

## REVIEW OF CONSERVATION AND MANAGEMENT MEASURES RELATING TO DATA AND STATISTICS

PREPARED BY: IOTC SECRETARIAT, 14 NOVEMBER 2013

### PURPOSE

To encourage participants at the Working Party on Data Collection and Statistics (WPDCS) to review the existing Conservation and Management Measures (CMM) relating to data collection and statistics, noting the CMMs contained in document IOTC–2013–WPDCS09–03; and as necessary to 1) provide recommendations to the Scientific Committee on whether modifications may be required; and 2) recommend whether other CMMs may be required.

### BACKGROUND

In addition to the CMMs outlined in document IOTC–2013–WPDCS09–03, IOTC fisheries are currently subject to a range of other CMMs adopted by the Commission. In an attempt to focus the efforts of the WPDCS participants may wish to annually review several of the key CMMs which are clearly based on scientific advice, or which match current requests from the Commission. The following are a list of the key CMMs for the consideration of the WPDCS09. At the next meeting, a range of other CMMs may be presented for discussion.

**Resolution 11/04 *On a regional observer scheme*.** This resolution puts in place a programme comprising national observer schemes to collect verified catch data and other scientific data related to the fisheries for tuna and tuna-like species in the IOTC area. The programme initially covers 5% of the operations of the vessels over 24 m and will include, progressively up to 5% of their operations in 2013, vessel under 24 m that fish outside their EEZs. Artisanal fishing landings shall also be progressively monitored at port by observers. Australia noted that a significant number of vessels less than 24 m long fish on the high seas in the IOTC Area, and the exclusion of these vessels at the start of the programme will result in a considerable loss of valuable information ([Appendix I](#)).

**Resolution 10/02 *Mandatory statistical requirements for IOTC Members and Cooperating Non-Contracting Parties (CPC's)*.** This resolution sets out mandatory minimum requirements for the annual submission of fisheries statistics to the IOTC Secretariat. This resolution applies to all tuna and tuna-like species, including all billfish species ([Appendix II](#)).

### DISCUSSION

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

### RECOMMENDATION

That the WPDCS **NOTE** paper IOTC–2013–WPDCS09–05 which aimed to encourage the WPDCS to review the existing Conservation and Management Measures (CMMs) relating to data and statistics, and as necessary to 1) provide recommendations to the Scientific Committee on whether modifications may be required; and 2) recommend whether other CMMs may be required.

### APPENDICES

**Appendix I:** [Resolution 11/04 on a regional observer program](#)

**Appendix II:** [Resolution 10/02 mandatory statistical requirements for IOTC Members and Cooperating Non-Contracting Parties \(CPC's\)](#)

**APPENDIX I**  
**RESOLUTION 11/04**  
**ON A REGIONAL OBSERVER SCHEME**

**The Indian Ocean Tuna Commission (IOTC),**

TAKING INTO ACCOUNT the need to increase the scientific information, in particular to provide the IOTC Scientific Committee working material in order to improve the management of the tuna and tuna-like species fished in the Indian Ocean;

REITERATING the responsibilities of flag States to ensure that their vessels conduct their fishing activities in a responsible manner, fully respecting IOTC Conservation and Management Measures;

CONSIDERING the need for action to ensure the effectiveness of the IOTC objectives;

CONSIDERING the obligation of all IOTC Contracting Parties and Cooperating Non-Contracting Parties (hereinafter CPCs) to fully comply with the IOTC Conservation and Management Measures;

AWARE of the necessity for sustained efforts by CPCs to ensure the enforcement of IOTC's Conservation and Management Measures, and the need to encourage Non-Contracting Parties (NCPs) to abide by these measures;

UNDERLINING that the adoption of this measure is intended to help support the implementation of Conservation and Management Measures as well as scientific research for tuna and tuna-like species;

CONSIDERING the provisions set forth in Resolution 10/04 *On A Regional Observer Scheme*, adopted by the Commission;

CONSIDERING the deliberations of the 12<sup>th</sup> Session of the IOTC Scientific Committee held in Victoria, Seychelles from 30 November to 4 December 2009

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

**Objective**

1. The objective of the IOTC observer scheme shall be to collect verified catch data and other scientific data related to the fisheries for tuna and tuna-like species in the IOTC area of competence.

**Observer Scheme**

2. In order to improve the collection of scientific data, at least 5 % of the number of operations/sets for each gear type by the fleet of each CPC while fishing in the IOTC area of competence of 24 meters overall length and over, and under 24 meters if they fish outside their Exclusive Economic Zone (EEZ) shall be covered by this observer scheme. For vessels under 24 meters if they fish outside their EEZ, the above mentioned coverage should be achieved progressively by January 2013.
3. When purse seiners are carrying an observer<sup>1</sup> as stated in paragraph 1, this observer shall also monitor the catches at unloading to identify the composition of bigeye tuna catches. The requirement for the observer to monitor catches at unloading is not applicable to CPCs already having a sampling scheme, with at least the coverage set out in paragraph 2.
4. The number of the artisanal fishing vessels landings shall also be monitored at the landing place by field samplers<sup>2</sup>. The indicative level of the coverage of the artisanal fishing vessels should progressively increase towards 5% of the total levels of vessel activity (i.e. total number of vessel trips or total number of vessels active).
5. CPCs shall:

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<sup>1</sup> Observer: a person who collects information on board fishing vessels. Observer programmes can be used for quantifying species composition of target species, bycatch, by-products and dead discards, collecting tag returns, etc.

<sup>2</sup> Field sampler: a person who collects information on land during the unloading of fishing vessels. Field sampling programmes can be used for quantifying catch, retained bycatch, collecting tag returns, etc.

- a) Have the primary responsibility to obtain qualified observers. Each CPC may choose to use either deployed national or non-national of the flag State of the vessel on which they are deployed;
  - b) Endeavour that the minimum level of coverage is met and that the observed vessels are a representative sample of the gear types active in their fleet;
  - c) Take all necessary measures to ensure that observers are able to carry out their duties in a competent and safe manner;
  - d) Endeavour to ensure that the observers alternate vessels between their assignments. Observers are not to perform duties, other than those described in paragraphs 10 and 11 below;
  - e) Ensure that the vessel on which an observer is placed shall provide suitable food and lodging during the observer's deployment at the same level as the officers, where possible. Vessel masters shall ensure that all necessary cooperation is extended to observers in order for them to carry out their duties safely including providing access, as required, to the retained catch, and catch which is intended to be discarded.
6. The cost of the observer scheme in paragraph 2 and 3 shall be met by each CPC.
7. The sampling scheme referred in paragraph 4 will be covered by the Commission's accumulated funds and voluntary contribution on a provisional basis. The Commission will consider an alternative for the financing of this scheme.
8. If the coverage referred in paragraphs 2 and 3 is not met by a CPC, any other CPC may, subject to the consent of the CPC who has not met its coverage, place an observer to fulfil the tasks defined in the paragraphs 1 and 2 until that CPC provides a replacement or the target coverage level is met.
9. CPCs shall provide to the IOTC Executive Secretary and the IOTC Scientific Committee annually a report of the number of vessels monitored and the coverage achieved by gear type in accordance with the provisions of this Resolution.
10. Observers shall:
- a) Record and report fishing activities, verify positions of the vessel;
  - b) Observe and estimate catches as far as possible with a view to identifying catch composition and monitoring discards, by-catches and size frequency;
  - c) Record the gear type, mesh size and attachments employed by the master;
  - d) Collect information to enable the cross-checking of entries made to the logbooks (species composition and quantities, live and processed weight and location, where available); and
  - e) Carry out such scientific work (for example, collecting samples), as requested by the IOTC Scientific Committee.
11. 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 IOTC Executive Secretary, who shall make the report available to the IOTC 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.
12. The confidentiality rules set out in the Resolution 98/02 [superseded by [Resolution 12/02](#)] *Data confidentiality policy and procedures* for fine-scale data shall apply.
13. Field samplers shall monitor catches at the landing place with a view to estimating catch-at-size by type of boat, gear and species, or carry out such scientific work as requested by the IOTC Scientific Committee.
14. The funds available from the IOTC balance of funds may be used to support the implementation of this programme in developing States, notably the training of observers and field samplers.
15. The elements of the Observer Scheme, notably those regarding its coverage, are subject to review and revision, as appropriate, for application in 2012 and subsequent years. Basing on the experience of other Tuna

RFMOs, the IOTC Scientific Committee will elaborate an observer working manual, a template to be used for reporting (including minimum data fields) and a training program.

16. This Resolution supersedes Resolution 10/04 *On A Regional Observer Scheme*.

**APPENDIX II**  
**RESOLUTION 10/02**

**MANDATORY STATISTICAL REQUIREMENTS FOR IOTC MEMBERS AND COOPERATING NON-  
CONTRACTING PARTIES (CPC'S)**

**The Indian Ocean Tuna Commission (IOTC)**

GIVEN 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 Organisation (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 organization;

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;

COGNISANT that the above commitment can only be achieved when Members meet the requirements of Article XI of the IOTC Agreement i.e. to provide statistical and other data and information to minimum specifications and in a timely manner;

ACKNOWLEDGING that the IOTC Scientific Committee has repeatedly stressed the importance of the timeliness of data submissions;

GIVEN that the activities of supply vessels and the use of Fish Aggregating Devices (FAD) are an integral part of the fishing effort exerted by the purse seine fleet;

CONSIDERING the provisions set forth in Resolution 08/01 [superseded by [Resolution 10/02](#)] on *mandatory statistical requirements for IOTC Members and Cooperating Non-Contracting parties (CPCs)*, adopted by the Commission in 2008;

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

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

1. CPC's shall provide the following information to the IOTC Secretariat according to the timelines specified in paragraph 6:
2. **Nominal catch data:**  
Estimates of the total annual catch by species and gear for all species under the IOTC mandate.
3. **Catch and effort data:**
  - a) **For surface fisheries:** catch weight by species and fishing effort shall be provided by 1° grid area and month strata. Purse seine fishery data shall be stratified by fishing mode (e.g. free swimming schools or schools in association with floating objects). The data shall be extrapolated to the total national monthly catches for each gear. Documents describing the extrapolation procedures (including raising factors corresponding to the logbook coverage) shall also be submitted routinely.
  - b) **Longline fisheries:** catch by species, in numbers or weight, and effort as the number of hooks deployed shall be provided by 5° grid area and month strata. Documents describing the extrapolation procedures (including raising factors corresponding to the logbook coverage) shall also be submitted routinely. For the work of relevant working parties under the IOTC Scientific Committee, longline data should be of a resolution of 1° grid area and month or finer. These data would be for the exclusive use of IOTC

scientists, subject to the approval of the data owners and IOTC Resolution 98/02 [[superseded by Resolution 12/02](#)] *Data confidentiality policy and procedures*, and should be provided for scientific use in a timely fashion.

- c) **For coastal fisheries:** available catch by species, fishing gear and fishing effort shall be submitted frequently and may be provided using an alternative geographical area if it better represents the fishery concerned.

These provisions, applicable to tuna and tuna-like species, shall also be applicable to the most commonly caught shark species and, where possible, to the less common shark species. CPC's are also encouraged to record and provide data on species other than sharks and tunas taken as bycatch.

4. **Size data:**

Size data shall be provided for all gears and for all species covered by the IOTC mandate according to the guidelines set out by the IOTC Scientific Committee. Size sampling shall be run under strict and well described random sampling schemes which are necessary to provide unbiased figures of the sizes taken. Sampling coverage shall be set to at least one fish measured by ton caught, by species and type of fishery, with samples being representative of all the periods and areas fished. Alternatively, size data for longline fleets may be provided as part of the Regional Observer Scheme where such fleets have at least 5% observer coverage of all fishing operations. Length data by species, including the total number of fish measured, shall be submitted by a 5° grid area by month, by gear and fishing mode (e.g. free swimming schools or schools in association with floating objects for the purse seiners). Documents covering sampling and raising procedures shall also be provided, by species and type of fishery.

5. Given that the activities of supply vessels and the use of **Fish Aggregating Devices (FAD)** are an integral part of the fishing effort exerted by the purse seine fleet, the following data shall be provided:

- a) The number and characteristics of supply vessels: (i) operating under their flag, (ii) assisting purse seine vessels operating under their flag, or (iii) licensed to operate in their exclusive economic zones, and that have been present in the IOTC Area;
- b) Number of days at sea by supply vessels by 1° grid area and month to be reported by the flag state of the supply vessel;
- c) The total number and type of FADs set by the supply vessel and purse seine fleet per quarter. Types of FADs are defined as 1) drifting log or debris, 2) drifting raft or fad with a net, 3) drifting raft or fad without a net, 4) other (e.g. Payao, dead animal etc). All types monitored by a tracking system.

These data would be for the exclusive use of IOTC scientists, subject to the approval of the data owners and Resolution 98/02 [[superseded by Resolution 12/02](#)] *Data confidentiality policy and procedures*, and should be provided in a timely fashion.

6. **Timeliness of data submission to the IOTC Secretariat:**

- a) Longline fleets operating in the high seas shall provide provisional data for the previous year no later than 30 June. Final data shall be submitted no later than 30 December;
- b) All other fleets (including supply vessels) shall submit their final data for the previous year no later than 30 June;
- c) In case where the final statistics cannot be submitted by that date, at least preliminary statistics should be provided. Beyond a delay of two years, all revisions of historical data should be formally reported and duly justified. These reports should be made on forms provided by the IOTC Secretariat and reviewed by the IOTC Scientific Committee. The IOTC Scientific Committee will advise the IOTC Secretariat if revisions are then accepted for scientific use.

7. This Resolution supersedes Resolution 08/01 on *Mandatory statistical requirements for IOTC Members and Cooperating Non-Contracting parties (CPCs)*.