# OUTCOMES OF THE 28th SESSION OF THE SCIENTIFIC COMMITTEE

**PREPARED BY: IOTC SECRETARIAT, 3 AUGUST 2026**

## PURPOSE

To inform participants at the 24th Working Party on Billfish (WPB24) of the recommendations arising from the 28th Session of the IOTC Scientific Committee (SC) held from 1–5 December 2025, specifically relating to the work of the WPB.

## BACKGROUND

At the 28th Session of the SC, the SC noted and considered the recommendations made by the WPB in 2025 that included requests to address the deficiencies in data collection, monitoring and reporting by CPCs, as well as to carry out targeted research and analysis on billfish species.

Billfish caught in the IOTC area of competence

| IOTC code | English name | Scientific name |
|---|---|---|
| BLM | Black marlin | *Makaira indica* |
| BUM | Blue marlin | *Makaira nigricans* |
| MLS | Striped marlin | *Tetrapturus audax* |
| SFA | Indo-Pacific sailfish | *Istiophorus platypterus* |
| SWO | Swordfish | *Xiphias gladius* |

Based on the recommendations arising from the WPB23, the SC28 adopted a set of recommendations, provided at Appendix A of this paper. The recommendations contained in Appendix A were provided to the Commission for consideration at its 30th Session held in May 2026.

In addition, the SC28 reviewed and endorsed a Program of Work (2026–2030) for the WPB, including a revised stock assessment schedule, as detailed in Appendix B. A separate paper (IOTC–2026–WPB24–08) will outline the review and development process for a Program of Work for the WPB for the next five years (2027–2031).

## DISCUSSION

In addition to the recommendations outlined in Appendix A, Appendix B and the SC made several other comments relevant to the WPB, which participants are asked to consider:

***Report of the 23nd Session of the Working Party on Billfish (WPB23)***

85. The SC **NOTED** the report of the 23rd Session of the Working Party on Billfish (IOTC–2025–WPB23–R), including the consolidated list of recommendations provided as an appendix to the report. The meeting was attended by 36 participants (cf. 47 in 2024). Five participants received funding through the MPF.

86. The SC **THANKED** and **CONGRATULATED** the Chair and the WPB for their efforts and accomplishments during the 23rd Session of the WPB.

87. The SC **NOTED** the presentation from the Chair of the WPB and **THANKED** the WPB for completing a significant amount of work, including two stock assessments – for blue marlin (BUM) and Indo-Pacific sailfish (SFA).

**Blue marlin stock assessment**

88. The SC **NOTED** that the blue marlin (BUM) stock assessment was run using both JABBA and SS3, with the models providing similar outputs with regards to stock status. The SC **NOTED** that the SS3 model was used as model from which the stock status was taken, although it was **AGREED** by the WPB that the model required further development in the future. The SS3 model was a spatial model, with two areas (east and west), based on fleet dynamics, with both fixed M (instantaneous rate of natural mortality) and h (0.87).

89. The SC **NOTED** some concerns with assessment, including: 1) fixing both M and h essentially fixes the population dynamics of the stock; and 2) there were generally poor fits to abundance indices.

90. The SC **NOTED** the requested sensitivity runs during the WPB, that included several values of M, additional Francis-weighting of the length data, and retrospective analyses using the base case model.

91. The SC **NOTED** the results of the JABBA model where 10 + model runs were presented to the WPB with several data weighting scenarios, including inclusion / exclusion of specific CPUE indices, and the use of different production functions.

92. The SC **NOTED** the development of a sdmTMB model for a CPUE index, although there were concerns around the process error as this is trending upwards.

93. The SC **ACKNOWLEDGED** the KOBE II strategy matrix, including results of projections that suggest that a reduction in catch by 20% would return the stock to the green quadrant in 2035 with a probability of 64%, this percentage increases to 86% if the catch is reduced by 40%.

94. The SC **ACKNOWLEDGED** issues surrounding the CPUE indices in the BUM stock assessment, including changes to fisheries and the overall reduction in spatial coverage of individual fleets. The SC **AGREED** that joint work can produce more robust indices, while **NOTING** that data confidentiality between CPCs is an issue.

95. The SC **DISCUSSED** the possibility of developing BUM CPUE indices that do not include confidential data, **NOTING** that the WPB hopes to develop data inference approaches that can perhaps explore more ways to produce abundance indices.

96. The SC **ACKNOWLEDGED** that although developing a joint CPUE index is common for the WPTT, it is not common among other WPs in the IOTC, and **NOTED** that this process could be lengthy, and requires careful consideration, **NOTING** the greater number of CPCs involved in major billfish fisheries, unlike the fisheries that target tropical tunas. Notwithstanding these issues, the SC **NOTED** that the first steps towards joint CPUE indices would be the harmonisation of CPUE standardisation methods between CPCs involved in billfish fisheries.

97. The SC **AGREED** that the WPB should draft guidelines for longline CPUE standardisation with consistent methods, **NOTING** that the intent is not to prescribe a single model, but to improve reproducibility and transparency among the production of CPUE indices. The SC **SUGGESTED** that the IOTC Secretariat could coordinate this approach, with the work being presented at the WPM next year.

98. The SC **NOTED** that, for several years, joint analyses combining catch and effort data from major longline fleets have been proposed to improve the CPUE index for billfish species, and that the WPEB had previously recommended investigating methods to compare CPUE indices across fleets and to develop joint CPUE indices for bycatch species. The SC also **NOTED** that these joint analyses could harmonize standardization methods, reconcile conflicts between indices developed from different fleets, and potentially produce more robust indices with broader spatial and temporal coverage. The SC further **NOTED** that it is at the discretion of CPCs to determine the feasibility of such collaboration, considering data confidentiality agreements and other logistical arrangements. The SC **AGREED** on the importance of establishing a process to discuss how to move forward. **NOTING** that joint CPUE analysis arrangements already exist for the standardization of tropical and temperate tuna, the SC **RECOMMENDED** that the Commission urge CPCs to explore ways to extend joint analyses to non-targeted species, such as marlins.

99. The SC **DISCUSSED** the BUM stock status, and that the stock has been classified as overfished, and subject to overfishing, for over 20 years despite relatively stable catches over this time frame. This conflict between the stock status and catch data might suggest that the assessment may be overly pessimistic, or that the stock is extremely resilient. The SC **DISCUSSED** the implications of this conflict between catch data and the stock status, including the significant uncertainties associated with billfish catch data, including the increases in reported catches from gillnet fisheries, while **NOTING** that these catches only represent 22% of the reported BUM catches.

100. The SC also **DISCUSSED** the potential of cryptic biomass in BUM that could be supporting the stock but **AGREED** that it is extremely difficult to collect evidence for the existence of refuges or cryptic biomass.

101. The SC **AGREED** that BUM CPUE indices may not effectively or appropriately reflect changing fishing practices (e.g. changes to gear type or depth of fishing). Noting these issues, the SC **URGED** the development of standardised CPUE indices that account for these changes.

102. The SC **NOTED** that there have been unusually high catches of striped and blue marlin by purse seines in vert recent years. The SC **REQUESTED** the WPB and WPDCS to investigate these data to check if those estimates are realistic.

**Indo-Pacific Sailfish stock assessment**

103. The SC **NOTED** the stock assessment for Indo-Pacific sailfish, implemented in JABBA using the same methods as in 2022. The method uses length frequency data to estimate annual spawning potential ratios (SPR) which are then normalised in the Just Another Red List Assessment (JARA) model to develop an index of spawning stock biomass. This index of biomass is then used within the JABBA modelling framework as an abundance index alongside catch data.

104. The SC **DISCUSSED** the novel abundance index and **NOTED** that the method has not been fully evaluated, even though it was **AGREED** after the SC in 2022 that the method should be evaluated by the WPM prior to being implemented in 2025. Indeed, during the WPB, the assumptions of the method were questioned, particularly with respect to the fact that the trend in biomass could be the opposite of that estimated by the SPR.

105. The SC **NOTED** that model developers have outlined a simulation approach to test the robustness of the stock assessment methods used in 2022 and 2025. The SC **CONGRATULATED** the developers on making significant progress on this topic since the end of the 23rd WPB and **NOTED** that the results are likely to be ready prior to the 24th WPB.

106. The SC **NOTED** the weight-of-evidence approach used in 2025 to provide the stock status, using the results of the JABBA assessment and **ACKNOWLEDGING** that the status of the stock is consistent with the previous assessment. However, the SC **NOTED** the WPB's concerns regarding the reliability of the method, and that there were concerns regarding consistently high catches that are above the estimated MSY for several years.

107. Considering all this, the SC **AGREED** that the results of the current stock assessment should be revisited at the 24th WPB in 2026, alongside results of the simulation study.

**Revision of catch levels of marlins under Resolution 18/05**

108. The SC **NOTED** that the WPB received a presentation from Australia scientists on potential management options for billfish, summarising available scientific information, reviewing data and research gaps, and outlining potential management tools, including catch limits, non-retention measures, gear modifications, and improved data collection. The WPB **AGREED** not to recommend specific management tools at this stage, but instead to advise the SC that the Commission should urge CPCs to address critical data gaps and conducted required research.

109. The SC **DISCUSSED** the purpose and cost-effectiveness of the proposed gillnet experimental fishing trials, **ACKNOWLEDGING** that the approach could also generate very important information on target species and TEPS interactions and potential mitigation approaches associated with that gear type.

110. The SC **NOTED** that the broader issues of gillnet catch and effort data, and their implications for multiple WPs.

111. **NOTING** the necessity to gather information to enable the development of advice relating to a range of potential management measures to complement the commonly used CPC based catch advice, the SC **REQUESTED**:
    - That the IOTC Secretariat (or alternately CPCs, where the Secretariat does not hold a CPCs relevant data or information) provide summaries of observer data (or logbook data or other relevant information) to WPB pertaining to the following data types for the following fishery types:
        - **All gear/fishery types** – discarding/retention rates and at-haul mortality (%) for each marlin and sailfish species, by fishery/gear type
        - **Longline** – proportion of each fleet using different hook types and sizes (Japanese tuna, J hook, Circle hook, other)

    - **Gillnet** – estimate of the proportion of the gillnet fleet using subsurface setting, and if possible, preferred depths used in fishery, and whether the fishery predominantly sets/soaks the gear overnight or through the day (or other).
- CPCs to consider undertaking analyses (e.g., model-based) of at-haul mortality, at a longline fleet level (and if possible for troll/handline), to help identify key factors driving at-haul mortality and subsequently, possibly help identify additional options to reduce at haul mortality
- CPCs individually or collaboratively conduct gillnet experimental fishing trials that:
    - Aim to test different setting depths and times of setting/soaking (e.g. day/night), on catch rates and mortality of interacting species
    - Collect data on all interacting species including billfish bycatch, target tuna and vulnerable species (e.g. cetaceans, turtles), in order to provide the Commission a quantified understanding of likely effects and possible trade-offs of various subsurface setting options, on each species.
    - Prioritise accurate species identification.

112. The SC **RECOMMENDED** that the Commission to give consideration to how best to financially and logistically support an experimental fishing trial with gillnets to be conducted by CPCs which would:
    - Aim to test different setting depths and times of setting/soaking (e.g. day/night), on catch rates and mortality of interacting species
    - Collect data on all interacting species including billfish bycatch, target tuna and vulnerable species (e.g. cetaceans, turtles), in order to provide the Commission a quantified understanding of likely effects and possible trade-offs of various subsurface setting options, on each species
    - Prioritise accurate species identification

**RECOMMENDATION/S**

That the WPB:

1) **NOTE** paper IOTC–2026–WPB24-03 which outlined the main outcomes of the 28th Session of the Scientific Committee (SC28), specifically related to the work of the WPB.
2) **CONSIDER** how best to progress these issues at the present meeting.

**APPENDICES**

Appendix A**:** Consolidated set of recommendations of the 28th Session of the Scientific Committee to the Commission, relevant to the Working Party on Billfish.

**APPENDIX A**

# CONSOLIDATED SET OF RECOMMENDATIONS OF THE 28th SESSION OF THE SCIENTIFIC COMMITTEE (1– 5 December 2025) TO THE COMMISSION RELEVANT TO THE WORKING PARTY ON BILLFISH

*Extract of the Report of the 28th Session of the Scientific Committee*

*(IOTC–2025–SC28–R)*

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

### *Billfish*

SC28.03 (para. 270) 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 five species assigned a stock status in 2025(Fig. 3):

Black marlin (*Istiompax indica*) – Appendix 18

Blue marlin (*Makaira nigricans*) – Appendix 19

Striped marlin (*Kajikia audax*) – Appendix 20

Indo-Pacific sailfish (*Istiophorus platypterus*) – Appendix 21

Swordfish (*Xiphias gladius*) – Appendix 22

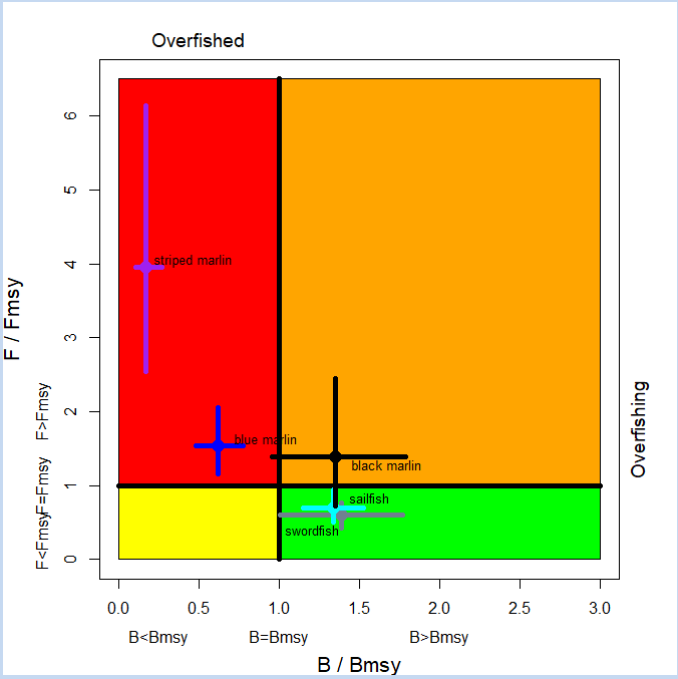


**Fig. 3**. Combined Kobe plot for swordfish (2021 with stock assessment conducted in 2023, grey), Indo-Pacific sailfish (2023 with stock assessment conducted in 2025, cyan), black marlin (2022 with stock assessment conducted in 2024, black), blue marlin (2023 with stock assessment conducted in 2025, blue) and striped marlin (2022 with stock assessment conducted in 2024, purple) showing the estimates of current stock size (SB or B, species stock assessment dependent) and current fishing mortality (F) in relation to optimal stock size and optimal fishing mortality. Cross bars illustrate the range of uncertainty from the model runs. Given unresolved uncertainty in the stock assessment, status for black marlin is uncertain.

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**GENERAL RECOMMENDATIONS TO THE COMMISSION**

***NATIONAL REPORTS FROM CPCS***

SC28.09 (para. 30) The SC **RECOMMENDED** that the Compliance Committee and Commission note the lack of compliance by 2 Contracting Parties (Members) that did not submit a National Report to the Scientific Committee in 2025, **NOTING** that the Commission agreed that the submission of the annual reports to the Scientific Committee is mandatory**.**

***Report of the 15th Session of the Working Party on Neritic Tunas (WPNT15)***

SC28.10 (para. 71) **ACKNOWLEDGING** the difficulties associated with deriving geo-referenced size-frequency data at the spatial resolution of 5° grids in most coastal longline and surface fisheries, and the fact that most analyses currently used in the assessments, do not require such fine resolution, the SC **RECOMMENDED** the Commission to align the spatial resolution of size-frequency data with that of geo-referenced catch and effort data. Consequently, the data may be provided using an alternative geographical area if it better represents the fishery concerned. The SC **NOTED** that this recommendation is relevant for many IOTC species and has been reiterated by other WPs.

***REPORT OF THE 23RD SESSION OF THE WORKING PARTY ON BILLFISH (WPB23)***

SC28.11 (para. 98) The SC **NOTED** that, for several years, joint analyses combining catch and effort data from major longline fleets have been proposed to improve the CPUE index for billfish species, and that the WPEB had previously recommended investigating methods to compare CPUE indices across fleets and to develop joint CPUE indices for bycatch species. The SC also **NOTED** that these joint analyses could harmonize standardization methods, reconcile conflicts between indices developed from different fleets, and potentially produce more robust indices with broader spatial and temporal coverage. The SC further **NOTED** that it is at the discretion of CPCs to determine the feasibility of such collaboration, considering data confidentiality agreements and other logistical arrangements. The SC **AGREED** on the importance of establishing a process to discuss how to move forward. **NOTING** that joint CPUE analysis arrangements already exist for the standardization of tropical and temperate tuna, the SC **RECOMMENDED** that the Commission urge CPCs to explore ways to extend joint analyses to non-targeted species, such as marlins.

SC28.12 (para. 112) The SC **RECOMMENDED** that the Commission to give consideration to how best to financially and logistically support an experimental fishing trial with gillnets to be conducted by CPCs which would:

- Aim to test different setting depths and times of setting/soaking (e.g. day/night), on catch rates and mortality of interacting species
- Collect data on all interacting species including billfish bycatch, target tuna and vulnerable species (e.g. cetaceans, turtles), in order to provide the Commission a quantified understanding of likely effects and possible trade-offs of various subsurface setting options, on each species
- Prioritise accurate species identification.

***REPORT OF THE 21TH SESSION OF THE WORKING PARTY ON ECOSYSTEMS AND BYCATCH (WPEB21)***

SC28.13 (para. 116) **NOTING** that data for bycatch species in IOTC fisheries are severely lacking, the SC **RECOMMENDED** that the Commission and Compliance Committee **ENCOURAGE** CPCs to provide observer data and work to reach at least the 5% minimum coverage level as required by Resolution 25/06.

SC28.14 (para. 118) **NOTING** that Resolution 15/01 includes a list of species for which reporting catch data is mandatory/optional and that varies by gear and by fishery type (i.e. artisanal vs commercial fisheries), the SC **NOTED** that many species of interest to the WPEB are not mandatory for reporting for all gears or fishery type. The SC **NOTED** concerns from some CPCs that making these species mandatory for reporting for all gears and fleets (including artisanal fleets) could place additional burden on many CPCs. This is particularly the case for many coastal fleets which are not necessarily targeting only tuna but instead target a wide range of species,

making data collection complex. The SC therefore **RECOMMENDED** that the Commission review the list of species that are mandatory for reporting to species level while considering the feasibility of such data collection for all CPCs. The SC included the following suggested changes:

- Silky sharks to be added also for gillnets fisheries
- Hammerhead sharks to be reported at species level at least for scalloped, smooth and great
- hammerhead sharks for all gear types (explicitly including purse seine fisheries)
- Mantas and devil rays to be reported at species level differentiating at least between manta ray (giant manta and reef manta) and other devil rays adding them for mandatory reporting at least for purse seine fisheries and for gillnet fisheries instead of optional
- Great white sharks as mandatory for all gear types
- Oceanic whitetip sharks as mandatory for all gear types

SC28.15 (para. 119) The SC **RECOMMENDED** that the Commission speak with CPCs to determine appropriate ways to improve data reporting from artisanal fisheries.

SC28.16 (para. 120) The SC **NOTED** that the WPEB had **REVIEWED** the minimum standards set out in Annex III of Resolution 25/08 and **ADOPTED** the revisions made by members of the group which can be found in Annex XVVII of the WPEB report. The SC **RECOMMENDED** that the Commission consider these standards for adoption in 2026. The SC further **NOTED** that work on best practice handling guidelines is ongoing and frequently evolves. The SC therefore **SUGGESTED** that the Commission consider adopting a master document containing handling guidelines for all taxa, rather than requiring Resolutions containing such guidelines to be updated when new information becomes available. Future Resolutions could then refer back to this master document adopted by the SC. The SC **AGREED** that a small working group will work on compiling these intersessionally for review by the SC.

SC28.17 (para. 121) The SC **NOTED** that in 2024, the WPEB recommended the adoption of a revised set of handling guidelines for mobulids while **NOTING** that work was required to further develop the guidelines for gillnets. The SC **NOTED** that the WPEB worked to further develop these guidelines which were revised and adopted. The SC **RECOMMENDED** that the Commission consider these revised handling guidelines for mobulids for consideration for adoption in 2026. The details of the suggested revisions to the handling procedures can be found in Appendix XVVI of the WPEB report.

SC28.18 (para. 122) The SC **NOTED** that while evidence on post-release survival of whale sharks from purse seine interactions suggests low mortality when best-practices are followed, data on bycatch in other fisheries, particularly gillnets, remains scarce. Therefore, the SC **RECOMMENDED** that the Commission **ENCOURAGE** CPCs to improve data collection and reporting for interactions with whale sharks involving all gear types as well as purse seine.

SC28.19 (para. 123) The SC **ENCOURAGED** efforts to clarify the extent and nature of whale shark interactions with IOTC fisheries, and to assess the current stock status within the IOTC area of competence, **ACKNOWLEDGING** that the extent of the vulnerability of whale sharks to IOTC fisheries is unknown. Based on the available information presented by the WPEB, the SC classified whale sharks in the Indian Ocean as a "taxon of the greatest biological vulnerability and conservation concern for which there are very few data", as defined in Resolution 25/08 and **RECOMMENDED** that the Commission take appropriate action based on this classification. The SC **NOTED** that this classification supports the consideration of precautionary management measures and prioritization of future research and data collection efforts by the Commission.

***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***

SC28.20 (para. 125) 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 in Appendix 6, recalling that the IPOA-Seabirds and IPOA-Sharks were adopted by the FAO in 1999 and 2000, respectively, and recommended the development of NPOAs.

***OTHER MATTERS***

SC28.21 (para. 145) The SC **RECOMMENDED** that the Commission **ENCOURAGE** ongoing trials with these gears (i.e., loop gears) to better understand their effect on target and bycatch species.

***REPORT OF THE 16TH SESSION OF THE WORKING PARTY ON METHODS (WPM16)***

***Bigeye tuna MP (Resolution 22/03)***

SC28.22 (para. 211) The SC **NOTED** that 2024 catch of bigeye tuna (82,874 t) has exceeded the 2024 TAC (80,583 t), which is an exceptional circumstance, and as such, the SC **RECOMMENDED** that the Commission should ensure that the appropriate provisions (e.g., in paragraphs 4, 5 and 8) of 23/04 are implemented to ensure catches remain inside the TAC, conditional on the allowances and requirements of those provisions.

***Skipjack tuna MP (Resolution 24/07)***

SC28.23 (para. 212) The SC **NOTED** the 2025 running of the SKJ MP **NOTING** that the this generated an unconstrained TAC of 528,130 t, which is >10% lower than the TAC set for 2024–2026. By applying the maximum 10% decrease in the TAC as per Resolution 24/07, the SC **RECOMMENDED** the Commission to adopt the TAC for skipjack tuna of 565,745 t. per year for 2027–2029.

***Swordfish tuna MP (Resolution 24/08)***

SC28.24 (para. 216) The SC **RECOMMENDED** that the Commission urgently propose and adopt the TAC for swordfish resulting from the MP (Resolution 24/08, now superseded by 25/07) in 2026.

***General MSE issues***

SC28.25 (para. 222) The SC **NOTED** that there are confidentiality agreements between longline countries and various tuna RFMO Secretariats regarding the use of operational data (such as those in place with the WCPFC and IATTC) and NOTING the provisions to ensure confidentiality of the operational data submitted to the Secretariat in IOTC Resolution 12/02, the SC **RECOMMENDED** that the Commission explore potential arrangements between longline-fleet CPCs and the IOTC Secretariat, under strict confidentiality rules (similar to those outlined in Resolution 12/02), so that the Secretariat can use operational data and participate in, as well as support, the development of the joint longline CPUE index. The SC further **RECOMMENDED** exploring similar arrangements for other fleets.

***REPORT OF THE 21TH SESSION OF THE WORKING PARTY ON DATA COLLECTION AND STATISTICS (WPDCS21)***

SC28.26 (para. 236) The SC **RECOMMENDED** that the Commission ensures that the transition from the current website to the FAO one does not affect the operations of the Commission and set aside enough resources for this transition.

***SUMMARY DISCUSSION OF MATTERS COMMON TO WORKING PARTIES***

***Observed issues related to IOTC Working Party meetings***

SC28.27 (para. 245) The SC **NOTED** the increasing utilisation of the Meeting Participation Fund (MPF) during working parties, observing that this is a positive development which aligns with the Commission's objectives and the original purpose of the MPF. However, the SC **NOTED** a few cases where applicants did not fully meet the MPF requirements, such as failing to submit a complete paper or submitting papers not sufficiently relevant to the meeting's agenda. The SC **NOTED** that there is currently no precedent requiring a recipient to return funds in such situations. Consequently, to ensure the effective use of MPF resources, the SC **RECOMMENDED** that the Commission and SCAF discuss further actions.

***Invited Expert(s) at the WP meetings***

SC28.28 (para. 260) Given the importance of external independent review for working party meetings, the SC **RECOMMENDED** the Commission continues to allocate sufficient budget for Invited Experts to be regularly invited to scientific working party meetings. The SC **NOTED** that there are generally funds to support 3 or 4 Invited Experts to attend IOTC's working parties.

***IOTC species identification guides: Tuna and tuna-like species***

SC28.29 (para. 262) The SC reiterated its **RECOMMENDATION** 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 CPC scientific observers, both on board and at port need to have hard copies.

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

SC28.30 (para. 266) 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 7.

***PROGRAM OF WORK AND SCHEDULE OF WORKING PARTY AND SCIENTIFIC COMMITTEE MEETINGS***

***Consultants***

SC28.31 (para. 293) **NOTING** the highly beneficial and relevant work done by IOTC stock assessment consultants 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.

***Data preparatory meetings and Hybrid meetings***

SC28.32 (para. 295) **ACKNOWLEDGING** that holding data preparatory meetings prior to stock assessments is considered to be best practice and **NOTING** that since 2019 data preparatory meetings were successfully held for the WPTmT, WPTT and WPEB, the SC **AGREED** to continue the practice of having data preparatory meetings in addition to stock assessment meetings for the main IOTC species. The SC **RECOMMENDED** that data preparatory meetings could continue to be held virtually so as not to increase the travel and costs required for the already full IOTC timetable of meetings.

***REVIEW OF THE DRAFT, AND ADOPTION OF THE REPORT OF THE 28TH SESSION OF THE SCIENTIFIC COMMITTEE***

SC28.33 (para. 303) The SC **RECOMMENDED** that the Commission consider the consolidated set of recommendations arising from SC25, provided at Appendix 40.