

IOTC CIRCULAR 2016-004

Dear Sir/Madam,

SUBJECT: PROPOSALS FOR CONSERVATION AND MANAGEMENT MEASURES TO BE CONSIDERED AT THE 20TH SESSION OF THE COMMISSION (S20)

Deferred proposals from 2015

At the 19th 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, two (2) 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 2015 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 2015 for discussion at S20 in 2016:

- 1) On the conservation of sharks caught in association with fisheries managed by the IOTC
- 2) On harvest controls rules for skipjack tuna in the IOTC area of competence

2016 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 (S20), 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 **24 March** (60 days prior to the S20). 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 S20. The hope is that where possible, duplication will be avoided and consensus can be reached on contentious matters before the S20, 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, Belize, 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, Sri Lanka, Sudan, United Rep. of Tanzania, Thailand, United Kingdom (OT), Yemen.

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

Intergovernmental Organisations, Non-Governmental Organisations

Chairperson IOTC

Copy to: FAO Headquarters, FAO Representatives to CPCs

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Recommendations of the 18th Session of the Scientific Committee

Also provided in [Appendix II](#), are the complete set of recommendations arising from the 18th Session of the Scientific Committee (SC18) which you may find useful in preparing for the 20th Session of the Commission. The full report of the SC18 may be downloaded from the IOTC website: <http://iotc.org/meetings/18th-scientific-committee-sc18> [6 Mb]

Yours sincerely



Dr. David T. Wilson
Executive Secretary (Interim)

Attachments:

- **Attachment I:** Proposals for Conservation and Management Measures **DEFERRED** by the Commission at its 19th Session until the 20th Session in 2016
- **Attachment II:** Consolidated set of recommendations of the 18th 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 19th Session of the Commission; IOTC–2015–S19–R)

Proposals for Conservation and Management Measures not endorsed by the Commission

Para. 136. 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 of sharks caught in association with fisheries managed by the IOTC

Para. 137. The Commission **CONSIDERED** two proposals on the conservation of sharks caught in association with fisheries managed by the IOTC (IOTC–2015–S19–PropC and PropD), but agreement could not be reached and the proposals were deferred until the next meeting of the Commission. The proposals were to introduce amendments to Resolution 05/05 *On the conservation of sharks*, to address the impact on shark mortality as a result of finning. The proposals aimed to promote full utilisation of sharks and facilitate the collection of critical data required to undertake rigorous assessments of the impact of fishing on these populations. The proposal requires that sharks be landed with their fins attached to their respective carcass when caught in association with fisheries targeting tuna and tuna-like species throughout the IOTC area of competence. Some CPCs indicated that the fin cutting issue has no relationship with stock management of sharks and that fishermen use their carcasses in totality.

On harvest controls rules for skipjack tuna in the IOTC area of competence

Para 138. The Commission **CONSIDERED** a proposal on harvest controls rules for skipjack tuna in the IOTC area of competence (IOTC–2015–S19–PropI), but agreement could not be reached and the proposal was deferred until the next meeting of the Commission. The proposal intended to set a biomass limit reference point at 20% of the unfished level ($B_{LIM} = 0.2B_0$) and a target biomass reference point at 40% of the unfished level ($B_{TARG} = 0.4B_0$). A key feature of the proposal was the explicit harvest control rule, or HCR to achieve the objectives of maintaining the stock at, or above, the TRP and above the LRP with a high probability. The scope of the discussions indicated CPCs have a desire to move towards a harvest control rules. Some CPCs suggested that inaction on the part of other CPCs following a catch limit being reached may reduce the effectiveness of the HCR. Other CPCs indicated the frequency of reporting should be increased to monthly intervals if the catch limits were to be effectively implemented.

Para. 139. The Commission **AGREED** that the proposal was premature given that MSE work on skipjack tuna is progressing and assessment of management procedures is not fully complete.

Para. 140. The Commission **NOTED** that a road map has been proposed under the MPD02 meeting which may be an effective means to advance the development of harvest control rules to be further discussed by the Commission. Results of such sub-groups will nevertheless be shared among all CPCs and will be compiled and consolidated, as appropriate, in recommendations to the Commission on management objectives and on management procedures.

Attachment II

CONSOLIDATED SET OF RECOMMENDATIONS OF THE 18TH SESSION OF THE SCIENTIFIC COMMITTEE (23–27 NOVEMBER 2015) TO THE COMMISSION

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

Tuna – Highly migratory species

SC18.01 (para. 121) 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 2015 (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](#)

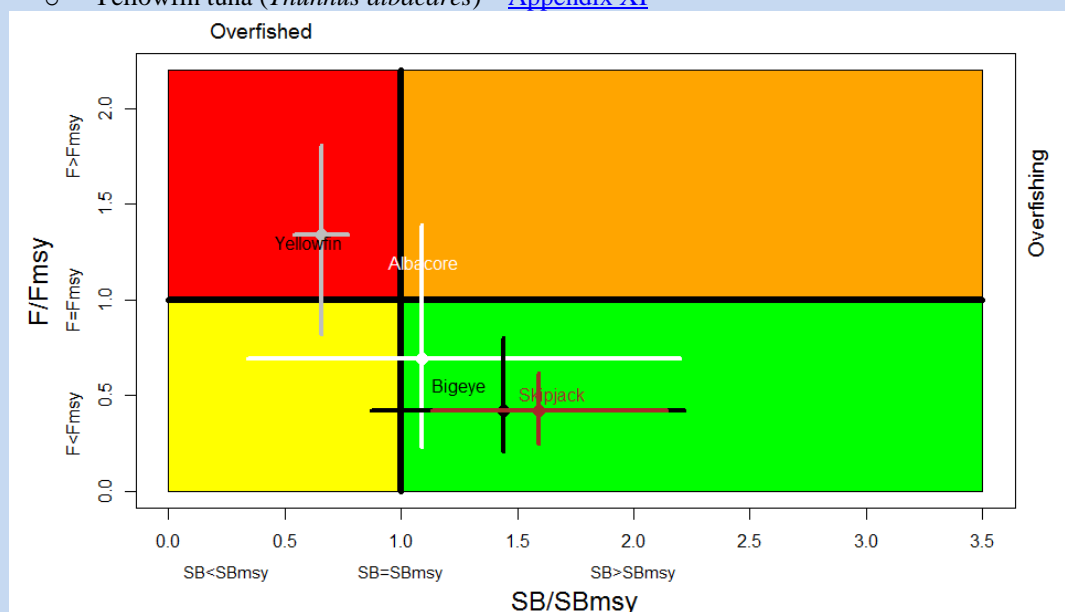


Fig. 4. Combined Kobe plot for bigeye tuna (black: 2013), skipjack tuna (brown: 2014), yellowfin tuna (grey: 2015) and albacore (white: 2014) showing the estimates of current stock size (SB) and current fishing mortality (F) in relation to the interim target spawning stock size and interim target fishing mortality. Cross bars illustrate the range of uncertainty from the model runs. 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

SC18.02 (para. 123) 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 2015 (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](#)

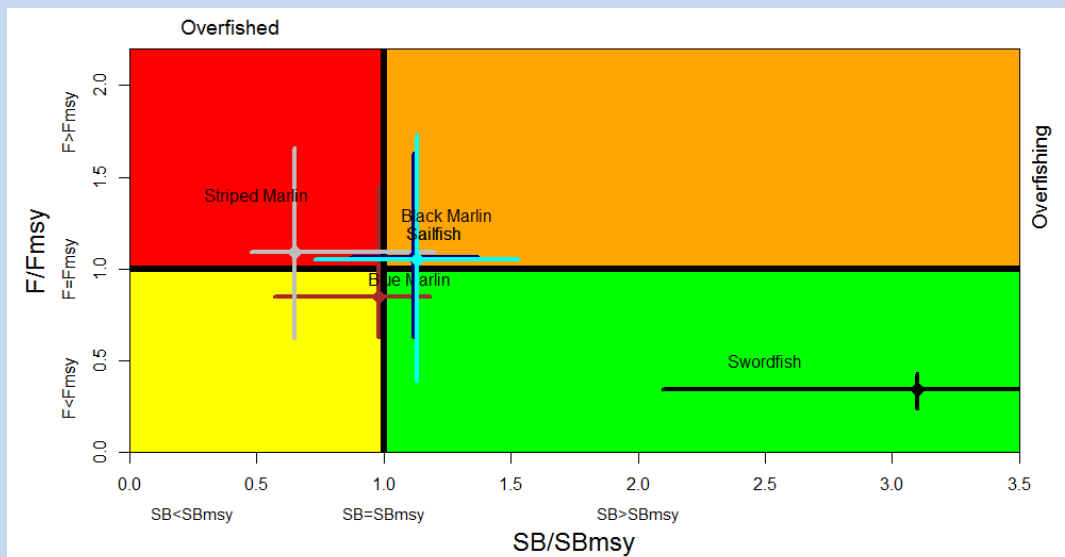


Fig. 5. Combined Kobe plot for swordfish (black: 2014), black marlin (light blue: 2014), blue marlin (brown: 2013), striped marlin (grey: 2015) and Indo-Pacific sailfish (black: 2015) showing the estimates of current stock size (SB or B, species assessment dependent) and current fishing mortality (F) in relation to the interim target spawning stock size and interim target fishing mortality. Cross bars illustrate the range of uncertainty from the model runs.

Tuna and seerfish – Neritic species

SC18.03 (para. 124) 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 2015 (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](#)

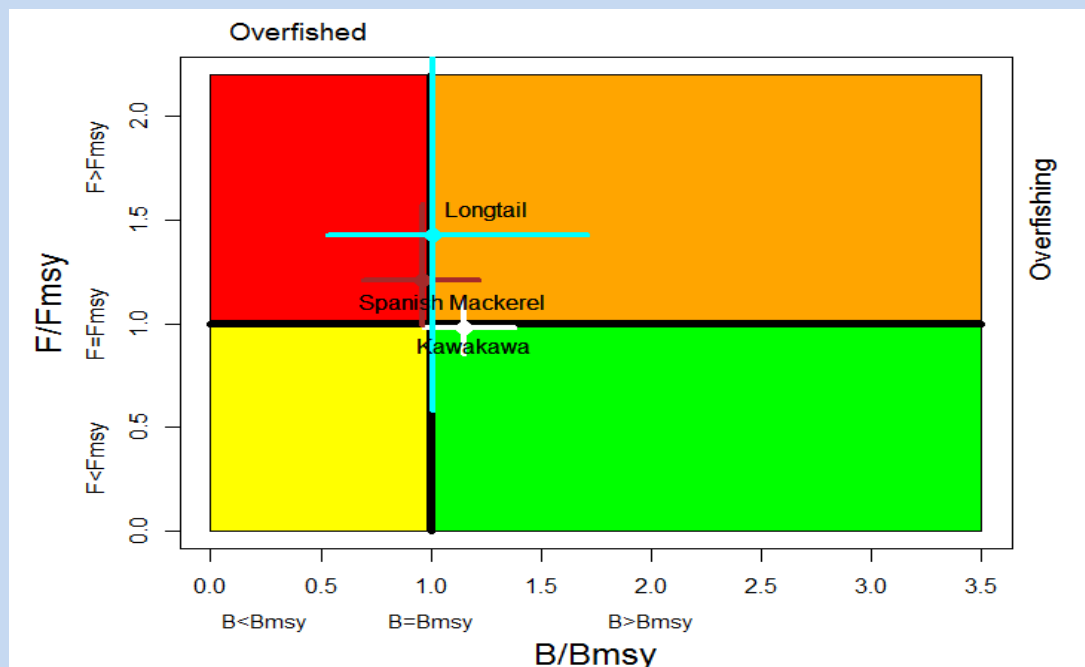


Fig. 6. Combined Kobe plot for kawakawa (white: 2015), longtail tuna (blue: 2015) and narrow-barred Spanish mackerel (brown: 2015), showing the estimates of current stock size (B) and current fishing mortality (F) in relation to interim target spawning stock size and interim target fishing mortality.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

Sharks

- SC18.04 ([para. 125](#)) 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

- SC18.05 ([para. 126](#)) 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

- SC18.06 ([para. 127](#)) 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

- SC18.07 ([para. 18](#)) **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 2015, 26 reports were provided by CPCs (26 in 2014, 28 in 2013) ([Table 2](#)).
- SC18.08 ([para. 19](#)) The SC **RECOMMENDED** that the Compliance Committee and Commission note the lack of compliance by 8 Contracting Parties (Members) and 3 Cooperating Non-Contracting Parties (CNCs), that did not submit a National Report to the Scientific Committee in 2015, noting that the Commission agreed that the submission of the annual reports to the Scientific Committee is mandatory ([Table 2](#)).

Report of the 5th Session of the Working Party on Neritic Tunas (WPNT05)

- SC18.09 ([para. 29](#)) The SC **RECOMMENDED** that a workshop is organised by the IOTC Secretariat in collaboration with WWF-Pakistan to analyse the datasets collaboratively using a meta-analysis based approach. WWF Pakistan have offered to provide support specifically for the north western Indian Ocean countries but additional funding will be needed for the participation of other CPCs. This workshop would also include training for people in data poor assessment approaches, as well as possibly focus on basic data for assessments, like CPUE and how to standardise such data.
- SC18.10 ([para. 33](#)) **NOTING** the current stock status of several neritic tunas and the continued increase in catch and effort, the SC **RECOMMENDED** that a precautionary approach to the management of neritic tunas is taken by the Commission.

Report of the 13th Session of the Working Party on Billfish (WPB13)

- SC18.11 ([para. 36](#)) The SC **RECOMMENDED** that the Chairperson and Vice-Chairperson continue to work in collaboration with the IOTC Secretariat and the African Billfish Foundation to find a suitable funding source and lead investigator to undertake the project outlined in the Report of the WPB13. The aim of the project is to enhance data recovery from sports and other recreational fisheries in the western Indian Ocean region, from which alternative abundance indices could be developed for marlins and I.P. sailfish. The Chairperson shall circulate the concept note to potential funding bodies on behalf of the WPB. A similar concept note could be developed for other regions in the IOTC area of competence at a later date.

Report of the 11th Session of the Working Party on Ecosystems and Bycatch (WPEB11)

Pakistan shark bycatch in gillnet fisheries

- SC18.12 ([para. 39](#)) **NOTING** that gillnets are regularly being used with lengths in excess of 4,000 m (and up to 7,000 m) within and occasionally beyond the EEZ of Pakistan and other IOTC CPCs in the region, and that those used within the EEZ may sometimes drift onto the high seas in contravention of Resolution 12/12, the SC **RECOMMENDED**

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.

Review of seabird mitigation measures in Resolution 12/06

SC18.13 (para. 41) The SC **RECOMMENDED** that CPCs bring data to the WPEB meeting in 2016, as the Commission via Resolution 12/06 required the WPEB and SC to undertake this task in 2015, which has not been possible due to insufficient data, and that a collaborative analysis of the impacts of Resolution 12/06 be undertaken during the WPEB meeting, if feasible. CPC review papers and datasets should include the following information/data from logbooks and/or observer schemes, where appropriate and should cover the period 2011 to 2015:

- Total effort south of 25°S by area and time, at the finest scale possible
- Observed effort south of 25°S by area and time, at the finest scale possible
- Observed seabird mortality rates south of 25°S by area and time, at the finest scale possible
- Descriptions of fleet structure /target species by time and area, and an indication of observer coverage per fleet/target species for effort south of 25°S
- Data on which seabird bycatch mitigation measures were used, on a set-by-set/cruise basis if possible or per vessel, or at the finest scale possible
- Descriptions of the specifications of seabird bycatch mitigation measures used according to the fields in the Regional Observer Scheme manual and in relation to the specifications given in Res 12/06

Shark fin to body weight ratio and wire leaders/traces

SC18.14 (para. 47) **NOTING** that the Commission, at its 19th Session, considered a range of proposals on sharks which included matters relevant to the shark fin to body weight ratio and wire leaders/traces, the SC **RECALLED** its previous advice to the Commission as follows:

- The SC **RECOMMENDED** the Commission consider, that the best way to encourage full utilisation of sharks, to ensure accurate catch statistics, and to facilitate the collection of biological information, is to revise the IOTC Resolution 05/05 *concerning the conservation of sharks caught in association with fisheries managed by IOTC* such that all sharks must be landed with fins attached (naturally or by other means) to their respective carcass. However, the SC **NOTED** that such an action would have practical implementation and safety issues for some fleets and may degrade the quality of the product in some cases. The SC **RECOMMENDED** all CPCs to obtain and maintain the best possible data for IOTC fisheries impacting upon sharks, including improved species identification.
- On the basis of information presented to the SC in previous years, the SC **RECOGNISED** that the use of wire leaders/traces in longline fisheries may imply targeting of sharks. The SC therefore **RECOMMENDED** to the Commission that if it wishes to reduce catch rates of sharks by longliners it should prohibit the use of wire leaders/traces.

Marine Turtles: Review of Resolution 12/04 on the conservation of marine turtles

SC18.15 (para. 50) The SC reiterated its **RECOMMENDATION** from 2013 and 2014, that at the next revision of IOTC Resolution 12/04 *on the conservation of marine turtles*, the measure is strengthened to ensure that where possible, CPCs report annually on the total estimated level of incidental catches of marine turtles, by species, as provided at [Table 3](#).

TABLE 3. Marine turtle species reported as caught in fisheries within the IOTC area of competence.

Common name	Scientific name
Flatback turtle	<i>Natator depressus</i>
Green turtle	<i>Chelonia mydas</i>
Hawksbill turtle	<i>Eretmochelys imbricata</i>
Leatherback turtle	<i>Dermochelys coriacea</i>
Loggerhead turtle	<i>Caretta caretta</i>
Olive ridley turtle	<i>Lepidochelys olivacea</i>

Marine mammals

SC18.16 (para. 53) The SC reiterated its previous **RECOMMENDATION** that depredation events be incorporated into Resolution 15/01 at its next revision, so that interactions may be quantified at a range of spatial scales. Depredation events should also be quantified by the regional observer scheme.

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

SC18.17 (para. 55) 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 only 16 of the 37 IOTC CPCs have an NPOA-Sharks (8 more in development), while only 6 CPCs have an NPOA-Seabirds (2 more in development). A single CPC has determined that an NPOA-Sharks is not needed, and 5 have similarly determined that an NPOA-Seabirds is not needed. Currently only 9 of the 37 IOTC CPCs have implemented the FAO guidelines to reduce marine turtle mortality in fishing operations (2 more in progress), and two CPCs (European Union, France (OT)) have implemented a full NPOA in 2015.

Report of the 6th Session of the Working Party on Methods (WPM06)

Proposal for a Technical Committee on Management Procedures

SC18.18 ([para. 59](#)) **NOTING** with concern the lack of adequate communication of the IOTC MSE process between the Scientific Committee and the Commission to date, the SC **RECOMMENDED** that the Commission consider the following draft outline to establish a formal communication channel for the science and management dialogue to enhance decision making. Possible adjustments to the mechanisms of communication between the Commission and the IOTC Scientific Committee could include the following:

- The progress of the MSE process will benefit from having communication between the Scientific Committee and the Commission more formally structured, for example, through a dedicated Technical Committee on Management Procedures (MP) that would serve as an effective two-way channel for scientists to communicate the results of the ongoing MSE work. The Technical Committee would require that specific terms of reference (in line with the priorities identified in Resolution 14/03), roles and responsibilities of both fisheries managers and scientists, and possible interactions and feedback, are developed and clarified. The Technical Committee on MP could meet in conjunction with the annual Commission Session, to facilitate full attendance by CPCs.
- The Technical Committee on MP would augment the ability of the Scientific Committee to communicate the progress of the MSE process.
- The Technical Committee on MP would focus on the presentation of results and exchange of information necessary for the Commission to consider possible adoption of harvest strategies, utilizing standard formats for the presentation of results to facilitate understanding of the material by the non-technical audience.
- It would be advisable that the agenda of the Technical Committee on MP place an emphasis on the elements of each MP that require a decision by the Commission. To facilitate such decisions, wherever necessary, interim choices should be offered to the Commission, noting that these choices can be modified at a later stage in the review. The MSE is an iterative process that allows for adjustments as the work, and the understanding of the elements involved, progresses.

Report of the 11th Session of the Working Party on Data Collection and Statistics (WPDCS11)

SC18.19 ([para. 72](#)) The SC **RECOMMENDED** the Commission develop penalty mechanisms through the IOTC Compliance Committee to improve compliance by CPCs that do not currently comply with the submission of basic fishery data requirements as stated in Resolution 15/01 and 15/02.

Resolution 15/02 Mandatory statistical requirements for IOTC Members and Cooperating Non-Contracting Parties (CPC's)

SC18.20 ([para. 78](#)) **NOTING** that the units of effort requested for longliners in IOTC Resolution 15/02 and 11/04 are not consistent as the former requests numbers of hooks and the latter numbers of sets, the SC **RECOMMENDED** that provisions in Resolution 15/02 are amended to include a requirement for longline fleets to report effort in terms of both number of hooks and number of sets, and that reporting of effort in terms of number of sets is also requested from surface purse seine fleets in addition to the current requirements to report effort as fishing days.

Further analysis of length frequency data from longline fleets and likely impacts on the assessments (Taiwan, China)

SC18.21 ([para. 79](#)) The SC **RECOMMENDED** further analysis to fully understand the recent changes in length composition reported by Taiwan, China – in particular whether there have been changes to the sampling protocols and selection of fish for sampling – and that the decline in the number of samples of small specimens of tropical tunas in particular may originate from high grading of catch onboard Taiwan, China longliners following the implementation of quotas on the Taiwan, China longline fleet in the Indian Ocean (i.e. only large specimens from the catch measured for length).

Report of the 17th Session of the Working Party on Tropical Tunas (WPTT17)

Report of the 2nd CPUE workshop on longline fisheries

SC18.22 (para. 83) **NOTING** the advice from the WPTT that differences between the Japan and Taiwan,China longline CPUE indices were examined and attributed to either low sampling coverage of logbook data (between 1982–2000) or misreporting across oceans (Atlantic and Indian oceans) for bigeye tuna catches between 2002–04 for Taiwan,China, the SC **RECOMMENDED** the 1) development of minimum criteria (e.g. 10% using a simple random stratified sample) for logbook coverage to use data in standardisation processes; and 2) identifying vessels through exploratory analysis that were misreporting, and excluding them from the dataset in the standardisation analysis.

SC18.23 (para. 84) The SC **RECOMMENDED** that:

- more credence should be given to CPUE indices based on operational data, since analyses of these data can take more factors into account, and analysts are better able to check the data for inconsistencies and errors.
- Taiwan,China fleets provide all available logbook data to data analysts, representing the best and most complete information possible. This stems from the fact that the dataset currently used by scientists from Taiwan,China is incomplete and not updated with logbooks that arrive after finalisation.
- that vessel identity information for the Japanese fleets for the period prior to 1979 should be obtained either from the original logbooks or from some other source, to the greatest extent possible to allow estimation of catchability change during this period and to permit cluster analysis using vessel level data. During this period there was significant technological change (e.g. deep freezers) and targeting changes (e.g. yellowfin tuna to bigeye tuna).
- examining operation level data across all longline fleets (Rep. of Korea, Japan and Taiwan,China) will give us a better idea of what is going on with the fishery and stock especially if some datasets have low sample sizes or effort in some years, and others have higher sample sizes and effort, so we have a representative sample covering the broadest areas in the Indian Ocean. This will also avoid having no information in certain strata if a fleet were not operating there, and avoid combining two indices in that case.
- that continued work on joint analysis of operational catch and effort data from multiple fleets be undertaken, to further develop methods and to provide indices of abundance for IOTC stock assessments.

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

Meeting participation fund

SC18.24 (para. 98) The SC **RECOMMENDED** 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.

Capacity building activities

SC18.25 (para. 99) 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, and **RECOMMENDED** that the Commission consider allocating more funds to these activities in the future.

SC18.26 (para. 100) The SC **RECOMMENDED** that Commission further increases the IOTC Capacity Building budget line so that capacity building training on data analysis and applied stock assessment approaches, with a priority being data poor approaches, can be carried out in 2016.

IOTC species identification guides: Marine mammal and Best practice guidelines for the safe release and handling of encircled cetaceans

SC18.27 (para. 102) The SC **RECOMMENDED** that the Commission allocate funds in its 2016/2017 budget, to produce and print the IOTC best practice guidelines for the safe release and handling of encircled cetaceans. The guidelines could be incorporated into a set of IOTC cetacean identification cards: “*Cetacean identification for Indian Ocean fisheries*”.

IOTC Secretariat staffing

SC18.28 (para. 106) **NOTING** the very heavy and constantly increasing workload on the IOTC Secretariat, and the current staffing capacity to respond to requests for assistance by countries, the SC strongly **RECOMMENDED** that at least three (3) additional staff (Science/Data) be hired to join the IOTC Secretariat to work on tasks including but not limited to 1) science and capacity building to improve understanding of IOTC processes; and 2) data quality/exchange improvement, to commence work by 1 January 2017. Funding for these new positions should come

from both the IOTC regular budget and from external sources to reduce the direct financial burden on the IOTC membership.

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

SC18.29 ([para. 107](#)) 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

SC18.30 ([para. 138](#)) **NOTING** that training of observers and crew is long-term and necessarily meticulous work that should be done in a recurrent way in order to optimise the efficiency of observers, the SC **RECOMMENDED** that the IOTC Secretariat increases its effort in training observers, including species identification. This would only be possible if the Commission were to increase staffing at the IOTC Secretariat and allocate specific funding for the Regional Observer Scheme implementation.

Resolution 11/04 On a regional observer scheme

SC18.31 ([para. 145](#)) **NOTING** that the objective of the Regional Observer Scheme contained in Resolution 11/04, and the rules contained in Resolution 12/02 *On data confidentiality policy and procedures* makes no reference to the data collected not being used for compliance purposes, the SC **RECOMMENDED** that at the next revision of Resolution 11/04, it be clearly stated that the data collected within the Regional Observer Scheme shall not be used for compliance purposes.

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

SC18.32 ([para. 151](#)) The SC **RECOMMENDED** that the Commission note the updates on progress regarding Resolution 09/01 *on the performance review follow-up*, as provided at [Appendix XXXIII](#).

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

Consultants

SC18.33 ([para. 157](#)) **NOTING** the highly beneficial and relevant work done by IOTC stock assessment consultants in 2015 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.

Schedule of meetings for 2016 and 2017

SC18.34 ([para. 160](#)) The SC **RECOMMENDED** that the Commission discuss the merits of moving the annual Scientific Committee meeting to February each year. This would allow the species working parties to be moved later in the year, thus ensuring that the most recent data is available for assessment purposes. If the Commission were to approve a February date, it may wish to fix its own meeting date in June each year, thus allowing sufficient consultation time between the Scientific Committee and the Commission meeting.

Review of publication deadlines for IOTC data summaries and other datasets for use by Working Parties

SC18.35 ([para. 165](#)) The SC **RECOMMENDED** that the reporting deadline for stock assessment inputs (index of abundance, catch reconstructions, size data, etc.) be 45 days prior to the meeting in which the species is to be assessed.

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

SC18.36 ([para. 175](#)) The SC **RECOMMENDED** that the Commission consider the consolidated set of recommendations arising from SC18, provided at [Appendix XXXVII](#).