and limit reference points, *inter alia*, on the basis of the precautionary approach;

NOTING that recommendations 37 and 38 of the Performance Review Panel, adopted by the Commission as Resolution 09/01, indicate that pending the amendment or replacement of the IOTC Agreement to incorporate modern fisheries management principles, the Commission should implement the precautionary approach including, *inter alia*, precautionary reference points, as set forth in the UNFSA;

NOTING Resolution 12/01 *On the implementation of the precautionary approach* that recommends adoption of provisional reference points, and that the Scientific Committee proposed provisional values at its 14th Session;

RECOMMENDS, in accordance with paragraph 8 of Article IX of the IOTC Agreement, to the following:

1. When assessing stock status and providing recommendations to the Commission, the Scientific Committee should apply the following interim target and limit reference points for the species of tuna and tuna-like species listed in [Table 1](#). B_{MSY} refers to the biomass level for the stock that would produce the Maximum Sustainable Yield; F_{MSY} refers to the level of fishing mortality that produces the Maximum Sustainable Yield.

Table 1. Interim target and limit reference points.

Stock	Target Reference Point	Limit Reference Point
Albacore tuna	B_{MSY} ; F_{MSY}	40% of B_{MSY} ; 40% above F_{MSY}
Bigeye tuna	B_{MSY} ; F_{MSY}	50% of B_{MSY} ; 30% above F_{MSY}
Skipjack tuna	B_{MSY} ; F_{MSY}	40% of B_{MSY} ; 50% above F_{MSY}
Yellowfin tuna	B_{MSY} ; F_{MSY}	40% of B_{MSY} ; 40% above F_{MSY}
Swordfish	B_{MSY} ; F_{MSY}	40% of B_{MSY} ; 40% above F_{MSY}

2. These interim target and limit reference points shall remain in effect until the Commission adopts updated, species-specific reference points and harvest control rules, considering the scientific advice supplied by the Scientific Committee.
3. In implementing harvest control rules, the Commission, taking into account the advice of the Scientific Committee, shall act to ensure that there is a high probability of target reference points being reached and a low probability of limit reference points being breached. This may be achieved by managing fishing mortality at levels which will allow stock biomass to be maintained above its limit reference points and around its target reference points.

APPENDIX O
RECOMMENDATION 12/15
ON THE BEST AVAILABLE SCIENCE

The Indian Ocean Tuna Commission (IOTC),

RECOGNIZING the importance of sound scientific advice as the centre piece for the conservation and management of tuna and tuna-like species in the Indian Ocean and adjacent seas in line with international law and the information needs of the Commission;

AWARE that the availability of adequate scientific information is fundamental to carrying out the objectives of the IOTC Agreement laid down in its Article V;

EMPHASIZING the importance of the effective participation by all CPCs in the work of the Scientific Committee and its Working Parties;

RECOGNIZING the limited financial resources of developing coastal States and wishing to assist in building their scientific capacity;

ACKNOWLEDGING the need to improve the availability and quality of data and analysis used for the provision of scientific advice, including on bycatch and discards;

NOTING that participation of invited experts may advance the quality assurance of the scientific work of the Scientific Committee;

RECOGNIZING the need for broadening and streamlining the scope of financial support for capacity building for the purpose of this Recommendation;

BUILDING on the deliberations and recommendations of the Scientific Committee and of the Kobe process;

NOTING the importance of regular assessments of the performance of Regional Fisheries Management Organizations, including the functioning of their scientific committees;

RECOMMENDS, in accordance with the provisions of Article IX, paragraph 8 of the IOTC Agreement, that CPCs undertake to:

1. Take all measures which would be appropriate:
 - i. To improve the communication between CPCs, the Commission and the Scientific Committee by enabling a continuous dialogue, for example, through the use of electronic discussion groups and tele-/video conferencing
 - ii. To improve the collection and submission of data to the Secretariat, including on bycatch
 - iii. To support research programs and projects relevant to the information needs of the Commission
 - iv. To facilitate participation in meetings of the Scientific Committee, its Working Parties as well as in other relevant scientific bodies of scientists with suitable scientific qualifications
 - v. To contribute to the training of scientific researchers, including young scientists
2. Preserve and promote the professional independence and excellence of the Scientific Committee and its Working Parties, and the relevance of their work to the information needs of the Commission, by:
 - i. Enhancing the participation of scientists in meetings of the Scientific Committee and its Working Parties, including scientists involved in other tuna RFMOs and other relevant scientific bodies
 - ii. Drafting a code of conduct for the Scientific Committee, including for its Working Parties, for adoption by the Commission. For this purpose, the Scientific Committee may develop rules to avoid conflict of interests, to ensure the quality, relevance and professional independence of scientific activities and, where applicable, to maintain the confidentiality of the data used

- iii. Drafting a strategic plan for the Scientific Committee, including its Working Parties, for adoption by the Commission. The strategic plan shall be used to guide the work of the Scientific Committee, and Working Parties, in assisting the Commission to effectively achieve its mandate
 - iv. Ensuring that relevant, professionally independent and objective scientific advice, based on the best available and peer-reviewed scientific analysis, is presented by the Scientific Committee to the Commission
 - v. Ensuring that sources and history of revisions of all documents submitted to and assessed by the Scientific Committee and its Working Parties are fully documented
 - vi. Providing clear, transparent, and standardized formats for the provision of advice to the Commission
 - vii. Providing for well-defined rules for formulating scientific advice to the Commission, reflecting different views while striving for consensus, to promote consistency and transparency
3. Strengthen peer review mechanisms within the Scientific Committee by participation of invited experts (e.g. from other RFMOs or from academia) in the Scientific Committee activities. These experts shall be subject to the data confidentiality rules and procedures currently applicable in the IOTC.
 4. Continue to support the Scientific Committee's initiatives to publish its scientific findings in the scientific peer-reviewed academic literature.
 5. With the aim of meeting the above-mentioned objectives, consider broadening financial support and mechanisms, including *inter alia*, contributing to the "Meeting Participation Fund" for Developing IOTC Contracting Parties, for the purpose of the implementation of this Resolution, in particular to:
 - i. Contribute to the scientific capacity building of the developing CPCs and to enhance their effective participation in the work of the Scientific Committee and its Working Parties
 - ii. Provide necessary resources for the Scientific Committee and its Working Parties, including consideration of alternative funding models for the commissioning of research
 6. The next independent performance review of IOTC should assess the functioning of the Scientific Committee and its Working Parties as a total quality management process, including an evaluation of the potential role of external reviews.