

OUTCOMES OF THE 19th SESSION OF THE SCIENTIFIC COMMITTEE

PREPARED BY: IOTC SECRETARIAT¹, 31 OCTOBER 2017

PURPOSE

To inform participants at the 13th Working Party on Data Collection and Statistics (WPDCS13) of the recommendations arising from the 19th Session of the Scientific Committee (SC19) held from 1-5 December 2016, specifically relating to the work of the WPDCS.

BACKGROUND

At the 19th Session of the SC, the SC noted and considered the recommendations made by the WPDCS in 2016 that included modifications to national statistical systems.

Based on the recommendations arising from the WPDCS12, the SC19 adopted a set of recommendations, provided at [Appendix A](#) of this paper.

The recommendations contained in [Appendix A](#) were provided to the Commission for consideration at its 21st Session held in May 2017. A separate paper, IOTC–2017–WPDCS13–04 addresses the responses and actions of the Commission.

In addition, the SC19 reviewed and endorsed a Program of Work for the WPDCS, as detailed in [Appendix B](#). A separate paper (IOTC–2017–WPDCS13–09) will outline the review and further development of a *Program of Work* for the WPDCS for the next five years.

DISCUSSION

In addition to the recommendations outlined in [Appendix A](#) and [Appendix B](#), the following extracts from the SC19 Report (IOTC–2016–SC19–R) are provided here for the consideration and action of the WPDCS13:

Further analysis of length frequency data and likely impacts on the assessments

(Para. 110) The SC **NOTED** paper IOTC-2016-WPDCS12-INF05 that provides updates on the relationship between fork length and total weight for yellowfin, bigeye, and skipjack caught with purse seine and **NOTING** that the current length-weight relationships adopted by IOTC tend to underestimate the weight at length for the two latter species **AGREED** that the new length - weight relationships replace the existing IOTC ones.

Resolution 15/02 Mandatory statistical requirements for IOTC Members and Cooperating Non-Contracting Parties (CPCs)

(Para. 111) The SC also **NOTED** the conceptual model adopted by ICCAT in its field manual to describe all quantities involved in the determination of retained and total catch and **AGREED** that a similar approach is adopted and used to provide clearer, more formal definitions of the depicted relevant concepts.

Resolution 16/01 On an interim plan for rebuilding the Indian Ocean yellowfin tuna stock

(Para. 112) The SC **AGREED** that a project be included in the WPDCS program of work to support CPCs in the improvement of their national data collection systems to support the implementation of Resolution 16/01 *On an interim plan for rebuilding the Indian Ocean Yellowfin tuna stock*; specifically estimates of fleet composition, time-area catches (and associated catches on the high seas for vessels under 24 metres), and efficiencies in the time required to assess the status of yellowfin tuna catches.

¹ IOTC-secretariat@fao.org; Mr. Fabio Fiorellato, fabio.fiorellato@fao.org

Resolution 16/04 On the implementation of a pilot project in view of promoting the regional observer scheme

(Para. 113) Resolution 11/04 *On a Regional Observer Scheme* requests the submission of a report after each trip but the SC **AGREED** that on the next revision of the Resolution, this should be amended to request the submission of electronic data (instead of the observer trip reports) with a fixed deadline so that information from multiple trips can be provided.

ROS E-reporting and E-monitoring projects

(Para. 115) The SC **NOTED** that the guidelines described in document IOTC-2016-WPDCS12-23 provide a useful starting point and **AGREED** these guidelines be adopted as a basis for defining minimum standards for tropical tuna purse seine fleets.

General discussion on data issues

(Para.118) The SC **NOTED** with concern the lack of information submitted by CPCs on total catches, catch and effort and size data for various IOTC species, despite their mandatory reporting status. For many IOTC stocks the IOTC Secretariat is required to estimate the level of catches, which increases the uncertainty of the stock assessment results using this data.

(Para.119) The SC **REQUESTED** that CPCs comply with IOTC data requirements as requested per Resolution 15/01 and 15/02, given the gaps in available information in the IOTC database and the importance of basic fishery data in order to assess the status of stocks and for the provision of sound management advice, noting the adoption of Resolution 16/06 *On measures applicable in case of non-fulfilment of reporting obligations in the IOTC* and possibility of penalty measures for non-compliance of Resolutions 15/01 and 15/02.

RECOMMENDATION

That the WPDCS:

- 1) **NOTE** paper IOTC–2017–WPDCS13–03 which outlined the main outcomes of the 19th Session of the Scientific Committee, specifically related to the work of the WPDCS.
- 2) **CONSIDER** how best to progress these issues at the present meeting.

APPENDICES

Appendix A: Consolidated set of recommendations of the 19th Session of the Scientific Committee (1-5 December 2016) to the Commission, relevant to the Working Party on Data Collection and Statistics.

Appendix B: Program of Work (2017–2021) for the IOTC Working Party on Data Collection and Statistics (WPDCS).

APPENDIX A

CONSOLIDATED SET OF RECOMMENDATIONS OF THE 19th SESSION OF THE SCIENTIFIC COMMITTEE (1-5 DECEMBER 2016) TO THE COMMISSION RELEVANT TO THE WORKING PARTY ON DATA COLLECTION AND STATISTICS

Extract of the Report of the 19th Session of the Scientific Committee

(IOTC-2016-SC19-R; Appendix XXXVII, PAGES 213-215)

GENERAL RECOMMENDATIONS TO THE COMMISSION

Report of the 12th Session of the Working Party on Data Collection and Statistics (WPDCS12)

Further analysis of length frequency data and likely impacts on the assessments

SC19.31 (para. 109) The SC **RECOMMENDED** that a collaborative work on longline size frequency data gathering scientists from Taiwan, China, Japan, Seychelles and Rep. of Korea should be conducted in 2017 in conjunction with the joint CPUE workshop, to compare the different data sets available and extract information useful for the future stock assessments of yellowfin, bigeye and albacore tuna.

Capacity Building Activities: Data Collection and Processing in Coastal Countries, and Compliance with Minimum Requirements

SC19.32 (para. 116) The SC **RECOMMENDED** that a capacity building workshop on R data extraction, manipulation and data visualisation takes place in 2017, **NOTING** that funding sources have to be sought and that Sri Lanka has expressed strong interest in this type of activity.

General discussion on data issues

SC19.33 (para. 120) The SC **NOTED** the issues with lack of data and poor quality data problems that were identified throughout the working party reports and strongly **RECOMMENDED** that these issues are addressed through improved compliance with Resolutions 15/01 *On the recording of catch and effort data by fishing vessels in the IOTC area of competence*, and 15/02 *Mandatory statistical reporting requirements for IOTC contracting parties and cooperating non-contracting parties*.

Summary discussion of matters common to Working Parties (capacity building activities – stock assessment course; connecting science and management, etc.)

Data collection and capacity building

SC19.34 (para. 121) The SC **AGREED** that, while external funding is helping the work of the Commission, funds allocated by the Commission to capacity building are still too low, considering the range of issues identified by the SC and its Working Parties, particularly in relation to the implementation of the Regional Observer Scheme and data collection and reporting for artisanal fisheries and **RECOMMENDED** that the Commission further increases the IOTC Capacity Building budget to fund these activities in the future.

Meeting participation fund

SC19.35 (para. 123) The SC reiterated its **RECOMMENDATION** that the IOTC Rules of Procedure (2014), for the administration of the Meeting Participation Fund be modified so that applications are due not later than 60 days, and that the full Draft paper be submitted no later than 45 days before the start of the relevant meeting. The aim is to allow the Selection Panel to review the full paper rather than just the abstract, and provide guidance on areas for improvement, as well as the suitability of the application to receive funding using the IOTC MPF. The earlier submission dates would also assist with Visa application procedures for candidates.

IOTC species identification guides: Tuna and tuna-like species

SC19.36 (para. 124) The SC **RECOMMENDED** that the Commission allocates budget towards continuing the translation and printing of the IOTC species ID guides so that hard copies of the identification cards can continue to be printed as many CPCs scientific observers, both on board and port, still do not have smart phone technology/hardware access and need to have hard copies on board.

IOTC Secretariat staffing

SC19.37 (para. 126) **NOTING** the very heavy workload at the IOTC Secretariat and the ever increasing demands by the Commission and the Scientific Committee, and also the capacity to respond to requests for

assistance by countries, the SC **RECOMMENDED** that the recommendation from the Performance Review PRIOTC02.07(g) is implemented, and that permanent staff of the IOTC Data and Science Section be increased by two (2) (1 x P4 and 1 x P3 level positions), supplemented by additional short-term consultants, to commence work by 1 January 2018 or earlier, and that funding for these new positions should come from both the IOTC regular budget and from external sources to reduce the financial burden on the IOTC membership.

Collaborative Longline CPUE

SC19.38 (para. 127) The SC **ACNOWLEDGED** the work of the WPTT and WPTmT and especially improvements in the joint CPUE standardization work which is critical for reliably estimating the stocks. The SC **NOTED** that the joint CPUE has become a critical component for the assessments of temperate and tropical tuna species and the SC **RECOMMENDED** that this work continue under the current framework, but that plans should be developed to formalize the process within the IOTC in the near future.

APPENDIX B

PROGRAM OF WORK (2017–2021) FOR THE SCIENTIFIC COMMITTEE AND ITS SUBSIDIARY BODIES

The SC **NOTED** the proposed Program of Work and priorities for each of the Working Parties and **AGREED** to a consolidated Program of Work as outlined in Appendix XXXIVa-g. The Chairpersons and Vice-Chairpersons of each working party shall ensure that the efforts of their working party are focused on the core areas contained within the appendix, taking into account any new research priorities identified by the Commission at its next Session. (IOTC–2016–SC19–R, Para. 170)

Working Party on Data Collection and Statistics (WPDCS)

(Extracts from IOTC–2016–WPDCS12–R: Appendix V)

The following is the Draft List of Priorities for the Development of a Program of Work by the IOTC WPDCS (2017–2021) and is based on the specific requests of the Commission and Scientific Committee. The Draft List of Priorities is presented in Table A, noting that the Programme of Work and timeline for implementation would be developed by the SC once it has agreed to the priority projects across all of its Working Parties:

Table A. High priority topics, by project for data collection and statistics in the Indian Ocean.

Topic	Sub-topic and project	Rank
Data Collection Standards - ROS	Artisanal fisheries <ul style="list-style-type: none"> ➤ For countries that are known for already having well established sampling systems in place, assess the outcomes / review the projects and proceed with immediate actions and support (if needed). ➤ Assessment of the status of all countries whose sampling systems are not fully known or established. ➤ Develop minima data requirements for the routine collection of data at the landing place, through sampling by enumerators ➤ Develop General Guidelines for data collection from artisanal fisheries; including development of a set of indicators to be used to assess the quality of data collection and management systems for artisanal fisheries ➤ Develop/Amend Fisheries specific data collection protocols, by country, where necessary ➤ Assist implementation of pilot sampling activities in countries/fisheries not/insufficiently sampled in the past; priority to be given to the following fisheries: <ul style="list-style-type: none"> • Coastal fisheries of Indonesia • Coastal fisheries of Pakistan • Coastal fisheries of Sri Lanka • Coastal fisheries of Yemen • Coastal fisheries of Madagascar • Coastal fisheries of Comoros • Coastal fisheries of Tanzania • Coastal fisheries of Thailand • Coastal fisheries of Malaysia 	1
	Industrial fisheries <ul style="list-style-type: none"> ➤ Develop General Guidelines for data collection by at-sea observers; including development of a set of indicators to be used to assess the quality of data collection and management systems for industrial fisheries ➤ Organize a Regional Workshop on the Implementation of the IOTC Regional Observer Scheme 	1

Topic	Sub-topic and project	Rank
	<ul style="list-style-type: none"> ➤ Develop/Amend fisheries specific at-sea observer data collection protocols, by country, where necessary ➤ Assist implementation of at-sea observer schemes in countries/fisheries not/insufficiently monitored in the past; including: <ul style="list-style-type: none"> • Evaluation of existing observer schemes and arrangements • Coordination of country/fishery specific Training Sessions and Workshops on the ROS • Assistance to data management and reporting Priority to be given to the following fisheries: <ul style="list-style-type: none"> • Iran (driftnet, purse seine) • Sri Lanka (purse seine, drifting gillnet & longline) • Indonesia (longline) • Pakistan (driftnet) • India (longline) • Mauritius (purse seine, longline) 	
Assistance to CPCs for the fulfilment of Resolution 16/01 mandate	➤ Provide support to identified CPCs to increase their level of monitoring and reporting in accordance with paragraph 8 of Resolution 16/01	1
Review Size Data Longline Fisheries	➤ Assistance to historical review of length frequency data for longline fisheries, in particular longliners from Taiwan,China and Japan	1
Compliance with IOTC Data Requirements	Data support missions <ul style="list-style-type: none"> ➤ Identification of indicators to assess performance of IOTC CPCs against IOTC Data Requirements; evaluation of performance of IOTC CPCs with those Requirements; development of plans of action to address the issues identified, including timeframe of implementation and follow-up activities required. 	2
Implementation Data Collection Sport Fisheries	➤ Produce a catalogue of sport fisheries in the Indian Ocean; facilitate collection and reporting of data from sport clubs; training of local staff.	4
IOTC Data access	➤ Design and implementation of a metadata catalogue to describe information and processes made available by IOTC followed by the development of software libraries (in the most widely adopted languages for statistical analysis, e.g. R, Python etc.) to simplify scientists' access to IOTC Remote data services.	3