



PROGRESS ON RECOMMENDATIONS OF THE 19th SESSION OF THE SCIENTIFIC COMMITTEE

PREPARED BY: IOTC SECRETARIAT AND SC CHAIRPERSON¹, 21 NOVEMBER 2017

PURPOSE

To provide participants at the 20th Scientific Committee (SC) with an update on the progress made in implementing the recommendations from the previous SC meeting, and to provide alternative recommendations for the consideration and potential endorsement by participants as appropriate given any progress.

BACKGROUND

At the 19th Session of the SC, participants agreed on a series of actions to be taken by participants, CPCs, and the IOTC Secretariat on a range of issues. The subsequent table developed and agreed to by the SC was endorsed at its December 2016 meeting.

DISCUSSION

The Rules of Procedure of the Scientific Committee include the following seven core tasks, which are to be supported by the various Working Parties.

- a) recommend policies and procedures for the collection, processing, dissemination and analysis of fishery data;
- b) facilitate the exchange and critical review among scientists of information on research and operation of fisheries of relevance to the Commission;
- c) develop and coordinate cooperative research programmes involving Members of the Commission in support of fisheries management;
- d) assess and report to the Commission on the status of stocks of relevance to the Commission and the likely effects of further fishing and of different fishing patterns and intensities;
- e) formulate and report to the sub-commission, as appropriate, on recommendations concerning conservation, fisheries management and research, including consensus, majority and minority views;
- f) consider any matter referred to by the Commission;
- g) carry out other technical activities of relevance to the Commission.

Recalling that the SC, at its 16th Session adopted a set of reporting terminology SC16.07 (para. 23), which was subsequently endorsed by the Commission at its 18th Session in 2014 (S18, para 10), to further improve the clarity of information sharing from, and among the science bodies, the following two term levels should be noted when interpreting the Reports and <u>Appendix I</u> to this paper:

Level 1: From a subsidiary body of the Commission to the next level in the structure of the Commission:

RECOMMENDED, **RECOMMENDATION**: Any conclusion or request for an action to be undertaken, from a subsidiary body of the Commission (Committee or Working Party), which is to be formally provided to the next level in the structure of the Commission for its consideration/endorsement (e.g. from a Working Party to the Scientific Committee; from a Committee to the Commission). The intention is that the higher body will consider the recommended action for endorsement under its own mandate, if the subsidiary body does not already have the required mandate. Ideally this should be task specific and contain a timeframe for completion.

Level 2: From a subsidiary body of the Commission to a CPC, the IOTC Secretariat, or other body (not the Commission) to carry out a specified task:

REQUESTED: This term should only be used by a subsidiary body of the Commission if it does not wish to have the request formally adopted/endorsed by the next level in the structure of the Commission. For example, if a Committee wishes to seek additional input from a CPC on a particular topic, but does not wish to formalise the request beyond the mandate of the Committee, it may request that a set action be undertaken. Ideally this should be task specific and contain a timeframe for the completion.

secretariat@iotc.org

The Recommendations endorsed by the SC at its 19th Session are contained in <u>Appendix I</u> for the consideration, review of progress, and revision/reiteration as necessary by the SC20. The SC participants are also encouraged to review the Progress on the Recommendations of Working Parties prepared by the Secretariat and presented to each Working Party for their consideration and revision (IOTC-2017-WPNT07-05, IOTC-2017-WPEB13-06, IOTC-2017-WPB15-06, IOTC-2017-WPM08-06 Rev1, IOTC-2017-WPTT19-05, IOTC-2017-WPDCS13-06, IOTC-2016-WPTmT06-06.

RECOMMENDATION

That the SC:

- 1) **NOTE** paper IOTC–2017–SC20–13 which detailed the progress made in implementing the recommendations and the requests of the 19th Session of the Scientific Committee (SC19);
- 2) **AGREE** to consider and revise as necessary, the recommendations, and for these to be combined with any new recommendations arising from SC20.

APPENDICES

Appendix I: Progress made on the Recommendations of SC19





SC19 Report	SC recommendations	Update/Progress
	SC – National Reports from CPCs	Update:
SC19.07 Para. 21	NOTING that the Commission, at its 15th Session, expressed concern regarding the limited submission of National Reports to the SC, and stressed the importance of providing the reports by all CPCs, the SC RECOMMENDED that the Commission note that in 2016, 23 reports were provided by CPCs (26 in 2015, 26 in 2014) (Table 2).	The Commission NOTED missing National Reports from 9 CPCs and 3 CNCPs and encouraged those countries to submit the National Report to SC in 2017.
SC19.08 Para. 22	The SC RECOMMENDED that the Compliance Committee and Commission note the lack of compliance by 9 Contracting Parties (Members) and 3 Cooperating Non-Contracting Parties (CNCPs), that did not submit a National Report to the Scientific Committee in 2016, noting that the Commission agreed that the submission of the annual reports to the Scientific Committee is mandatory.	
SC19.09	WPNT CPUE standardisation	Update:
Para. 29	ACKNOWLEDGING the importance of indices of abundance for future stock assessments, the WPNT RECOMMENDED that the development of standardised CPUE series is explored, with priority given to fleets which account for the largest catches of neritic tuna and tuna-like species (e.g., I.R. Iran, Indonesia, India, Pakistan, and Sri Lanka).	 This item is currently still pending data availability and funding. The WPNT07 made a number of Recommendations for consideration by SC20: (IOTC-2017-WPNT07-R, para. 27) NOTING a number of long-standing data reporting or data quality issues that severely impact the assessment of neritic species, the WPNT RECOMMENDED that funds be made available to the IOTC Secretariat (either through the IOTC Regular Budget or from external sources) dedicated to capacity building activities, or data compliance and support missions, aimed at improving the availability of data for those countries identified as a priority for neritic species in terms of importance of catches. Specifically: that the IOTC Secretariat conducts a Data Compliance and Support mission to I.R. Iran to assess the status of data collection and reporting of IOTC datasets, notably catch-and-effort, and the availability of data that could be used as a basis of a future standardized CPUE series gillnet fleets; when sufficient data is recovered, or made available, that the IOTC Secretariat
		 allocates funds to assist with the development of a standardized CPUE series for gillnets, in collaboration with IOTC members, including organization of a joint-workshop or hiring of an international consultant; that the IOTC Secretariat formally communicates to India requesting the submission
		of mandatory datasets according to the requirements of IOTC Resolution 15/02 and, if necessary, conducts a Data Compliance and Support mission to facilitate the reporting of data to the IOTC;
		iv. that the IOTC Secretariat continues to support the work of WWF-Pakistan and the Government of Pakistan in the evaluation and reporting of the crew-based observer

		program, and facilitate the reporting of length data and catch-and-effort collected by the observer log-books.
		(para. 140) The WPNT AGREED that a new item on data mining and collation should be added as a fundamental piece of work to be undertaken as a priority and RECOMMENDED that this work is supported by the IOTC Secretariat. The WPNT further AGREED that data collation has been identified as the main priority of the group and allocated this the highest priority ranking.
		(para. 141) ACKNOWLEDGING the importance of indices of abundance for future stock assessments, the WPNT RECOMMENDED that the development of standardised CPUE series is explored, with priority given to fleets which account for the largest catches of neritic tuna and tuna-like species (e.g., I.R. Iran, Indonesia, India, Pakistan, and Sri Lanka).
SC19.10	WPNT Selection of Stock Status indicators	Update:
Para. 32	The SC NOTED the importance of exploring alternative data poor stock assessment methods and RECOMMENDED that the Commission allocates funding for work to explore methods based on different data sources, such as catch curve estimation of mortality from length- frequency data. A range of data sources should be explored, including data from observer programmes, the sport fisheries project, and non-state actor (e.g. WWF) projects for suitability.	Under Outcome 1 (Improved stock assessments of target fisheries and bycatch) of the 2017 EU grant to IOTC (GCP/INT/305/EC) a sub-project will be tendered in 2018 for 1.4: Review of data poor stock assessment methods for Indian Ocean tuna fisheries. This study will develop a manual of best practice methodologies for the types of data available for Indian Ocean species.
SC19.11 Para. 33	The SC RECALLED the recommendation of the WPNT05 for the SC to request the Working Party on Methods evaluate a proposed alternative methodology for presenting management	Update:
Pala. 55	advice for data poor methods in 2016. The SC REQUESTED that the WPM evaluate the possibility of using different colours to distinguish between stocks which have not been assessed (e.g., white) and stocks which have been assessed but the status is considered to be uncertain (e.g., grey).	The WPM AGREED that work on the presentation of stock status advice for data limited stocks will need to be carried out inter-sessionally, and that this will require some level of preparation and planning. The WPM REQUESTED the Chairperson liaise with the Chairs of the species WPs (WPNT and WPB) in order to draft a study proposal on this issue and RECOMMENDED the SC allocate funding to this project (para.121, IOTC-2017-WPM08-R).
		This project has been included as item 2 in the WPM workplan.
SC19.12	WPTmT Growth curve of albacore	Update:
Para. 41	NOTING the general paucity of biological indicators available from the Indian Ocean, and particularly the lack of age-specific maturity as a primary source of uncertainty in the stock assessment of albacore tuna, the SC RECOMMENDED a study on the growth curve of albacore tuna in the Indian Ocean as a high priority in the SC Program of Work.	Under Outcome 1 (Improved stock assessments of target fisheries and bycatch) of the 2017 EU grant to IOTC (GCP/INT/305/EC) a sub-project will be tendered in 2018 for 1.5: Albacore growth curve analysis. This research project is intended to conduct ageing of Indian Ocean albacore and the results of this work will be available in time to incorporate in the next albacore stock assessment scheduled for 2018.
SC19.13	WPB Shortbilled spearfish	Update: Pending
Para. 46		Recommendations passed to Commission but no actions taken. Should be addressed in the next
	The SC RECOMMENDED that on the next revisions of the IOTC Agreement, short billed	revision of the IOTC Agreement.

SC19.14	WPB Billfish species ID guides	Update:
Para. 48	The SC AGREED on the importance of the hard, waterproof copies of the IOTC species identification guides for observers and port samplers, and RECOMMENDED that funds are allocated for further printing of the species ID guides for distribution to sports fishing clubs and recreational fisheries to improve the quality of data reported, and that funds also be continued for the translation of these into the priority languages identified by the SC.	Under Outcome 2 (Improved data quality) of the 2017 EU grant to IOTC (GCP/INT/305/EC) a sub- project will be funded in 2018 for 2.6: Species ID cards translation and printing. Funds will be used to print hard copies of the IOTC species identification cards in priority languages identified by the SC.
SC19.15	WPB Swordfish habitat and behavior	Update:
Para. 51	The SC RECOMMENDED that, for subsequent WPB meetings, swordfish is treated as a single stock and that references related to swordfish for the southwest Indian Ocean are removed from the Executive Summary and from the summary of available data for all billfish species.	The 2017 stock assessment of swordfish was carried out for a single stock in the Indian Ocean (IOTC-2017-WPB15-20 Rev_1) and the Executive Summary and Supporting Information have been revised accordingly.
SC19.16	WPEB Identification guides for fishing gear	Update: Pending
Para. 55	The SC RECALLED the recommendation made by the WPEB in 2013 and 2014: Noting the continued confusion in the terminology of various hook types being used in IOTC fisheries, (e.g. tuna hook vs. J-hook; definition of a circle hook), the SC RECOMMENDED that the Commission allocate funds in the 2014 IOTC Budget to develop an identification guide for fisheries heads and relation fisher even work in IOTC fisheries.	The WPEB12 ENCOURAGED all participants to bring examples of the types of hooks used by their domestic longline fisheries to the next WPEB to begin the process of collecting terminal gear information.
	fishing hooks and pelagic fishing gears used in IOTC fisheries. The total estimated production and printing costs for the first 1000 sets of the identification cards is around a maximum of US\$16,500 (Table 6). The IOTC Secretariat shall seek funds from potential donors to print additional sets of the identification cards at US\$5,500 per 1000 sets of cards.	NOTING the continued confusion in the terminology of various hook types being used in IOTC fisheries, (e.g. tuna hook vs. J-hook; definition of a circle hook), the WPEB REITERATED its previous RECOMMENDATIONS (2013, 2014 and 2016) and the RECOMMENDATION from SC19 (SC19.16; para. 55 of IOTC-2016-SC19-R) that the Commission allocate funds in the 2018 IOTC Budget to develop an identification guide for fishing hooks and pelagic fishing gears used in IOTC fisheries (para. 24, IOTC-2017-WPEB13-R).
SC19.17	WPEB Regional observer scheme	
Para. 56	NOTING that many CPCs report Regional Observer data in .pdf format, or as data embedded within documents, and also in hard-copy format, the SC ENCOURAGED CPCs to report Regional Observer data in any non-proprietary electronic format (e.g. csv, xml, txt, etc.) or in an electronic format that can be easily exported and processed into standard spreadsheet, database or statistical software (e.g. xls, dbase, mdb, etc.). This may be in any electronically readable format as long as all of the agreed minimum data reporting requirements have been fulfilled.	Update: Partial. Some CPCs Observer reports are submitted electronically but not all. The SC should reiterate its RECOMMENDATION.
	The SC RECOMMENDED all CPCs to submit observer data in an electronic format that can be automatically exported and processed into a standard spreadsheet-like format (e.g. csv, xml, txt, xls, dbase, mdb etc.), avoiding formats whose processing could be time consuming and unnecessarily complex (e.g. pdf, Microsoft Word documents etc.), at the same time ensuring that all of the agreed minimum data reporting requirements have been fulfilled.	
SC19.18 Para. 57	RECALLING the objectives of Resolution 11/04 on a regional observer scheme as follows: "Para 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", and NOTING that the objective of the ROS contained in Resolution 11/04, and the rules contained in Resolution 12/02 "On data confidentiality policy and procedures" make no reference to the data collected not being used for compliance purposes, the SC reiterated its	Update: Pending revision of Resolution 11/04

	101C-2017-5C20-15	
	RECOMMENDATION that at the next revision of Resolution 11/04, it be clearly stated that the data collected shall only be used for scientific purposes.	
C10 10	WPEB Bycatch data exchange protocol (BDEP)	Update:
SC19.19 Para. 58	The SC RECOMMENDED that, on completion of the development of the ROS database and the input of all of the historical data, the IOTC Secretariat continue to populate the BDEP template, adapting it where necessary, and present this to the WPDCS and SC for further review.	The ROS database development is now complete and the processing of inputting historical reported data has begun (a first data extraction of JPN observer data from 2014-2016 has been completed). This process will be time consuming given the number of inconsistencies in the reported datasets in terms of format, content, code lists etc, however, the sufficient resources are available and the work is ongoing through a consultancy project.
		On completion of this task, the Secretariat has agreed to collate all the relevant observer data from the ROS regional database into the BDEP format to enhance data exchange with other institutions. Testing of the export facilities for this is currently under way.
SC19.20	WPEB Gillnet fisheries	Update:
Para. 59	NOTING that gillnets are regularly being used with lengths in excess of 4,000 m (and up to 7,000 m) within and occasionally into the high seas, and that those used within the EEZ may sometimes drift onto the high seas in contravention of Resolution 12/12, the SC reiterated it's previous RECOMMENDATION that the Commission should consider if a ban on large scale gillnets should also apply within IOTC CPC EEZ. This would be especially important given the negative ecological impacts of large scale drifting gillnets in areas frequented by marine mammals and turtles	In May 2017 the Commission adopted Resolution 17/07 <i>On the prohibition to use large-scale driftnets in the IOTC Area.</i> This Resolution bans the use of large scale drifting gillnets in coastal EEZs from 2022.
SC19.21	WPEB Data collection opportunities	Update:
Para. 60	The SC RECOGNISED that although the IOTC Regional Observer Programme (ROP) for transhipment is primarily a mechanism for compliance monitoring, it does provide potential opportunities for gathering photographs and information for scientific purposes, including on seabird bycatch mitigation measures. Therefore, the SC RECOMMENDED that the collection of seabird bycatch mitigation photographs through the ROP is trialled as a pilot.	In early 2017 CPCs involved in the ROP were formally contacted by the IOTC Secretariat to request permission to use the information provided by the compliance programme for the monitoring of seabirds. Permission was granted and BirdLife International are currently working on the information available to assess whether any meaningful data on mitigation measures can be obtained.
SC19.22	ACAP best practice advice: update	Update:
Para. 68	The SC RECOMMENDED that Resolution 12/06 be reviewed and ENCOURAGED the line weighting specifications to be updated to conform with the latest ACAP advice: (a) 40 g or	Pending revision of Resolution 12/06

SC19.23 Para. 69	greater attached within 0.5 m of the hook; or (b) 60 g or greater attached within 1 m of the hook; or (c) 80 g or greater attached within 2 m of the hook. CPCs are ENCOURAGED to test the safety and practicality of the above mentioned measure as well as sliding lead devices for line weighting, and to report the results back to the WPEB or SC. The SC RECOMMENDED that when Resolution 12/06 is reviewed, the two hook-shielding devices recommended by ACAP as best practice mitigation measures be incorporated as stand- alone mitigation options for use in IOTC fisheries operating south of 25°S, and that these measures should conform with the technical specifications and performance attributes detailed in the ACAP advice. The SC CLARIFIED that if used, the hook-shielding devices would not need to be combined with any other mitigation measure. In relation to the Smart Tuna Hook, the SC NOTED that on the basis of information provided, after release from the hook the shield sinks to the seafloor where it corrodes within 12 months, the byproduct of which is iron oxide and carbon. However, the SC NOTED concerns regarding pollution associated with the discarded shields of the Smart Tuna Hooks, and REQUESTED that further information be made available to clarify the potential effects.	Update: As above
SC19.24	WPEB NPOAs	
Para. 82	The SC RECOMMENDED that the Commission note the current status of development and implementation of National Plans of Action (NPOAs) for sharks and seabirds, and the implementation of the FAO guidelines to reduce marine turtle mortality in fishing operations, by each CPC as provided at Appendix V, recalling that the IPOA-Seabirds and IPOA-Sharks were adopted by the FAO in 1999 and 2000, respectively, and required the development of NPOAs. Despite the time that has elapsed since then, very few CPCs have developed NPOAs, or even carried out assessments to ascertain if the development of a Plan is warranted. Currently 16 of the 36 IOTC CPCs have an NPOA-Sharks (6 more in development), while only 7 CPCs have an NPOA-Seabirds (3 more in development). A single CPC has determined that an NPOA-Sharks is not needed, and 3 have similarly determined that an NPOA-Seabirds is not needed. Currently 10 CPCs have implemented the FAO guidelines to reduce marine turtle mortality in fishing operations, and two CPCs (European Union, France (OT)) have implemented a full NPOA.	Update: Presented to and Noted at the S21 Commission meeting. The SC should reiterate its RECOMMENDATION.
SC19.25	WPTT Bigeye tuna CPUE summary discussion	Update: Ongoing
Para. 93	The SC RECOMMENDED that the multi-nation CPUE standardisation collaboration continue their efforts to improve the understanding of commercial CPUE as relative abundance indices, and expand future work to include other fleets, including the Seychelles longline fleet.	In 2017 a follow-up CPUE workshop was arranged to update and develop the collaborative longline CPUE for tropical and temperate tunas. The consultant worked closely with scientists from the three fleets to understand and resolve the inconsistencies between the fleets; five papers on the results of developments in the collaborative CPUE were presented at WPTT19 and WPM08. In addition, the CPUE for yellowfin and bigeye tuna was standardised for the Seychelles longline fleet and presented at WPTT19 (IOTC-2017-WPTT19-37).
SC19.26	WPTT Stock Synthesis III (SS3) assessment of yellowfin tuna	Update: Ongoing
Para. 95	NOTING the discussions on the tagging mixing period during previous WPTT meetings, related to the assessment of yellowfin and other tropical tuna stocks, the SC RECOMMENDED that additional work to be conducted to elucidate the most appropriate approach to tag modelling in IOTC stock assessments.	Under Outcome 1 (Improved stock assessments of target fisheries and bycatch) of the 2017 EU grant to IOTC (GCP/INT/305/EC) a sub-project will be tendered in 2018 for 1.3: Tag modelling project (tropical tunas). The aim of the project is to develop a preliminary spatially explicit operating model of the tropical tuna population for potential use in evaluating assessment bias.

SC19.27	WPTT Parameters for future analyses: Yellowfin tuna CPUE standardisation and stock	Update: Ongoing
Para. 96	 assessments The SC RECOMMENDED that development of the next stock assessment of yellowfin tuna should include a detailed review of the existing data sources (conducted by the stock assessment consultant, in collaboration with the IOTC Secretariat and main longline and purse seine fleets), including: Size frequency data: Evaluation of the reliability of length composition from the longline fisheries (including recent and historical data), review of issues with the use of the (EU) purse seine length composition data prior to 1991, and the need for a thorough review of the size frequency data held by IOTC, in collaboration with the fleets involved, to improve the utilization of these data in tropical tuna stock assessments. Collaborative longline CPUE: Further refinement of the procedures to standardize the composite longline logsheet data sets to develop the longline CPUE indices; 	Under Outcome 2 (Improved data quality) of the 2017 EU grant to IOTC (GCP/INT/305/EC) a sub- project will be funded in 2018 for 2.2: Review of longline and purse seine size frequency data. A consultant will be hired, with support from the IOTC Secretariat Data Section, to evaluate the reliability of length composition and evaluate the need for a thorough review of the size frequency data held by IOTC, in collaboration with the fleets involved, to improve the utilization of these data in tropical tuna stock assessments.
	iii. Tagging data: Comprehensive analysis of the tag release/recovery data set;	
	iv. Alternative CPUE series: a review of the available data from the Indian tuna longline survey data.	
SC19.28	WPM Revision of the WPM Program of work (2017–2021)	Update:
Para. 100	The SC RECOMMENDED the proposed standardised methods for the presentation of MSE results (Appendix IX) are submitted to TCMP and S21 for discussion, revision and endorsement, as appropriate. Subsequently, this should be considered a living document that will benefit from revision based upon feedback received from the TCMP, which will first meet in 2017.	This was presented to and ENDORSED by S21 Commission meeting as a living document. Furthermore, The WPM RECOMMENDED (WPM08.07) a revised version of the standardised methods for the presentation of MSE results to be discussed and revised at SC20 and to be presented at the TCMP02 and S22 Commission meeting.
SC19.29	WPM Operational definition of TRPs and LRPs	Update: Ongoing
Para. 101	The SC NOTED the request for advice on the feasibility of reporting stock status in relation to limit reference points in addition to the target reference points currently used: "The Commission NOTED the progress towards development of harvest strategies for key stocks, including the adoption of limit and target reference points for a number of stocks, and REQUESTED that the SC provide advice to the 21st Session of the IOTC on the feasibility of reporting stock status in relation to the agreed limit reference points" (IOTC-2016-S20-R, para. 16). The SC NOTED that if stock status advice changes as soon as the target reference points are exceeded, it is likely for advice to change based purely on natural fluctuations in stock abundance or other expected sources of variability. The SC RECOMMENDED that the operational definition of TRPs and LRPs is included for discussion at the Technical Committee on Management Procedures.	Discussed at TCMP in 2017 and will be discussed further in 2018. Furthermore, the WPTT RECOMMENDED (WPTT19.05) that the Scientific Committee review the approach used to provide management advice, particularly in relation to how the outcomes from stock assessments are reported against target and limit reference points.
SC19.30	WPM Revision of the WPM Program of work (2017–2021)	Update:
Para. 102	The SC NOTED that the next stock assessment of Indian Ocean swordfish is due to take place in 2017 and RECOMMENDED that the development of MSE of swordfish is considered as a high priority in the revised WPM Program of Work and that funding is allocated for this activity, to start the conditioning of an OM for this stock.	Work started in 2017 and a report will be presented to the Scientific Committee in December 2017 (IOTC-2017-SC20-11).

SC19.31	WPDCS Further analysis of length frequency data and likely impacts on the assessments	Update: Completed.
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.	Various papers presented to WPM and WPTT. IOTC-2017-WPTT19-31 – 36 IOTC-2017-WPM08-18 - 22
SC19.32 Para. 116	 WPDCS 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 	Update: Pending funding
SC19.33	sources have to be sought and that Sri Lanka has expressed strong interest in this type of activity. <i>WPDCS General discussion on data issues</i>	Update:
Para. 120	The SC NOTED the issues with lack of data and poor quality data problems that were identified throughout the working party reports 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.	This was presented to Commission but not actions taken. The SC should strongly reiterate this RECOMMENDATION.
SC19.34	WPDCS Data collection and capacity building	Update:
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.	The majority of data-related capacity building activities were carried out using extra-budgetary funding in 2017. The 2018 Commission budget includes \$85,000 for data and science-related capacity building activities.
SC19.35	WPDCS Meeting participation fund	Update:
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.	Pending revision of the IOTC Rules of Procedures by a CPC.
SC19.36	General - IOTC species identification guides: Tuna and tuna-like species	Update:
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	Under Outcome 2 (Improved data quality) of the 2017 EU grant to IOTC (GCP/INT/305/EC) a sub- project will be funded in 2018 for 2.6: Species ID cards translation and printing. Funds will be used to to print hard copies of the IOTC species identification cards in priority languages identified by the SC.

	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.	
SC19.37 Para. 126	<i>General - IOTC Secretariat staffing</i> 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.	Update:. A P1 Data Assistant position has been advertised and interviews are due to take place shortly.
SC19.38 Para. 127	<i>General – Collaborative Longline CPUE</i> The SC ACNOWLEDGED the work of the WPTmT 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.	Update:. Completed for yellowfin, bigeye and albacore tunas and planned to continue in the future and expanded to other species where funds are available.
SC19.40	General - Implementation of the Regional Observer Scheme	Update:
Para. 160	The SC NOTED the substantial resourcing that the proposed framework will require and RECOMMENDED that the Commission provide adequate resources to enable implementation of the project.	Under Outcome 2 (Improved data quality) of the 2017 EU grant to IOTC (GCP/INT/305/EC) a sub- project will be tendered in 2018 for 2.3: Regional Observer Scheme - support for the implementation of the IOTC Regional Observer Scheme. This project aims to develop data collection protocols for the artisanal component of the ROS and assist countries through capacity building activities, directly through workshops held by the IOTC Secretariat staff and consultants and indirectly through the harmonisation of regional capacity building training courses.
SC19.41 Para. 168	General - Progress on the Implementation of the Recommendations of the Second Performance Review Panel The SC RECOMMENDED that the Commission note the updates on progress regarding Resolution 16/03, as provided at Appendix XXXIII.	Update: Presented to the Commission and progress is reviewed on IOTC-2017-SC20-08
SC19.42	General – Consultants	Update:
Para. 179	NOTING the highly beneficial and relevant work done by IOTC stock assessment consultants in 2016 and in previous years, the SC RECOMMENDED that the engagement of consultants be continued for each coming year based on the Program of Work. Consultants will be hired to supplement the skill set available within the IOTC Secretariat and CPCs. The draft budget	Completed with Consultants attending all Working Parties meetings in 2017. And planned for next year as well.

	provided in Table 5, shall be incorporated into the overall IOTC Science budget for the consideration of the Commission.	
SC19.43 Para. 185	General - Consideration of Resolution 15/09 On a fish aggregating devices (FADs) working group The SC further NOTED that the intention of this is to hold a dialogue meeting between Commissioners as well as scientists and RECOMMENDED that the Commission consider holding an internal IOTC meeting in early 2017 in advance of the global meeting.	Update: An internal IOTC working group on FADs was held prior to the joint tRFMO working group as recommended by the SC19. The one-day meeting was_co-Chaired by the Chair of the Commission and the Chair of the Scientific Committee and the data received by the Secretariat were reviewed and discussed by the group. The IOTC remains the only tRFMO to have taken the practical step of implementing a limit on the number of active FADs that may be used.