

DRAFT: REPORT OF THE SECRETARIAT – ACTIVITIES IN SUPPORT OF THE IOTC SCIENCE PROCESS IN 2018

PREPARED BY: IOTC SECRETARIAT, 14 NOVEMBER 2018

PURPOSE

1. To inform the Scientific Committee (SC) of work undertaken by the IOTC Secretariat in 2018 in support of the IOTC Science process, endorsed by the Commission.

DISCUSSION

Staffing

2. The Science Manager (Dr Paul de Bruyn): started at the IOTC Secretariat in July 2018.

IOTC meetings – Working parties

3. In 2018, six (6) Working Party meetings were organised and facilitated by the IOTC Secretariat (Table 1). The current Chairs and Vice-Chairs for each Committee and Working Party are provided at [Appendix I](#).
4. [Appendix II](#) lists the documents produced by the IOTC Secretariat in support of Working Party meetings held in 2018. In addition, the IOTC Secretariat produced revised Executive Summaries for all of the IOTC stocks, as well as for sharks, seabirds, marine turtles and cetaceans in association with various experts, totalling 26 Executive Summaries.
5. The IOTC Secretariat facilitated the participation of invited experts that were selected to attend each of the Working Party meetings in 2018. The names and affiliations of each of the Invited Experts are provided in Table 1.

Table 1. Invited Experts for Working Party meetings in 2018

Working Party	Date and place	Name	Affiliation
Neritic Tunas	21–24 August, Seychelles	Dr. Shijie Zhou	CSIRO, Australia
Billfish	4–7 September, South Africa	Dr Evgeny Romanov	IRD, France
Ecosystems and Bycatch	10–14 September, South Africa	Dr Evgeny Romanov	IRD, France
Methods	25–27 October, Seychelles	Dr. Rishi Sharma	NOAA, USA
Tropical Tunas	29 October - 3 November, Seychelles	Dr Rishi Sharma	NOAA, USA
Data Collection and Statistics	29 November – 1 December, Seychelles	Nil	Nil

IOTC meetings – Meeting Participation Fund

6. The IOTC Meeting Participation Fund (MPF) was utilised for the indicated scientific meetings and/or Working Parties indicated in [Table 1](#). Noting that the intention of the MPF was to utilise the funds, as a first priority, to support the participation of scientists from developing Members in scientific meetings of the IOTC, including Working Parties, in 2018, the Secretariat facilitated the participation of 34 individuals from developing Members of the IOTC to the six (6) Working Party meetings held in 2018 as detailed in Table 2.
7. The total level of participation (including the Scientific Committee) by MPF recipients was 46 in 2018 compared with 2017(64), 2016 (67), 2015 (53), 2014 (50), and 2013 (58) (46 in 2012, 33 in 2011 and 19 in 2010) (Table 2).

Table 2. Scientific Meetings held in 2018, prior to the 21st Session of the IOTC Scientific Committee meeting. Numbers in brackets represent numbers for the previous Working Party meetings.

Working Party	Date and place of most recent meeting	No. of participants							Meeting Participation Fund						No. of documents (and for the previous meeting)	
		2012	2013	2014	2015	2016	2017	2018	2012	2013	2014	2015	2016	2017		2018
Neritic Tunas	21–24 August, Seychelles	35	42	37	31	20	26	18	10	11	13	9	8	8	6	Total: 19 (28) Working papers: 17 (27) Information papers: 2 (1)
Temperate Tunas	21-24 July 2016, Shanghai, China	26	–	27	–	29	-	-	3	–	3	–	4	-	-	Total : 29 (30) Working papers : 29 (26) Information papers : 0 (4)
Billfish	4–7 September, South Africa	23	24	21	23	18	25	20	5	10	4	9 ¹	6	8	5	Total: 28 (37) Working papers: 27 (35) Information papers: 1 (2)
Ecosystems and Bycatch	10–14 September, South Africa	48	32	37	38	37	39	40	7	11	5	8 ²	8	7	7	Total: 53 (57) Working papers: 46 (43) Information papers: 7 (14)
Methods	25–27 October, Seychelles	22	–	34	26	29	27	23	1	–	3 ³	6 ⁴	9	5	2	Total: 21 (27) Working papers: 15 (22) Information papers: 6 (5)
Data Collection and Statistics	29 November – 1 December, Seychelles	–	23	30	20	32	45		–	5	1	4	6	10	7	Total: 43 (45) Working papers: 40 (40) Information papers: 3 (5)
Tropical Tunas	29 October - 3 November, Seychelles	47	46	53	44	47	48		8	10	6	6	6	10	7	Total: 57 (55) Working papers: 51 (51) Information papers: 6 (4)
Scientific Committee	3 – 7 December, Seychelles	54	75	62	71	78			12	11	15	13	18	13	12	Working papers: 21 (14) Executive Summaries: 25 (26) Information papers: 2 (8)

¹ 2 scientists attended both the WPB and WPEB;

² 2 scientists attended both the WPB and WPEB

³ 3 scientists attended both the WPM and SC

⁴ Funded by the ABNJ tuna project

* Refers to year 2008

Data-related activities – General

8. A large proportion of the IOTC Data Section staff time is devoted to the acquisition and editing of the data required under the IOTC Resolutions. These data are utilised in monitoring compliance or in scientific analyses necessary for the assessment of the status of stocks. The IOTC databases are constantly revised and updated.
9. Integrated IOTC database: the migration of the main IOTC datasets has been completed and the development is now focusing on aspects related to data dissemination (through the IOTC website and through dedicated, remote services for the integration of data extraction and processing within third-party code) as well as the inclusion of additional support for improved stock assessment procedures and further integration with the Regional Observer Database.
10. The regular suite of datasets have been supplied for all scientists engaged in stock assessment activities and reports on status of IOTC databases produced for relevant Working Parties and SC, and for the preparation of the Country Reports of the Compliance Committee. No new information has been incorporated in the RTTP tagging dataset.

Data-related activities – Capacity building and other initiatives

11. The IOTC Secretariat continues to facilitate or provide direct support to developing coastal states using funds from the IOTC capacity building budget or other collaborating agencies. In particular, the Overseas Fishery Cooperation Foundation of Japan (OFCF) has provided resources and advice for the strengthening of data collection systems in more than 20 countries in the region since its inception in 2002. The IOTC Secretariat has also cooperated with COI-SmartFish, the BOBLME Project, the ABNJ Project, the ISSF, and other initiatives in recent years in the coordination and execution of capacity building activities in developing coastal states of the Indian Ocean. In addition, the IOTC Secretariat is also working collaboratively with NOAA, CMS, IOSEA, WWF-Pakistan and WWF-USA on capacity building activities to support the implementation of the Regional Observer Scheme in developing coastal states.
12. Table 3 provides a summary of the main capacity building activities undertaken since the end of SC20⁵, which can be broadly categorised into the following activities:
 - a) Data compliance and support missions: aimed at facilitating improvements in the validation and reporting of core IOTC datasets to the IOTC Secretariat (i.e., nominal catches, catch-and-effort, and size data); also to assess current shortcomings concerning the collection and management of fisheries data, and to agree a plan of action with the CPC required to deliver improvements on the levels of reporting. In 2018 support has been provided to Pakistan in terms of evaluation of their crew-based data collection pilot project; while a mission originally planned for July has been postponed until December 2018.
 - b) Technical assistance missions: capacity building in data collection, support for the development of national fisheries databases and statistical systems, or other issues related to fisheries data management. Examples in 2018 included continued support to Kenya and the evaluation of the Catch Assessment Survey.

The IOTC-OFCF collaborative project has also been implementing a project to identify appropriate socio-economic indicators to support the integrated management of the IOTC resources and fisheries and its long-term sustainability including the social and economic aspects. The project focuses on i.) reviewing the existing information and ii.) evaluating the feasibility and utility of a Fishery Satellite Account through experimental compilations.

- c) Support for implementation of the Regional Observer Scheme and implementation of the ROS Pilot Project: capacity building activities cover a number of components, including the development of the IOTC's electronic reporting tools, and feasibility study implementing electronic monitoring systems (EMS) on small-scale fisheries. In 2018 training workshops for the e-Reporting tools were delivered to Sri Lanka and

⁵ For more information on these activities refer to *IOTC capacity building activities in support of developing coastal IOTC CPCs: 2017 activities*, IOTC–2017–WPDCS13-08, or email: IOTC-secretariat@fao.org.

Indonesia; while procurement of EMS for 6 gillnet/longline vessels in Sri Lanka is currently being finalized, with delivery of the equipment scheduled for end-2018.

13. Below is a non-exhaustive (provisional) list of the capacity building activities planned for 2019⁶:
- a) Support to the implementation of the IOTC Regional Observer Scheme (on-going), and development of the Regional Observer Scheme Pilot Project.
 - b) Regional Observer Scheme e-monitoring in Sri Lanka: on-going. The formal commencement of EMS monitored trips is scheduled for early-2019.
 - c) Regional Observer Scheme e-Reporting tools: follow-up workshops scheduled for Mauritius and Tanzania in early-2019.
 - d) Implementation of biological port sampling program of Albacore (e.g., in Port Louis, Mauritius).
 - e) Fishery Satellite Account compilation (IOTC-OFCE Project): continuation of support to Seychelles to assess the overall economic impacts to the national economy of tuna fisheries. The project also intends to continue providing support in 2019 to other interested CPCs.
 - f) Data compliance and support missions (priority countries to be confirmed).

⁶ *Ditto 5*

Table 3. Activities of the IOTC Secretariat in relation to science and data related capacity building activities in the Indian Ocean in 2018.

Country	Date	Executing Agencies / Staff	Description of activities
Seychelles	Mar, Jun, Aug-Sep, Nov 2018	IOTC-OFCF Project Manager	IOTC-OFCF Project implementation for experimental compilation of Fisheries Satellite Account
Sri Lanka	Feb 2018	IOTC Fisheries Statistician IOTC Fisheries Officer Cap Marine Environmental	i.) Regional Observer Workshop to provide training in ii.) <u>ROS Pilot Project activities (ROS e-Reporting tools)</u> : follow-up training for the implementation of the IOTC electronic ROS data collection, reporting and management tools. The first workshop was delivered to Sri Lanka in December 2017.
Indonesia	Apr-May, Jul 2018	IOTC-OFCF Project Manager	Preparatory missions for the IOTC-OFCF Project implementation, including: i.) Reviewing the current data collection and compilation systems. ii.) Technical advices to One Data.
Indonesia (Bali)	July 2018	IOTC Fisheries Statistician, IOTC Consultant IOTC-OFCF Project Manager	i.) <u>ROS e-Reporting tools (ROS e-Reporting tools)</u> : delivery of a second training workshop implementing the new IOTC electronic ROS data collection, reporting and management tools. ii.) Data evaluation workshop of Indonesia's longline fisheries.
Pakistan	Dec 2018 (TBC)	IOTC Fisheries Statistician IOTC Data Coordinator	i.) Provide technical support for the collection, and reporting of WWF-Pakistan's crew based observer scheme. ii.) Data compliance and support mission: evaluation of the reconstructed catch series submitted by the Government of Pakistan in 2017.
Sri Lanka	On-going throughout 2018	IOTC Fisheries Statistician	<u>ROS Pilot Project activities (EMS)</u> : Development of a feasibility study trialling electronic monitoring systems on-board small-scale coastal gillnet/longline vessels.

Other data activities (2018)

14. CLAV: The IOTC Secretariat is responsible for the coordination of activities concerning the global Consolidated List of Authorized Vessels (CLAV), a regularly updated list including the authorized vessels of the five t-RFMOs. Collaboration between the IOTC Secretariat and FAO-FIPS continued in 2018. Since 2015, the CLAV has been further enhanced using funds from the FAO Common Oceans/ABNJ Tuna Project. The main objective of the CLAV component of the Project is ensuring that updates of the CLAV occur in as close-to real time as possible in the future.
15. Regional Observer Scheme: A full update on progress with the implementation of the ROS Pilot Project is provided in paper IOTC-2018-SC21-07. Key areas of progress this year include:
- A project Steering Committee has been established to oversee all project components
 - A consultancy project and expert peer review workshop was held to review the standards. The outcomes are described in detail in IOTC-2018-WPDCS14-35 and IOTC-2018-WPDCS14-INF03
 - A substantial amount of data have now been entered into the Regional Observer Database through the support of two consultancy projects.

- Further training in the *electronic data collection and management interface* has been carried out in Indonesia and Sri Lanka.
- Equipment has been procured for the Electronic Monitoring Systems for small-scale fisheries
- Funds have been secured for the development of training materials and supporting national observer schemes in six IOTC CPCs between 2019 and 2020.

Science activities (2018)

16. Neritic tuna CPUE standardisation workshop: Due to the limited availability of data, the management advice for neritic tunas has been based on catch-only methods. In August 2018 a training workshop was held during the WPNT08 to support scientists in the analysis of neritic tuna datasets, specifically in the development of standardised CPUE series to contribute to future assessments of neritic species. The full workshop report is available in IOTC-2018-WPNT08-R.
17. IOTC Species ID guides: Work is ongoing to translate, typeset, format and print the IOTC Species ID guides into the priority languages identified by the SC. The current set of identification guides available is provided here: www.iotc.org/science/species-identification-cards.
18. Cetacean ID guide: A consultant (Dr Gill Braulik) worked closely with the WPEB to develop an identification guide for cetaceans in the Indian Ocean. These have been made available on the IOTC and FAO websites (www.fao.org/documents/card/en/c/CA1893EN/) and are currently being printed in English and French. The guides have been translated into languages used by the main fleets thought to be interacting with cetaceans in the Indian Ocean: Japanese, Chinese (Mandarin and Taiwanese), French and Spanish for species names and French, Spanish, Persian, Urdu, Sinhalese and Tamil, Hindi, Bahasa Indonesian, Arabic and Swahili for the entire booklet. These are currently under review by CPC scientists.
19. Bigeye thresher shark tagging: A consortium has been established to work jointly on a tagging project for to evaluate the post-release mortality of bigeye thresher sharks and the effectiveness of the no retention measure in Resolution 12/09. Scientists are working with observers to deploy tags on sharks release according to routine practices from the fleets of Japan, Taiwan, China, EU, Portugal, EU, France and South Africa. Fifty four pop-up archival satellite tags have been purchased and are in the process of being distributed and deployed. An update is provided in IOTC-2018-WPEB14-27.
20. Collaborative longline CPUE: A stock assessment consultant (Dr. Simon Hoyle), funded by ISSF and the IOTC regular budget, provided the results of the previously held workshop on joint CPUR analysis, to address contrary signals of abundance noted for the major tropical species between Taiwan, China, Japan, and Rep. of Korea. 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 WPTT20 and WPM09.
21. Yellowfin tuna stock assessment: The IOTC stock assessment scientist carried out a stock assessment of yellowfin tuna (1950-2017) using stock synthesis III. Given the substantial uncertainties associated with the input parameters, a reference grid of 24 runs was used. This included alternative levels of steepness (0.7, 0.8 and 0.9), initial tag mortalities (10% and 27.5%), and tag lambdas (0.1 and 1) as well as two assumptions about longline CPUE; (i) down-weighted piracy period (2007-2011) and constant q (Q1) and (ii) removed piracy period with separate q estimates before and after piracy (Q2). The results indicated that the stock is currently overfished and subject to overfishing.
22. Yellowfin and bigeye tuna MSE: A Stock Assessment consultant (Dale Kolody) funded by the joint ABNJ project conducted MSE for yellowfin and bigeye tuna.
23. Swordfish MSE: A workshop was held at the JRC in Italy in November 2018 to review and evaluate the OMs for the IO swordfish MSE. The workshop was attended by the stock assessment scientist as well as CPC scientists.
24. MSE workshop: The 7th IOTC MSE workshop was held in Lisbon in March 2018 to discuss and review the progress for IO yellowfin, bigeye and albacore tuna MSE work. The workshop focused on the technical aspect of the OM development and MP evaluations. The workshop also set out the workplan for the 2nd TCMP meeting.
25. Socio-economic scoping study: A consultancy has been selected and initiated work on a scoping study to assess the state of socio-economic information available for the development of indicators based on the ToRs outlined in Resolution 18/09. This project is due to be completed ahead of the Commission meeting in 2019, at which the results will be presented.

Joint tRFMO activities

26. 2018 ISSF Stock Assessment Workshop: In March 2018 the IOTC secretariat attended a workshop to Review Current t-RFMO Practices in Stock Status Determinations. This Workshop was convened by the International Seafood Sustainability Foundation (ISSF) to review different approaches currently used by tuna Regional Fisheries Management Organizations' (tRFMOs: CCSBT, IATTC, ICCAT, IOTC and WCPFC) science bodies to determine stock status and disseminate stock status information. Workshop participants from all ocean regions reviewed current methodologies, identified best practices and agreed on a set of recommendations on scientific process, stock assessment, uncertainty characterization, stock status determination and communication of scientific results to managers and stakeholders.
27. Joint tuna RFMO Management Strategy Evaluation meeting: In July 2018 the IOTC Secretariat and Chair of the SC attended a joint meeting to discuss the advancement of MSE in the various tuna RFMOs. The aim of the workshop was to provide advice and support for issues of common interest related to MSE development. The outputs of the meeting included a list of recommendations regarding MSE "best practice" as well as a glossary of terms to reduce any confusion regarding MSE discussions

IOTC publications and information products**Documents**

28. In 2018, the Secretariat produced XX (59 in 2017, 74 in 2016, 59 in 2015, 61 in 2014) papers/reports ([Appendix II](#)) in support of the IOTC Science process, not including the reports of the various working parties (6) or the species Executive Summaries (26).

IOTC Website

29. The IOTC website continues to be a portal for communicating science related information to a variety of audiences. The Secretariat completed development of a new website in 2015, as requested by the Commission, which include:
- **Stock assessment**: Input and output files for yellowfin tuna stock assessments.
 - **Species ID guides**: translated versions are being made available online, as they are produced.

RECOMMENDATION

That the Scientific Committee **NOTE** paper IOTC–2018–SC21–05 which provides the report of the IOTC Secretariat for 2018, including the updates provided on the Recommendations and Requests directed to the IOTC Secretariat for implementation in 2018.

APPENDICES

Appendix I: [List of Chairs, Vice-Chairs and their respective terms for IOTC Science meetings.](#)

Appendix II: [Papers from the IOTC Secretariat \(or co-authorship\) submitted to the IOTC Working Parties or Scientific Committee in 2017.](#)

APPENDIX I

List of Chairs, Vice-Chairs and their respective terms for the IOTC Scientific Committee and its subsidiary bodies

Group	Chair/Vice-Chair	Chair	CPC/Affiliation	1 st Term commencement date	Term expiration date (End date is until replacement is elected)	Comments
SC	Chair	Dr Hilario Murua	EU,Spain	28–Nov–15	End of SC in 2019	2 nd term
	Vice-Chair	Dr Shiham Adam	Maldives, Rep. of	28–Nov–15	End of SC in 2019	2 nd term
WPB	Chair	Dr Rui Coelho	EU,Portugal	14–Sept–17	End of WPB in 2019	1 st term
	Vice-Chair	Dr Evgeny Romanov	EU,France	05–Sep–15	End of WPB in 2019	2 nd term
WPTmT	Chair	Dr Jiangfeng Zhu	China	21–July–16	End of WPTmT in 2018	1 st term
	Vice-Chair	Dr Toshihide Kitakado	Japan	21–July–16	End of WPTmT in 2018	1 st term
WPTT	Chair	Dr Gorka Merino	EU,Spain	03–Nov–18	End of WPTT in 2020	1 st term
	Vice-Chair	Dr Shiham Adam	Maldives, Rep. of	13–Nov–18	End of WPTT in 2020	1 st term
WPEB	Chair	Dr Sylvain Bonhommeau	EU,France	08–Sept–17	End of WPEB in 2019	1 st term
	Vice-Chair	Dr Reza Shahifar; Dr Ross Wanless	I.R. Iran / South Africa	11–Sept–15	End of WPEB in 2019	2 nd term
WPNT	Chair	Dr Farhad Kaymaram	I.R. Iran	29–May–15	End of WPNT in 2019	2 nd term
	Vice-Chair	Dr Mathias Igulu	Tanzania	29–May–15	End of WPNT in 2019	2 nd term
WPDCS	Chair	Mr Stephen Ndegwa	Kenya	28–Nov–17	End of WPDCS in 2019	1 st term
	Vice-Chair	Dr Julien Barde	EU,France	28–Nov–17	End of WPDCS in 2019	1 st term
WPM	Chair	Dr Toshihide Kitakado	Japan	21–Oct–15	End of WPM in 2019	2 nd term
	Vice-Chair	Dr Iago Mosqueira	EU,Spain	21–Oct–15	End of WPM in 2019	2 nd term

APPENDIX II

Papers from the IOTC Secretariat (or co-authorship) submitted to the IOTC Working Parties or Scientific Committee in 2018

Document number	Title
<i>8th Session of the IOTC Working Party on Neritic Tunas</i>	
IOTC–2018–WPNT08–03	Outcomes of the 20 th Session of the Scientific Committee (IOTC Secretariat)
IOTC–2018–WPNT08–04	Outcomes of the 22 nd Session of the Commission (IOTC Secretariat)
IOTC–2018–WPNT08–05	Review of current Conservation and Management Measures relating to neritic tuna species (IOTC Secretariat)
IOTC–2018–WPNT08–06	Progress made on the recommendations and requests of WPNT07 and SC20 (IOTC Secretariat)
IOTC–2018–WPNT08–07	Review of the statistical data available for the neritic tuna species (IOTC Secretariat)
IOTC–2018–WPNT08–08	Revision of the WPNT Program of Work (2019–2023) (IOTC Secretariat)
IOTC–2018–WPNT08–INF01	Guidelines for the presentation of CPUE standardisations and stock assessment models (IOTC Secretariat)
IOTC–2018–WPNT08–INF02	SC Workplan 2018 (IOTC Secretariat)
<i>16th Session of the IOTC Working Party on Billfish</i>	
IOTC–2018–WPB16–03	Outcomes of the 20 th Session of the Scientific Committee (IOTC Secretariat)
IOTC–2018–WPB16–04	Outcomes of the 22 nd Session of the Commission (IOTC Secretariat)
IOTC–2018–WPB16–05	Review of Conservation and Management Measures relevant to billfish (IOTC Secretariat)
IOTC–2018–WPB16–06_Rev1	Progress made on the recommendations and requests of WPB15 and SC20 (IOTC Secretariat)
IOTC–2018–WPB16–07	Review of the statistical data and fishery trends for billfish species (IOTC Secretariat)
IOTC–2018–WPB16–08	Revision of the WPB Program of Work (2019–2023) (IOTC Secretariat)
IOTC–2018–WPB16–22	Revision to IOTC scientific estimates for Indonesia's small-scale longline catches (Geehan J, Setyadj B)
<i>14th Session of the Working Party on Ecosystems and Bycatch</i>	
IOTC–2018–WPEB14–03	Outcomes of the 20 th Session of the Scientific Committee (IOTC Secretariat)
IOTC–2018–WPEB14–04	Outcomes of the 22 nd Session of the Commission (IOTC Secretariat)
IOTC–2018–WPEB14–05	Review of Conservation and Management Measures relevant to ecosystems and bycatch (IOTC Secretariat)
IOTC–2018–WPEB14–06	Progress made on the recommendations and requests of WPEB13 and SC20 (IOTC Secretariat)
IOTC–2018–WPEB14–07	Review of the statistical data and fishery trends for ecosystems and bycatch species (IOTC Secretariat)
IOTC–2018–WPEB14–08_Rev1	Update on the implementation of the IOTC Regional Observer Scheme (IOTC Secretariat)
IOTC–2018–WPEB14–09	Status of development and implementation of National Plans of Action for seabirds and sharks, and implementation of the FAO guidelines to reduce marine turtle mortality in fishing operations (IOTC Secretariat)
IOTC–2018–WPEB14–10	Revision of the WPEB Program of Work (2019–2023) (IOTC Secretariat & Chairperson)
IOTC–2018–WPEB14–INF01	Draft marine turtle call (IOTC Secretariat)
<i>20th Session of the Working Party on Tropical Tunas</i>	
IOTC–2018–WPTT20–03	Outcomes of the 20 th Session of the Scientific Committee (IOTC Secretariat)
IOTC–2018–WPTT20–04	Outcomes of the 22 nd Session of the Commission (IOTC Secretariat)
IOTC–2018–WPTT20–05	Review of Conservation and Management Measures relevant to tropical tunas (IOTC Secretariat)
IOTC–2018–WPTT20–06	Progress made on the recommendations of WPTT19 (IOTC Secretariat)
IOTC–2018–WPTT20–07	Outcomes of the 2 nd Session of the Technical Committee on management Procedures (IOTC Secretariat)
IOTC–2018–WPTT20–08	Review of the statistical data and fishery trends for tropical tunas (IOTC Secretariat)
IOTC–2018–WPTT20–09	Revision of the WPTT Program of Work (2019–2023) (IOTC Secretariat)

IOTC-2017-WPTT20-33	Preliminary Indian Ocean Yellowfin Tuna Stock Assessment 1950-2017 (Stock Synthesis) (Fu D, Langley A, Merino G and Urtizbera A)
9th Working Party on Methods	
IOTC-2018-WPM09-03	Outcomes of the 20 th Session of the Scientific Committee (IOTC Secretariat)
IOTC-2018-WPM09-04	Outcomes of the 22 nd Session of the Commission (IOTC Secretariat)
IOTC-2018-WPM09-05	Review of Conservation and Management Measures relating to methods (IOTC Secretariat)
IOTC-2018-WPM09-06	Progress on the recommendations of WPM08 and SC20 (IOTC Secretariat)
IOTC-2018-WPM09-07	Revision of the WPM Program of Work (2019–2023) (IOTC Secretariat & Chairpersons)
IOTC-2018-WPM09-12	Collaborative study of yellowfin tuna CPUE from multiple Indian Ocean longline fleets in 2018 (Hoyle S D, Chassot E, Fu D, Kim D N, Lee S I, Matsumoto T, Satoh K, Wang S-P, Yeh Y-M, and Kitakado T)
IOTC-2018-WPM09-INF04	Report of the 2nd meeting of the Joint Tuna RFMO MSE Working Group (Anon)
14th Working Party on Data Collection and Statistics	
IOTC-2018-WPDCS14-03	Outcomes of the 20 th Session of the Scientific Committee (IOTC Secretariat)
IOTC-2018-WPDCS14-04	Outcomes of the 22 nd Session of the Commission (IOTC Secretariat)
IOTC-2018-WPDCS14-05	Review of current Conservation and Management Measures relating to the WPDCS (IOTC Secretariat)
IOTC-2018-WPDCS14-06	Progress on the recommendations of WPDCS12 (IOTC Secretariat)
IOTC-2018-WPDCS14-07	Report on IOTC Data Collection and Statistics (IOTC Secretariat)
IOTC-2018-WPDCS14-08	IOTC capacity building activities in support of developing coastal IOTC CPCs (IOTC Secretariat)
IOTC-2018-WPDCS14-09	Revision of the WPDCS Program of Work (2019–2023) (IOTC Secretariat, Chairperson & Vice-Chairperson)
IOTC-2018-WPDCS14-31	Review of Pakistan's reconstructed catch series (Khan F, Khan M, Geehan J)
IOTC-2018-WPDCS14-33	Electronic tools in support of the IOTC ROS data collection and reporting workflow (IOTC Secretariat)
IOTC-2018-WPDCS14-35	Report of the expert workshop to review the standards of the ROS (ROS Expert Working Group)
IOTC-2018-WPDCS14-INF03	Proposed changes to the IOTC ROS data collection fields (ROS Expert Working Group)
20th Session of the Scientific Committee	
IOTC-2018-SC21-03	Outcomes of the 22 nd Session of the Commission (IOTC Secretariat)
IOTC-2018-SC21-04	Previous decisions of the Commission (IOTC Secretariat)
IOTC-2018-SC21-05	Report of the Secretariat – Activities in support of the IOTC science process in 2018 (IOTC Secretariat)
IOTC-2018-SC21-06	Status of development and implementation of national plans of action for seabirds and sharks, and implementation of the FAO guidelines to reduce marine turtle mortality in fishing operations (IOTC Secretariat)
IOTC-2018-SC21-07	2018: Update on the implementation of the regional observer scheme (IOTC Secretariat)
IOTC-2018-SC21-08	2018: Update on progress regarding Resolution 09/01 – on the performance review follow-up (IOTC Secretariat)
IOTC-2018-SC21-09	Revision of the program of work (2019–2023) for the IOTC science process (IOTC Secretariat)
IOTC-2018-SC21-10	Proposed schedule of Working Party and Scientific Committee meetings for 2019 and 2020 (IOTC Secretariat)
IOTC-2018-SC21-11	Progress on recommendations from SC20 (IOTC Secretariat)
IOTC-2018-SC21-12	Update on the conditioning of an operating model and initial testing of generic candidate management procedures for the Indian Ocean swordfish (Rosa D, Mosqueira I, Fu D, Coelho R)
IOTC-2018-SC21-16	Indian Ocean Yellowfin Tuna SS3 Model Projections (Fu D, Langley A, Merino G and Urtizbera A)
IOTC-2018-SC21-18	IOTC Science Strategic Plan (IOTC-SSP), (SC Chair and IOTC Secretariat)