

IOTC CIRCULAR 2017-027

Dear Sir/Madam,

SUBJECT: PROPOSALS FOR CONSERVATION AND MANAGEMENT MEASURES TO BE CONSIDERED AT THE 21ST SESSION OF THE COMMISSION (S21)

Deferred proposals from 2016

At the 20th Session of the Commission, Contracting Parties and Cooperating Non-Contracting Parties (collectively termed CPCs) considered a wide range of proposals for new or revised Conservation and Management Measures, four (4) of which were deferred until the next Session of the Commission as agreement could not be reached. Details of the discussions surrounding the deferred proposals from 2016 are provided as an attachment to this Circular ([Attachment I](#)). Sponsors of the proposals may wish to consult widely among the Membership and to resubmit, if desired, in accordance with the IOTC Rules of Procedure (2014).

List of Proposals **DEFERRED** by the Commission in 2016 for discussion at S21 in 2017:

- 1) On the conservation and management of neritic tunas in the IOTC Area of Competence
- 2) On establishing a list of vessels presumed to have carried out illegal, unreported and unregulated fishing in the IOTC area of competence
- 3) Concerning the conservation of sharks caught in association with fisheries managed by the IOTC
- 4) On the conservation and management of IOTC species

2017 Proposal titles and sponsorship

In an attempt to further improve the coordination and development of proposals for new and/or revised Conservation and Management Measures for the upcoming Commission session (S21), Members are kindly requested to provide the IOTC Secretariat with a **provisional title** and **Contracting Party sponsorship**, for each proposal you are intending on submitting for the consideration of the Commission, as soon as possible, although no later than **22 April** (30 days prior to the S21). The intention is to provide all Contracting Parties with an opportunity to identify proposals being developed by others, and as appropriate, to improve collaboration on the development of proposals prior to the S21. The hope is that, where possible, duplication will be avoided and consensus can be reached on contentious matters before the S21, thereby improving efficiency during Plenary.

Template for Proposals

If you are unfamiliar with the Proposal drafting process, please do not hesitate to request that the IOTC Secretariat provide you with a template to work from. Similarly, if you are intending on revising a current/active Resolution or Recommendation, please request the current MS-Word version from the IOTC Secretariat so that you may modify the correct version accordingly.

Distribution

IOTC Contracting Parties: Australia, China, Comoros, Eritrea, European Union, France (Territories), Guinea, India, Indonesia, Iran (Islamic Rep of), Japan, Kenya, Rep. of Korea, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Oman, Pakistan, Philippines, Seychelles, Sierra Leone, Somalia, South Africa, Sri Lanka, Sudan, United Rep. of Tanzania, Thailand, United Kingdom (OT), Yemen.

Cooperating Non-Contracting Parties: Bangladesh, Djibouti, Liberia, Senegal.

Intergovernmental Organisations, Non-Governmental Organisations

Chairperson IOTC

Copy to: FAO Headquarters, FAO Representatives to CPCs

This message has been transmitted by email only

Recommendations of the 19th Session of the Scientific Committee

Also provided in [Attachment II](#), are the complete set of recommendations arising from the 19th Session of the Scientific Committee (SC19), which you may find useful in preparing for the 21st Session of the Commission. The full report of the SC19 may be downloaded from the IOTC website: <http://www.iotc.org/documents/report-19th-session-iotc-scientific-committee> [7.34 Mb].

Yours sincerely



Alejandro Anganuzzi (Dr.)
Executive Secretary (*a. i.*)

Attachments:

- **Attachment I:** Proposals for Conservation and Management Measures **DEFERRED** by the Commission at its 20th Session until the 21st Session in 2017
- **Attachment II:** Consolidated set of recommendations of the 19th Session of the Scientific Committee to the Commission

Attachment I

Proposals for Conservation and Management Measures DEFERRED by the Commission at its 19th Session until the 20th Session in 2016

(Extracts from the Report of the 20th Session of the Commission; IOTC-2016-S20-R)

Proposals for Conservation and Management Measures not endorsed by the Commission

Para. 140. The Commission considered the following proposals as Conservation and Management Measures, but consensus could not be reached and the proposals were either withdrawn or deferred until the next Session.

On the conservation and management of neritic tunas in the IOTC Area of Competence

Para. 141. The Commission CONSIDERED a proposal on the conservation and management of neritic tunas in the IOTC Area of Competence (IOTC-2016-S20-Prop E), and while there was some support from CPCs, agreement could not be reached on the proposal, which was subsequently deferred until the next meeting of the Commission.

On establishing a list of vessels presumed to have carried out illegal, unreported and unregulated fishing in the IOTC area of competence

Para. 142. The Commission CONSIDERED a proposal to strengthen the current resolution on establishing a list of vessels presumed to have carried out illegal, unreported and unregulated fishing in the IOTC Area of competence (IOTC-2016-S20-Prop O). Despite revisions to the proposal, based on feedback received during the meeting, agreement could not be reached and the proposal was deferred until the next meeting of the Commission.

Concerning the conservation of sharks caught in association with fisheries managed by the IOTC

Para. 143. The Commission CONSIDERED two proposals concerning the conservation of sharks caught in association with fisheries managed by the IOTC (IOTC-2016-S20-Prop C, & IOTC-2016-S20-Prop D), but agreement could not be reached and the proposals were deferred and withdrawn, respectively. For the Resolution regarding size data, some CPCs considered that some elements of the proposals were in contradiction to the recommendations of the Scientific Committee. However, CPCs should explore with the Secretariat practical arrangements to better reflect compliance, when it is not feasible for some CPC, notably due to legal constraints, to report all catch data. With regard to the Resolution on shark finning, some CPCs highlighted that finning has no relationship with stock management of sharks, that fishermen use their carcasses in totality and cut fins would create practical implementation and safety problems.

On the conservation and management of IOTC species

Para 148. The Commission CONSIDERED a proposal on the conservation and management of IOTC species (IOTC-2016-S20-Prop G), which detailed two options with the main objective of decreasing the fishing pressure on Yellowfin Tuna (*Thunnus albacares*), and which will also benefit the status of the following overfished stocks: Striped Marlin (*Tetrapturus audax*), Black Marlin (*Makaira indica*), Blue Marlin (*Makaira nigricans*), Indo-Pacific Sailfish (*Istiophorus platypterus*), Longtail Tuna (*Thunnus tonggol*) and Narrow-based Spanish Mackerel (*Scomberomorus Commerson*) in the IOTC Area of competence. Following discussions with CPCs, the proposal was split into three individual proposals with catch reduction measures specific to the following species: Prop-G-A (Yellowfin tuna), Prop-G-B (billfish species), and Prop-G-C (neritic tunas). The proposal to reduce catches of Yellowfin tuna (Prop-A) was eventually withdrawn, in favour of the adoption of (IOTC-2016-S20-PropF) that included some principles of this proposal; while the proposals for Prop-G-B and Prop-G-C, were deferred until the next meeting of the Commission, despite the Scientific Committee recommendations to decrease the current level of catches of some of these species.

Attachment II

CONSOLIDATED SET OF RECOMMENDATIONS OF THE 19TH SESSION OF THE SCIENTIFIC COMMITTEE (01–05 DECEMBER 2016) TO THE COMMISSION

STATUS OF TUNA AND TUNA-LIKE RESOURCES IN THE INDIAN OCEAN AND ASSOCIATED SPECIES

Tuna – Highly migratory species

SC19.01 (para. 142) The SC **RECOMMENDED** that the Commission note the management advice developed for each tropical and temperate tuna species as provided in the Executive Summary for each species, and the combined Kobe plot for the three species assigned a stock status in 2016 (Fig. 4):

- Albacore (*Thunnus alalunga*) – [Appendix VIII](#)
- Bigeye tuna (*Thunnus obesus*) – [Appendix IX](#)
- Skipjack tuna (*Katsuwonus pelamis*) – [Appendix X](#)
- Yellowfin tuna (*Thunnus albacares*) – [Appendix XI](#)

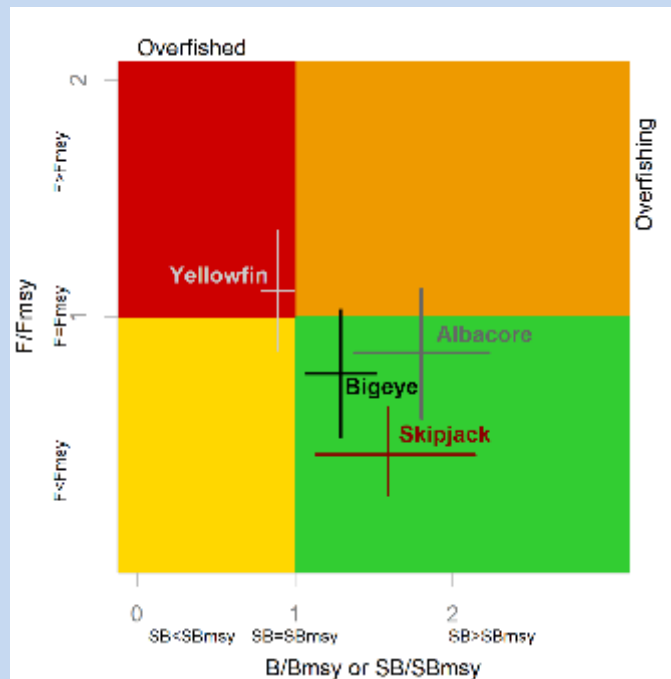


Fig. 4. Combined Kobe plot for bigeye tuna (black: 2016), skipjack tuna (brown: 2014), yellowfin tuna (grey: 2016), and albacore tuna (dark grey: 2016) showing the estimates of current stock size (SB) and current fishing mortality (F) in relation to optimal spawning stock size and optimal fishing mortality. Cross bars illustrate the range of uncertainty from the model runs with a 80% CI. Note that for skipjack tuna, the estimates are highly uncertain as F_{MSY} is poorly estimated, and as suggested for stock status advice it is better to use B_0 as a biomass reference point and $C(t)$ relative to C_{MSY} as a fishing mortality reference point.

Billfish

SC19.02 (para. 144) The SC **RECOMMENDED** that the Commission note the management advice developed for each billfish species under the IOTC mandate, as provided in the Executive Summary for each species, and the combined Kobe plot for the three species assigned a stock status in 2016 (Fig. 5):

- Swordfish (*Xiphias gladius*) – [Appendix XII](#)
- Black marlin (*Makaira indica*) – [Appendix XIII](#)
- Blue marlin (*Makaira nigricans*) – [Appendix XIV](#)
- Striped marlin (*Tetrapturus audax*) – [Appendix XV](#)
- Indo-Pacific sailfish (*Istiophorus platypterus*) – [Appendix XVI](#)

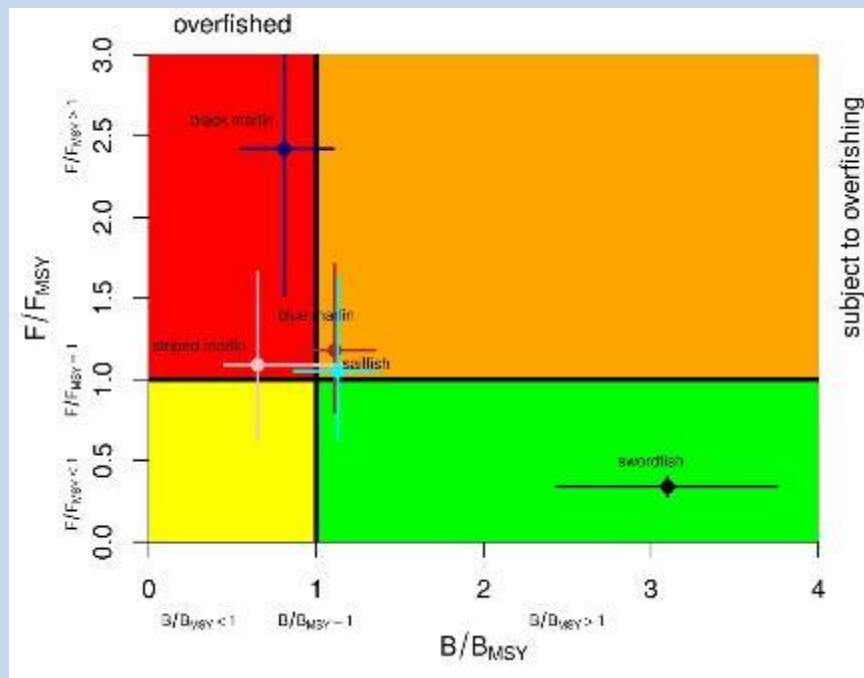


Fig. 5. Combined Kobe plot for swordfish (black), Indo-pacific sailfish (cyan), black marlin (light blue), blue marlin (brown) and striped marlin (pink) showing the 2015 and 2016 estimates of current stock size (S_B or B , species assessment dependent) and current fishing mortality (F) in relation to optimal spawning stock size and optimal fishing mortality. Cross bars illustrate the range of uncertainty from the model runs.

Tuna and seerfish – Neritic species

SC19.03 (para. 145) The SC **RECOMMENDED** that the Commission note the management advice developed for each neritic tuna (and mackerel) species under the IOTC mandate, as provided in the Executive Summary for each species, and the combined Kobe plot for the three species assigned a stock status in 2016 (Fig. 6):

- Bullet tuna (*Auxis rochei*) – [Appendix XVII](#)
- Frigate tuna (*Auxis thazard*) – [Appendix XVIII](#)
- Kawakawa (*Euthynnus affinis*) – [Appendix XIX](#)
- Longtail tuna (*Thunnus tonggol*) – [Appendix XX](#)
- Indo-Pacific king mackerel (*Scomberomorus guttatus*) – [Appendix XXI](#)
- Narrow-barred Spanish mackerel (*Scomberomorus commerson*) – [Appendix XXII](#)

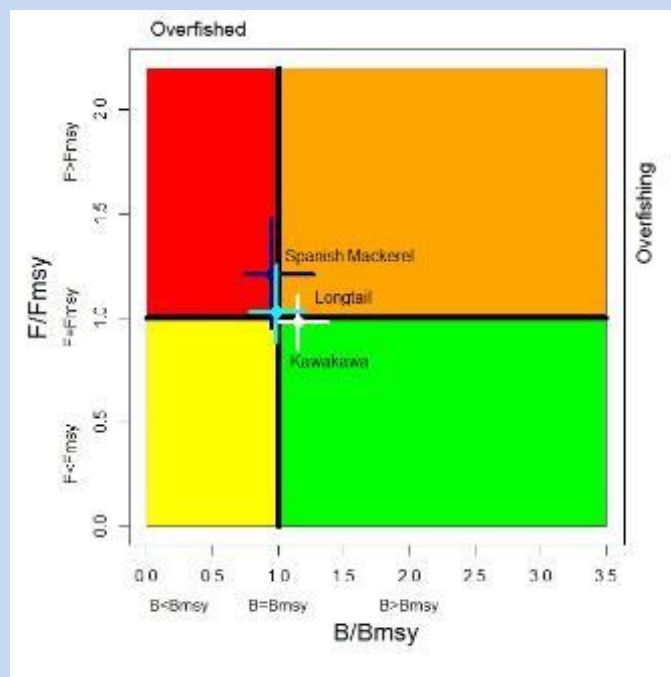


Fig. 6. Combined Kobe plot for longtail tuna (cyan: 2016), narrow-barred Spanish mackerel (dark blue: 2016), and kawakawa (white: 2015) showing the estimates of stock size (B) and current fishing mortality (F) in relation to optimal spawning stock size and optimal fishing mortality using the OCOM modelling approach. Cross bars illustrate the range of uncertainty from the model runs.

Sharks

SC19.04 (para. 146) The SC **RECOMMENDED** that the Commission note the management advice developed for a subset of shark species commonly caught in IOTC fisheries for tuna and tuna-like species:

- Blue shark (*Prionace glauca*) – [Appendix XXIII](#)
- Oceanic whitetip shark (*Carcharhinus longimanus*) – [Appendix XXIV](#)
- Scalloped hammerhead shark (*Sphyrna lewini*) – [Appendix XXV](#)
- Shortfin mako shark (*Isurus oxyrinchus*) – [Appendix XXVI](#)
- Silky shark (*Carcharhinus falciformis*) – [Appendix XXVII](#)
- Bigeye thresher shark (*Alopias superciliosus*) – [Appendix XXVIII](#)
- Pelagic thresher shark (*Alopias pelagicus*) – [Appendix XXIX](#)

Marine turtles

SC19.05 (para. 147) The SC **RECOMMENDED** that the Commission note the management advice developed for marine turtles, as provided in the Executive Summary encompassing all six species found in the Indian Ocean:

- Marine turtles – [Appendix XXX](#)

Seabirds

SC19.06 (para. 148) The SC **RECOMMENDED** that the Commission note the management advice developed for seabirds, as provided in the Executive Summary encompassing all species commonly interacting with IOTC fisheries for tuna and tuna-like species:

- Seabirds – [Appendix XXXI](#)

GENERAL RECOMMENDATIONS TO THE COMMISSION

National Reports from CPCs

- 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](#)).
- 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 (CNCs), 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.

Report of the 6th Session of the Working Party on Neritic Tunas (WPNT06)

CPUE standardisation

- SC19.09 ([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).

Selection of Stock Status indicators

- SC19.10 ([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.
- 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 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).

Report of the 6th Session of the Working Party on Temperate tunas

New information on biology, ecology, fisheries and environmental data relating to temperate tunas

- SC19.12 ([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.

Report of the 14th Session of the Working Party on Billfish

- SC19.13 ([para. 46](#)) The SC **RECOMMENDED** that on the next revisions of the IOTC Agreement, short billed spearfish be included as an IOTC species.

Billfish species identification

- SC19.14 ([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.

Swordfish habitat and behavior

- SC19.15 ([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.

Report of the 12th Session of the Working Party on Ecosystems and Bycatch (WPEB12)

Identification guides for fishing gear

SC19.16 ([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 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.

Regional observer scheme

SC19.17 ([para. 56](#)) **RECALLING** the SC18 (IOTC–2015–SC18–R, para. 134):

*“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”.*

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 **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.

Bycatch data exchange protocol (BDEP)

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.

Gillnet fisheries

SC19.20 ([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 its 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.

Data collection opportunities

SC19.21 ([para. 60](#)) The SC **RECOGNISED** that although the IOTC Regional Observer Programme (ROP) for transshipment 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.

ACAP best practice advice: update

SC19.22 ([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 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.

SC19.23 ([para. 69](#)) 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.

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

SC19.24 ([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.

Report of the 18th Session of the Working Party on Tropical Tunas (WPTT18)

Bigeye tuna CPUE summary discussion

SC19.25 ([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.

Stock Synthesis III (SS3) assessment of yellowfin tuna

SC19.26 ([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.

Parameters for future analyses: Yellowfin tuna CPUE standardisation and stock assessments

SC19.27 ([para. 96](#)) 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:

- i. 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.
- ii. Collaborative longline CPUE: Further refinement of the procedures to standardize the composite longline logsheet data sets to develop the longline CPUE indices;
- 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.

Report of the 7th Session of the Working Party on Methods (WPM07)

Presentation and evaluation of MSE results

SC19.28 ([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.

Operational definition of TRPs and LRPs

SC19.29 ([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. 16ⁱ).*

Revision of the WPM Program of work (2017–2021)

SC19.30 ([para. 102](#)) 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.

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

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

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

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

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

General discussion on data issues

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

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

Data collection and capacity building

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

Meeting participation fund

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

IOTC species identification guides: Tuna and tuna-like species

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

IOTC Secretariat staffing

SC19.37 ([para. 126](#)) **NOTING** the very heavy workload at the IOTC Secretariat and the ever increasing demands by the Commission and the Scientific Committee, and also the capacity to respond to requests for assistance by countries, the SC **RECOMMENDED** that the recommendation from the Performance Review PRIOTC02.07(g) is implemented, and that permanent staff of the IOTC Data and Science Section be increased by two (2) (1 x P4 and 1 x P3 level positions), supplemented by additional short-term consultants, to commence work by 1 January 2018 or earlier, and that funding for these new positions should come from both the IOTC regular budget and from external sources to reduce the financial burden on the IOTC membership.

Collaborative Longline CPUE

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

Chairpersons and Vice-Chairpersons of the SC and its subsidiary bodies

SC19.39 ([para. 128](#)) The SC **RECOMMENDED** that the Commission note and endorse the Chairpersons and Vice-Chairpersons for the SC and its subsidiary bodies for the coming years, as provided in [Appendix VII](#).

Implementation of the Regional Observer Scheme

Development of a proposal for a Pilot Project to be presented to the Commission 2017

SC19.40 ([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.

Progress on the Implementation of the Recommendations of the Second Performance Review Panel

SC19.41 ([para. 168](#)) The SC **RECOMMENDED** that the Commission note the updates on progress regarding Resolution 16/03, as provided at [Appendix XXXIII](#).

Program of work and schedule of Working Party and Scientific Committee meetings

Consultants

SC19.42 ([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 provided in [Table 5](#), shall be incorporated into the overall IOTC Science budget for the consideration of the Commission.

Consideration of Resolution 15/09 On a fish aggregating devices (FADs) working group

SC19.43 ([para. 185](#)) 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.

Review of the Draft, and Adoption of the Report of the 18th Session of the Scientific Committee

SC19.44 ([para. 204](#)) The SC **RECOMMENDED** that the Commission consider the consolidated set of recommendations arising from SC19, provided at [Appendix XXXVII](#)

ⁱ Provisional until approval of the final version of the S20 report by correspondence.