

DRAFT: REPORT OF THE SECRETARIAT – ACTIVITIES IN SUPPORT OF THE IOTC SCIENCE PROCESS IN 2016

PREPARED BY: IOTC SECRETARIAT, 16 NOVEMBER 2016

PURPOSE

1. To inform the Scientific Committee (SC) of work undertaken by the IOTC Secretariat in 2016 in support of the IOTC Science process, endorsed by the Commission.

DISCUSSION

Staffing

2. Fishery Officer (Data Coordinator): Mr Fabio Fiorellato arrived at the IOTC Secretariat in March 2016
3. Fishery Officer (Stock Assessment): Mr Dan Fu arrived at the IOTC Secretariat in November 2016

IOTC meetings – Working parties

4. In 2016, seven (7) 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](#).
5. [Appendix II](#) lists the documents produced by the IOTC Secretariat in support of Working Party meetings held in 2016. In addition, the IOTC Secretariat produced revised Executive Summaries for all of the IOTC stocks, as well as for sharks, seabirds and marine turtles in association with various experts, totalling 25 Executive Summaries.
6. The IOTC Secretariat facilitated the participation of invited experts that were selected to attend each of the Working Party meetings in 2016. The names and affiliations of each of the Invited Experts are provided in Table 1.

Table 1. Invited Experts for Working Party meetings in 2016

Working Party	Date and place	Name	Affiliation
Neritic Tunas	21–24 June, Seychelles	Dr. Shiji Zhou	CSIRO, Australia
Temperate Tunas	18-21 July, Shanghai, China	Nil	Nil
Billfish	6–10 September, Seychelles	Dr. Humber Andrade	Universidade Federal Rural de Pernambuco, Brazil
Ecosystems and Bycatch	12–16 September, Seychelles	Dr. Malcolm Francie	NIWA, New Zealand
Tropical Tunas	5–10 November, Seychelles	Nil ¹	Nil
Methods	11–13 November, Seychelles	Dr. Ana Parma	Argentina
Data Collection and Statistics	28-30 November, Seychelles	Nil	Nil

IOTC meetings – Meeting Participation Fund

7. 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 2016, the Secretariat facilitated the participation of 49 individuals from developing Members of the IOTC to the seven (7) Working Party meetings held in 2016 as detailed in Table 2.
8. The total level of participation (including the Scientific Committee) by MPF recipients increased in 2016 (67), compared to 2015 (53), 2014 (50), and 2013 (58) (46 in 2012, 33 in 2011 and 19 in 2010) (Table 2).

¹ Due to exceptional circumstances the invited expert had to withdraw from the meeting at the last minute

Table 2. Scientific Meetings held in 2016, prior to the 19th 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)	
		2010	2011	2012	2013	2014	2015	2016	2010	2011	2012	2013	2014	2015		2016
Neritic Tunas	21–24 June, Seychelles	–	28	35	42	37	31	20	–	9 ²	10	11	13	9	10	Total: 28 (32) Working papers: 26 (29) Information papers: 2 (3)
Temperate Tunas	21-24 July, Shanghai, China	15*	16	26	–	27	–	29	–	2	3	–	3	–	4	Total : 29 (30) Working papers : 29 (26) Information papers : 0 (4)
Billfish	6–10 September, Seychelles	12	27	23	24	21	23	18	0	5	5	10	4	9 ³	6	Total: 29 (40) Working papers: 28 (32) Information papers: 1 (8)
Ecosystems and Bycatch	12–16 September, Seychelles	37	49	48	32	37	38	37	9 ⁴	7 ⁵	7	11	5	8 ⁶	8	Total: 53 (64) Working papers: 42 (52) Information papers: 11 (12)
Methods	11–13 November, Seychelles	18*	–	22	–	34	26	TBA	–	–	1	–	3 ⁷	6 ⁸	9	Total: 18 (24) Working papers: 17 (14) Information papers: 1 (10)
Data Collection and Statistics	28-30 November, Seychelles	28	21	–	23	30	20	TBA	–	2	–	5	1	4	6	Total: 33 (17) Working papers: 28 (11) Information papers: 5 (6)
Tropical Tunas	5–10 November, Seychelles	39	49	47	46	53	44	47	11	13	8	10	6	6	6	Total: 42 (46) Working papers: 39 (37) Information papers: 3 (9)
Scientific Committee	1–5 December, Seychelles	41	50	54	75	62	71	TBA	7	10	12	11	15	13	18	Working papers: TBA (14) Executive Summaries: 25 Information papers: TBA (1)

² Another 7 scientists were supported by IOTC through the Capacity Building funds as they were also attending the capacity building workshop in Chennai, India (WPNT01)

³ 2 scientists attended both the WPB and WPEB;

⁴ 6 scientists attended both the WPTT and WPEB

⁵ 3 scientists attended both the WPTT and WPEB

⁶ 2 scientists attended both the WPB and WPEB

⁷ 3 scientists attended both the WPM and SC

⁸ Funded by the ABNJ tuna project

* Refers to year 2008

Data-related activities – General

9. 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.
10. Integrated IOTC database: The new Data Coordinator arrived at the IOTC Secretariat in March 2016 and has been leading the finalization of the new IOTC Integrated Tuna Database. Migration of the main IOTC datasets has now been completed, and development is now being focused on dissemination of the elements of the database on the IOTC website and also integration of stock assessment dataset procedures.
11. 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. In addition to the standard fishery datasets, the IOTC Secretariat has updated the RTTP tagging dataset to incorporate new information.

Data-related activities – Capacity building and other initiatives

12. 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 CMS, IOSEA, NOAA, WWF-Pakistan and WWF-USA on capacity building activities to support the implementation of the Regional Observer Scheme in developing coastal states.
13. Following is a summary of the capacity building activities undertaken since the end of SC18⁹:
 - a) Data compliance and support missions, including:
 - i. Tanzania (Feb-2016)
 - ii. Mauritius (Aug-2016)
 - iii. Indonesia (Oct-2016)
 - b) Mauritius: assessment of size and biological data for albacore tuna unloading in Port Louis, Mauritius (Aug-2016).
 - c) Indonesia: technical assistance mission to support IOTC-OFCF Pilot sampling project of artisanal fisheries.
14. Below is a non-exhaustive (provisional) list of the capacity building activities planned for 2017¹⁰:
 - a) Support to WWF Observer Workshop for northern Indian Ocean CPCs (Iran, January)
 - b) IOTC data compliance and support missions (e.g., I.R. Iran) (TBC)
 - c) Indonesia pilot project of artisanal fisheries (on-going)
 - d) Support to the implementation of the IOTC Regional Observer Scheme (on-going), and development of the Regional Observer Scheme Pilot Project
 - e) Regional Observer Scheme E-monitoring: pilot
 - f) Regional Observer Scheme E-Reporting tool: pilot testing and roll-out workshops
 - g) Assistance in Catch Assessment Survey of artisanal fisheries in Kenya (TBC)

⁹ For more information on these activities refer to: IOTC capacity building activities in support of developing coastal IOTC CPCs: 2016 activities. IOTC–2016–WPDCS12-08, or email: secretariat@iotc.org.

¹⁰ Ditto 5

Table 3. Missions of staff from the IOTC Secretariat during 2016 in relation to capacity building activities in the Indian Ocean.

Country	Date	Staff	Description
Tanzania	Feb 2016	IOTC Fisheries Statistician IOTC Data Assistant	Data compliance and support mission, including support for implementation of the Regional Observer Scheme
Mauritius	August 2016	IOTC Fisheries Statistician IOTC Data Assistant	i.) Data compliance and support mission. ii.) Assess the feasibility of collecting length and biological information for albacore tuna, particularly for foreign longline vessels unloading in Mauritius.
Indonesia	Oct 2016	IOTC Fisheries Statistician IOTC-OFCF Project Manager	i.) Technical assistance mission: reporting of catch-and-effort, size data and Regional Observer data. ii.) Assistance for continuation of IOTC-OFCF Indonesia pilot sampling project.

Other data activities (2016)

15. **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 2016. 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.
16. **Regional Observer Scheme:** In 2015 a project proposal was developed to support the collection, reporting and management of data under the IOTC Regional Observer Scheme. Work on of an electronic reporting interface and database, integrated with the new IOTC database system has progressed throughout 2016, and is due to conclude in early-2017 followed by testing and roll-out of the new ROS reporting system to a small number of pilot CPCs. This project has been developed in collaboration with WWF, and is jointly funded by the EU and NOAA.
17. **Sport fisheries project:** The project aims to improve the data reporting coverage of sports and recreational fisheries in the western Indian Ocean. The activities include compiling a directory of sport fishing centres in the western Indian Ocean region, development of a database and standardized reporting forms adapted to Sport Fishing Centres in the western Indian Ocean region, and deliver training materials to Sports Fishing Centres to improve the reporting of sports fisheries data to the IOTC Secretariat.
18. **CITES data mining and indicator development:** A data-mining workshop was held in Victoria, Seychelles from 2-4 November 2016, led by a consultant, Dr Joel Rice. This was part of the WPEB Program of Work and funded by CITES. The main objectives of this workshop were to conduct data mining to compile historical data for CITES-listed oceanic whitetip (*Carcharhinus longimanus*) and hammerhead sharks, namely *Sphyrna lewini*, *S. mokarran* and *S. zygaena* and develop descriptive indicators related to stock status. This work is ongoing and the final report is due at the end of December 2016.

Science activities (2016)

19. **Neritic tunas:** In 2016 two data-poor stock assessment methods (an Optimised Catch-Only Method and Catch-MSY) were used to assess the status of stocks for Longtail tuna (*Thunnus tonggol*), narrow-barred Spanish mackerel (*Scomberomorus commerson*) and Indo-Pacific king mackerel (*Scomberomorus guttatus*) in collaboration with the invited expert and an external consultant.
20. **Blue shark:** During the stock assessment conducted on blue shark in 2015, the historical catch series was considered to be the major source of uncertainty and so in preparation for the next stock assessment in 2017, the IOTC Secretariat worked on methods to generate alternative catch estimates for the historical data series. Three main methods were used:
 - Disaggregation techniques – a method to estimate the species composition of reported aggregate shark catches (SKH) was developed based on the methods used for disaggregating the IOTC main species, i.e. using ratios from proxy fleets, time periods and regions.
 - Estimation of ‘missing’ catches – two methods were developed to estimate the unreported catches of blue sharks. One was based on a ratio of blue sharks to target catches, by fleet, over time. The

second was based on a statistical modelling approach using GAMs to predict catches based on the input variables: target species catches, time, fleet, and area (E/W).

These are being developed further in collaboration with the stock assessment consultant for use in 2017.

21. Seabirds: In 2016 a data call was circulated among CPCs based on a proposal by BirdLife for data to review the effectiveness of Resolution 12/06. These data were collated and reviewed by the IOTC Secretariat in collaboration with the Chairpersons of WPEB and the SC.
22. 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. An update on current progress is available in IOTC-2016-SC19-07.
23. Cetacean ID guides: ToRs for the development of a set of cetacean ID guides for the Indian Ocean are in the final stages of development and the work is due to commence shortly.

Joint tRFMO activities

24. Ecosystem Based Fisheries Management: In December 2016 the IOTC Secretariat, with the SC WPEB Chairpersons, will be attending a joint meeting of tuna RFMOs on the Implementation of the Ecosystem Approach to Fisheries Management to review progress, discuss challenges and potential solutions in implementing EBFM and contribute to a draft framework. Outcomes will be reported back to the SC20.
25. SeaBird Bycatch Assessment Workshop: In 2017 the IOTC Secretariat will be attending a regional seabird bycatch assessment workshop which aims to strengthen the capacity of national scientists and institutions to manage and conduct analyses of seabird bycatch data and the effectiveness of bycatch mitigation measures and develop harmonised assessment methods to facilitate annual seabird bycatch assessments by RFMOs and/or CPCs and for the global assessment of current bycatch mitigation measures.
26. FAD working group: The IOTC Secretariat is liaising with the ICCAT Secretariat and other tRFMOs to hold a joint working group on FADs in 2017, as per Resolution 15/09. EU funding has been provided for support the attendance of developing CPCs at this meeting.

Stock assessment consultants

27. Blue shark: Following the recommendation of the Working Party on Ecosystems and Bycatch in 2015, which was endorsed by the Scientific Committee at its 18th Session, a Stock Assessment consultant (Dr. Joel Rice) was hired to conduct historic catch reconstruction analyses on blue shark.
28. Yellowfin and bigeye tuna: Following the recommendation of the Working Party on Tropical Tunas in 2015, which was endorsed by the Scientific Committee at its 18th Session, a Stock Assessment consultant (Mr. Adam Langley) was hired again to conduct stock assessment analyses on bigeye tuna and also an update to the 2015 yellowfin tuna stock assessment.
29. Collaborative longline CPUE: A follow-up CPUE workshop was arranged to update and develop the collaborative longline CPUE for tropical and temperate tunas, by a stock assessment consultant (Dr. Simon Hoyle), funded by ISSF and the IOTC regular budget, 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; one paper on the results of developments in the collaborative CPUE were presented at WPTT18 and WPM07¹¹.

IOTC publications and information products

Documents

30. In 2016, the Secretariat produced 74 (59 in 2015, 61 in 2014, 51 in 2013, 49 in 2012) papers/reports ([Appendix II](#)) in support of the IOTC Science process, not including the reports of the various working parties (7) or the species Executive Summaries (25).

¹¹ <http://www.iotc.org/documents/collaborative-study-tropical-tuna-cpue-multiple-indian-ocean-longline-fleets-2016>

IOTC Website

31. 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, available as they are produced.

RECOMMENDATION

That the Scientific Committee **NOTE** paper IOTC–2016–SC19–05 which provides the report of the IOTC Secretariat for 2016, including the updates provided on the Recommendations and Requests directed to the IOTC Secretariat for implementation in 2016.

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 2016.](#)

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 2017	1 st term
	Vice-Chair	Dr Shiham Adam	Maldives, Rep. of	28–Nov–15	End of SC in 2017	1 st term
WPB	Chair	Dr Tsutomu Nishida	Japan	05–Sept–15	End of WPB in 2017	1 st term
	Vice-Chair	Dr Evgeny Romanov	EU,France	05–Sep–15	End of WPB in 2017	1 st 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 Shiham Adam	Maldives, Rep. of	19–Nov–14	End of WPTT in 2018	2 nd term
	Vice-Chair	Dr Gorka Merino	EU,Spain	19–Nov–14	End of WPTT in 2018	2 nd term
WPEB	Chair	Dr Rui Coelho	EU,Portugal	16–Sept–13	End of WPEB in 2017	2 nd term
	Vice-Chair	Dr Reza Sharifar; Dr Ross Wanless	I.R. Iran / South Africa	11–Sept–15	End of WPEB in 2017	1 st term
WPNT	Chair	Dr Farhad Kaymaram	I.R. Iran	29–May–15	End of WPNT in 2017	1 st term
	Vice-Chair	Dr Mathias Igulu	Tanzania	29–May–15	End of WPNT in 2017	1 st term
WPDCS	Chair	Dr Emmanuel Chassot	EU,France	02–Dec–14	End of WPDCS in 2017	2 nd term
	Vice-Chair	Mr Stephen Ndegwa	Kenya	22–Oct–15	End of WPDCS in 2017	2 nd term
WPM	Chair	Dr Toshihide Kitakado	Japan	21–Oct–15	End of WPM in 2017	1 st term
	Vice-Chair	Dr Iago Mosqueira	EU,Spain	21–Oct–15	End of WPM in 2017	1 st term

APPENDIX II

Papers from the IOTC Secretariat (or co-authorship) submitted to the IOTC Working Parties or Scientific Committee in 2016

Document number	Title
6th Session of the IOTC Working Party on Neritic Tunas	
IOTC–2016–WPNT06–03	Outcomes of the 18 th Session of the Scientific Committee (IOTC Secretariat)
IOTC–2016–WPNT06–04	Outcomes of the 20 th Session of the Commission (IOTC Secretariat)
IOTC–2016–WPNT06–05	Review of current Conservation and Management Measures relating to neritic tuna species (IOTC Secretariat)
IOTC–2016–WPNT06–06	Progress made on the recommendations and requests of WPNT05 and SC18 (IOTC Secretariat)
IOTC-2016-WPNT06-07 Rev_1	Review of the statistical data available for the neritic tuna species (IOTC Secretariat)
IOTC–2016–WPNT06–08	Revision of the WPNT Program of Work (2017–2021) (IOTC Secretariat)
IOTC–2016–WPNT06–09	Improving the core IOTC data management processes (IOTC Secretariat)
IOTC–2016–WPNT06–10	Overview of the pilot sampling project of artisanal fisheries in North and West Sumatra: implications on IOTC catch estimates of neritic tunas in Indonesia. (IOTC Secretariat)
IOTC–2016–WPNT06–16	A Productivity Susceptibility Analysis for neritic tuna species (J.Robinson, IOTC Consultant)
IOTC–2016–WPNT06–17 Rev_1	Assessment of Indian Ocean longtail tuna (<i>Thunnus tonggol</i>) using data poor catch-based methods (IOTC Secretariat)
IOTC–2016–WPNT06–18 Rev_1	Assessment of Indian Ocean narrow-barred Spanish mackerel (<i>Scomberomorus commerson</i>) using data poor catch-based methods (IOTC Secretariat)
IOTC–2016–WPNT06–21 Rev_1	Assessment of Indian Ocean Indo-Pacific king mackerel (<i>Scomberomorus guttatus</i>) using data poor catch-based methods (IOTC Secretariat)
6th Session of the IOTC Working Party on Temperate Tunas	
IOTC–2016–WPTmT06–03	Outcomes of the 18 th Session of the Scientific Committee (IOTC Secretariat)
IOTC–2016–WPTmT06–04	Outcomes of the 20 th Session of the Commission (IOTC Secretariat)
IOTC–2016–WPTmT06–05	Review of Conservation and Management Measures relevant to temperate tuna (IOTC Secretariat)
IOTC–2016–WPTmT06–06	Progress made on the recommendations of WPTmT05 (IOTC Secretariat)
IOTC–2016–WPTmT06–07	Review of the statistical data and fishery trends for albacore (IOTC Secretariat)
IOTC–2016–WPTmT06–08	Revision of the WPTmT Program of Work (2017–2021) (IOTC Secretariat)
14th Session of the IOTC Working Party on Billfish	
IOTC–2016–WPB14–03	Outcomes of the 18 th Session of the Scientific Committee (IOTC Secretariat)
IOTC–2016–WPB14–04	Outcomes of the 20 th Session of the Commission (IOTC Secretariat)
IOTC–2016–WPB14–05	Review of Conservation and Management Measures relevant to billfish (IOTC Secretariat)
IOTC–2016–WPB14–06	Progress made on the recommendations and requests of WPB13 and SC18 (IOTC Secretariat)
IOTC–2016–WPB14–07_Rev1	Review of the statistical data and fishery trends for billfish species (IOTC Secretariat)
IOTC–2016–WPB14–08_Rev1	Revision of the WPB Program of Work (2017–2021) (IOTC Secretariat)
IOTC–2016–WPB14–09_Rev1	Improvement in the core IOTC data management processes (IOTC Secretariat)
12th Session of the Working Party on Ecosystems and Bycatch	
IOTC–2016–WPEB12–03	Outcomes of the 18 th Session of the Scientific Committee (IOTC Secretariat)
IOTC–2016–WPEB12–04	Outcomes of the 20 th Session of the Commission (IOTC Secretariat)
IOTC–2016–WPEB12–05	Review of Conservation and Management Measures relevant to ecosystems and bycatch (IOTC Secretariat)
IOTC–2016–WPEB12–06	Progress made on the recommendations and requests of WPEB11 and SC18 (IOTC Secretariat)
IOTC–2016–WPEB12–07	Review of the statistical data and fishery trends for ecosystems and bycatch species (IOTC Secretariat)
IOTC–2016–WPEB12–08	Improvements to the IOTC database (IOTC Secretariat)

IOTC–2016–WPEB12–09 Rev_1	Update on the implementation of the IOTC Regional Observer Scheme (IOTC Secretariat)
IOTC–2016–WPEB12–10 Rev_1	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–2016–WPEB12–11	Revision of the WPEB Program of Work (2017–2021) (IOTC Secretariat)
IOTC–2016–WPEB12–36	Preliminary Analysis and Data Development for Blue Shark (<i>Prionace glauca</i>) Catch Reconstruction (J.Rice and S.Martin)
IOTC–2016–WPEB12–37	Progress report on data mining for CITES-listed species, stock status and review of mitigation measures for Oceanic whitetip shark (<i>Carcharhinus longimanus</i>) (J.Rice)
IOTC–2016–WPEB12–INF04	Blue Shark catches reported to the IOTC Secretariat, and a review of current estimation procedures (IOTC Secretariat)

18th Session of the Working Party on Tropical Tunas

IOTC–2016–WPTT18–03	Outcomes of the 18 th Session of the Scientific Committee (IOTC Secretariat)
IOTC–2016–WPTT18–04	Outcomes of the 20 th Session of the Commission (IOTC Secretariat)
IOTC–2016–WPTT18–05	Review of Conservation and Management Measures relevant to tropical tunas (IOTC Secretariat)
IOTC–2016–WPTT18–06	Progress made on the recommendations of WPTT17 (IOTC Secretariat)
IOTC–2016–WPTT18–07	Review of the statistical data and fishery trends for tropical tunas (IOTC Secretariat)
IOTC–2016–WPTT18–08	Revision of the WPTT Program of Work (2017–2021) (IOTC Secretariat)

7th Working Party on Methods

IOTC–2016–WPM07–03	Outcomes of the 18 th Session of the Scientific Committee (IOTC Secretariat)
IOTC–2016–WPM07–04	Outcomes of the 20 th Session of the Commission (IOTC Secretariat)
IOTC–2016–WPM07–05	Review of Conservation and Management Measures relating to methods (IOTC Secretariat)
IOTC–2016–WPM07–06	Progress on the recommendations of WPM06 (IOTC Secretariat, Chair & Vice-Chair)
IOTC–2016–WPM07–07	Revision of the WPM Program of Work (2017–2021) (IOTC Secretariat, Chair & Vice-Chair)

12th Working Party on Data Collection and Statistics

IOTC–2016–WPDCS12–03	Outcomes of the 18 th Session of the Scientific Committee (IOTC Secretariat)
IOTC–2016–WPDCS12–04	Outcomes of the 20 th Session of the Commission (IOTC Secretariat)
IOTC–2016–WPDCS12–05	Review of current Conservation and Management Measures relating to the WPDCS (IOTC Secretariat)
IOTC–2016–WPDCS12–06	Progress on the recommendations of WPDCS11 (IOTC Secretariat)
IOTC–2016–WPDCS12–07	Report on IOTC Data Collection and Statistics (IOTC Secretariat)
IOTC–2016–WPDCS12–08	IOTC capacity building activities in support of developing coastal IOTC CPCs (IOTC Secretariat)
IOTC–2016–WPDCS12–09	Revision of the WPDCS Program of Work (2017–2021) (IOTC Secretariat, Chairperson & Vice-Chairperson)
IOTC–2016–WPDCS12–18	Improving the management of European Union and assimilated Purse Seine fleets size-frequency data received by the Secretariat (IOTC Secretariat)
IOTC–2016–WPDCS12–19	Considerations about alternative definitions of total catches, discards and bycatch and their possible impact on the IOTC data submission forms (IOTC Secretariat)
IOTC–2016–WPDCS12–20	Implications on data collection and reporting for IOTC Contracting Parties and Cooperating Non-Contracting Parties subject to catch reductions according to Resolution 16/01 (IOTC Secretariat)
IOTC–2016–WPDCS12–22	The Regional Observer Scheme strategic plan (IOTC Secretariat)
IOTC–2016–WPDCS12–25	Improving the core IOTC data management processes (IOTC Secretariat)
IOTC–2016–WPDCS12–26	Data as resources: how to enhance data sharing capabilities between the Secretariat and the scientific community (IOTC Secretariat)
IOTC–2016–WPDCS12–28	A bycatch data exchange protocol for the Indian Ocean (IOTC Secretariat)

18th Session of the Scientific Committee

IOTC–2016–SC19–03	Outcomes of the 20 th Session of the Commission (IOTC Secretariat)
IOTC–2016–SC19–04	Previous decisions of the Commission (IOTC Secretariat)
IOTC–2016–SC19–05	Report of the Secretariat – Activities in support of the IOTC science process in 2016 (IOTC Secretariat)
IOTC–2016–SC19–06	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–2016–SC19–07	2016: Update on the implementation of the regional observer scheme (IOTC Secretariat)
IOTC–2016–SC19–08	2016: Update on progress regarding Resolution 09/01 – on the performance review follow-up (IOTC Secretariat)
IOTC–2016–SC19–09	Revision of the program of work (2016–2020) for the IOTC science process (IOTC Secretariat)
IOTC–2016–SC19–10	Proposed schedule of Working Party and Scientific Committee meetings for 2017 and 2018 (IOTC Secretariat)
IOTC–2016–SC19–14	Development of a pilot project for the ROS (IOTC Secretariat)
IOTC–2016–SC19–INF01	Preliminary results of data mining for oceanic whitetip sharks with respect to IOTC Resolution 13/06 (J. Rice, IOTC Consultant)
IOTC–2016–SC19–INF02	A review of the response to the seabird data call in IOTC circular 2016-043 (IOTC Secretariat)
IOTC-2016-SC19-ES1-ES25	Executive Summaries for IOTC species and the main bycatch species