

## OUTCOMES OF THE 20<sup>th</sup> SESSION OF THE SCIENTIFIC COMMITTEE

PREPARED BY: IOTC SECRETARIAT<sup>1</sup>, 19 OCTOBER 2018

### PURPOSE

To inform participants at the 14<sup>th</sup> Working Party on Data Collection and Statistics (WPDCS14) of the recommendations arising from the 20<sup>th</sup> Session of the Scientific Committee (SC20) held from 30 November - 4 December 2017, specifically relating to the work of the WPDCS.

### BACKGROUND

At the 20<sup>th</sup> Session of the SC, the SC noted and considered the recommendations made by the WPDCS in 2017 that included modifications to national statistical systems.

Based on the recommendations arising from the WPDCS13, the SC20 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 22<sup>nd</sup> Session held in May 2018. A separate paper, IOTC–2018–WPDCS14–04 addresses the responses and actions of the Commission.

In addition, the SC20 reviewed and endorsed a Program of Work for the WPDCS, as detailed in [Appendix B](#). A separate paper (IOTC–2018–WPDCS14–09) 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 SC20 Report (IOTC–2017–SC20–R) are provided here for the consideration and action of the WPDCS14:

#### ***Resolution 17/01 On an interim plan for rebuilding the Indian Ocean yellowfin tuna stock***

(Para. 108) The SC noted that, although no scientific papers were presented at the WPDCS13 directly addressing discussions of definitions of Alternative Management Measures, these were discussed as a possible way to address the issue of correctly monitoring yellowfin tuna catches during periods close to the end of the year, as described by EU-France and EU-Italy PS fleets in document IOTC–2017–WPDCS13–21.

(Para. 109) The SC **REQUESTED** that collaborative work is carried out by different purse seine fleets active in the Indian Ocean, so as to increase the frequency of production of corrected estimates of yellowfin tuna catches to monitor yellowfin quota consumption and **REQUESTED** the WPTT and WPM to investigate additional or complementary management measures (e.g., input control measures) for purse seiners and other gears that will facilitate the control and monitoring of the management measures adopted by IOTC.

#### ***Resolution 17/08 Procedures on a fish aggregating devices (FADs) management plan, including a limitation on the number of FADs, more detailed specifications of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species***

(Para. 110) The SC noted the lack of consensus from participants of the WPDCS13 regarding the classifications to model FAD types and FAD activity types for data reporting purposes, following suggestions presented by IOTC–2017–WPDCS13–27 and the IOTC Secretariat's comments reported in IOTC-2017-WPDCS13-INF03, and **REQUESTED** that the issue be addressed intersessionally between members of the scientific community, the industry and the IOTC Secretariat in order to submit a revised form to be discussed at the next WPTT and WPDCS.

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(Para. 111) The SC acknowledged the request that, in the interim period, data providers continue to submit FAD activity data using the existing IOTC Form 3\_FA and its current categories, and **REQUESTED** that the IOTC Secretariat provide clarifications on definitions of FAD activity in the context of the IOTC classifications to ensure consistency in the data submissions. The SC **REQUESTED** the addition of a *FAD ownership* field to the list of mandatory information to be collected by IOTC Form 3\_FA, as this was considered necessary to model and report the tracking status of all FADs (*i) monitored and owned, ii) not monitored, iii) monitored and not owned*), subject to a recorded activity.

#### ***ROS E-reporting and E-monitoring projects***

(Para. 113) The SC noted that EMS are intended to complement human observer programs and also collect other useful information, and encouraged that different – but mutually compatible EMS systems – conform to harmonized standards in terms of installation, data collection and reporting, and **REQUESTED** that purse seine fleets or CPCs wishing to voluntarily implement EMS in purse seiners follow the guidelines described in document IOTC–2017–WPDCS13–26 and IOTC-2016-SC19-15.

(Para. 114) The SC noted that the feasibility and range of data collected by Electronic Monitoring Systems varies according to type of fishing gear, and **REQUESTED** that the IOTC Secretariat, in collaboration with CPCs, develop standards for data collection and reporting applicable to different gear types.

#### ***General discussion on data issues***

(Para. 116) 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. 117) 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, and noted 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.

#### ***The Consolidated List of Authorized Vessels (CLAV)***

(Para. 120) The SC acknowledged the importance of the CLAV (Consolidated List of Authorized Vessels) as a tool to combat and deter IUU fishing, and noted that funds from Common Oceans/GEF are due to expire in March 2018, and **REQUESTED** that participants from CPCs that also belong to other tRFMOs reiterate the importance of the CLAV to ensure future support to the initiative from the five major tRFMOs.

### **RECOMMENDATION**

That the WPDCS:

- 1) **NOTE** paper IOTC–2018–WPDCS14–03 which outlined the main outcomes of the 20<sup>th</sup> 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 20<sup>th</sup> Session of the Scientific Committee (30 November -4 December 2017) to the Commission, relevant to the Working Party on Data Collection and Statistics.

**Appendix B:** Program of Work (2019–2023) for the IOTC Working Party on Data Collection and Statistics (WPDCS).

## APPENDIX A

**CONSOLIDATED SET OF RECOMMENDATIONS OF THE 20<sup>th</sup> SESSION OF THE SCIENTIFIC COMMITTEE (30 NOVEMBER–4 DECEMBER 2017) TO THE COMMISSION RELEVANT TO THE WORKING PARTY ON DATA COLLECTION AND STATISTICS**

*Extract of the Report of the 20<sup>th</sup> Session of the Scientific Committee*

*(IOTC-2017-SC20-R; Appendix XXXIX, PAGES 224-232)*

**GENERAL RECOMMENDATIONS TO THE COMMISSION**

*Report of the 13<sup>th</sup> Session of the Working Party on Data Collection and Statistics (WPDCS13)*

*ROS E-reporting and E-monitoring projects*

SC20.35 (para. 112) The SC **RECOMMENDED** that a data exchange be implemented between existing software formats used for the collection of observer data by CPCs (e.g., ObServe), and the IOTC Regional Observer Database, to facilitate the transfer of historical observer data to the IOTC database for future dissemination and analysis.

SC20.36 (para. 115) Resolution 11/04 On a Regional Observer Scheme requests the submission of a report after each trip but the SC **RECOMMENDED** that on the next revision of the Resolution, this should be amended to request the submission of data in an electronic format suitable for automated data extraction (including historic data) with a given deadline so that information from multiple trips can be provided.

*General discussion on data issues*

SC20.37 (para. 118) Acknowledging the substantial gaps in reporting of mandatory IOTC datasets by many CPCs to the IOTC Secretariat, which increases the uncertainty of stock assessments and management advice based on these data, the SC strongly **RECOMMENDED** the Commission strengthen the penalty mechanisms adopted in *Resolution 16/06 On measures applicable in case of non-fulfilment of reporting obligations in the IOTC* to improve compliance by CPCs in terms of the submission of basic fishery data in accordance with Resolution 15/01 and 15/02.

SC20.38 (para. 119) The SC noted the issues with the lack of data and problems of poor data quality 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*

SC20.39 (para. 122) 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.

*Invited Expert(s) at the WP meetings*

SC20.40 (para. 124) Given the importance of external peer review for working party meetings, the SC **RECOMMENDED** that the Commission continues to allocate sufficient budget for an invited expert to be regularly invited to all scientific WP meetings.

*Meeting participation fund*

SC20.41 (para. 126) 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*

SC20.42 (para. 127) The SC reiterated its **RECOMMENDATION** 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*

SC20.43 (para. 128) 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 late-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.

**APPENDIX B**  
**WORKING PARTY ON DATA COLLECTION AND STATISTICS PROGRAM OF WORK (2018–2022)**

*(Extracts from IOTC–2017–SC20–R: Appendix XXXVI)*

The Program of Work consists of the following, noting that a timeline for implementation would be developed by the SC once it has agreed to the priority projects across all of its Working Parties:

**Table 1.** Priority topics for obtaining the information necessary to deliver the necessary advice to the Commission.

Topic	Sub-topic and project	Priority ranking	Est. budget (potential source)	Timing				
				2018	2019	2020	2021	2022
1. Artisanal fisheries data collection	1.1 Assist the implementation of data collection and sampling activities of coastal fisheries in countries/fisheries insufficiently sampled in the past; priority to be given to the following fisheries: <ul style="list-style-type: none"> <li>• Coastal fisheries of Indonesia</li> <li>• Coastal fisheries of Pakistan</li> <li>• Coastal fisheries of Sri Lanka</li> <li>• Coastal fisheries of Kenya</li> <li>• Coastal fisheries of I.R. Iran</li> <li>• Coastal fisheries of Somalia</li> </ul>	1	US\$ ??? (TBD)					
2. Assistance to CPCs for the fulfillment of Resolution 17/01 mandate	2.1 Provide support to identified CPCs to increase their level of monitoring and reporting in accordance with paragraph 8 of Resolution 17/01	<b>FUNDED</b>	US\$ 60K (EU cofund.)					
3. Review Size Data Longline Fisheries	3.1 Assistance to historical review of length frequency data for longline fisheries, in particular longliners from Taiwan, China and Japan	<b>FUNDED</b>	US\$ 48K (EU cofund.)					
4. Compliance with IOTC Data Requirements	4.1 Data support missions <p>4.1.1 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</p>	<b>FUNDED</b>	US\$ 5-10K each (EU cofund.)					

	<p>action to address the issues identified, including timeframe of implementation and follow-up activities required. Priority to be given to the following fisheries:</p> <ul style="list-style-type: none"> <li>• Pakistan</li> <li>• Indonesia</li> <li>• Sri Lanka</li> <li>• India</li> <li>• Yemen</li> </ul>								
5.	IOTC Data access	5.1 Develop software libraries (in the most widely adopted languages for statistical analysis, e.g. R, Python etc.) to simplify access to the new IOTC Remote data services by scientists	3	US\$ 5K (Consultant, TBD)					
		5.2 Identify and add descriptive metadata to main IOTC data sets	3	US\$ 30K (Consultant, IOC / IRD ?)					
		5.3 Deliver R capacity building support (workshops, training courses) for the manipulation of IOTC data by national scientists	4	US\$ ??? (TBD)					
6.	ROS – Support for the implementation of the IOTC Regional Observer Scheme	6.1 ROS tools							
		6.1.1 Support the adoption of the ROS e-Reporting and ROS national database tools by countries not having any existing observer data collection and management system in place	2	US\$ ??? (TBD)					
		6.2 ROS Regional Database							
		6.2.1 Incorporate all historical observer data currently available in other proprietary data formats (e.g. ObServe database dumps, ICCAT ST09 and other custom observer forms)	2	US\$ 20K (Consultant, TBD)					
		6.2.2 Add import / export capabilities from proprietary data collection systems to the ROS Observer Data Model format	2	US\$ 35K (Consultant, TBD)					
		6.2.2 Implement dissemination best-practices for all data collected by the ROS Regional Database	2	US\$ 20K (TBD - Consultant)					

6.3 ROS Electronic Monitoring Systems								
6.3.1 Implement pilot EMS system on gillnet / coastal longline vessels for fleets insufficiently covered by on-board observers	<table border="1"> <tr> <td data-bbox="1370 167 1500 285"><b>FUNDED</b></td> <td data-bbox="1500 167 1680 285">US\$ 150 k (CPCs, EU co-funded)</td> <td data-bbox="1680 167 1774 285"></td> <td data-bbox="1774 167 1868 285"></td> <td data-bbox="1868 167 1962 285"></td> <td data-bbox="1962 167 2056 285"></td> <td data-bbox="2056 167 2130 285"></td> </tr> </table>	<b>FUNDED</b>	US\$ 150 k (CPCs, EU co-funded)					
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