

**SCIENTIFIC COMMITTEE**

**SEVENTEENTH REGULAR SESSION**

Electronic Meeting

11 – 19 August 2021

**PROVISIONAL ANNOTATED AGENDA**

**WCPFC-SC17-2021/03 (Rev.02)**

1. **OPENING OF THE MEETING**

The electronic SC17 meeting will start at 10am in Pohnpei time every day except Friday, 13 August 2021. On Friday, the meeting will start at 4pm (16:00) in Pohnpei time.

* 1. **Welcome address**

The Commission Chair, SC Chair and the Executive Director will welcome delegations of the WCPFC Members, Cooperating Non-members and Participating Territories (CCMs) and Observers to the Seventeenth Regular Session of the Scientific Committee (SC17).

* 1. **Meeting arrangements**

The SC Chair will outline procedural matters including the meeting schedule, administrative arrangements, and the list of theme conveners. In addition, SC17 will endorse the appointment of new conveners as required.

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| --- | --- |
| Chair | Ueta Jr. Faasili (4); [ueta.faasili@maf.gov.ws](mailto:ueta.faasili@maf.gov.ws) |
| Vice Chair | Tuikolongahau Halafihi (2); [supi64t@gmail.com](mailto:supi64t@gmail.com) |
| ST Theme | Valerie Post (4); [valerie.post@noaa.gov](mailto:valerie.post@noaa.gov) |
| SA Theme | Keith Bigelow (3); [keith.bigelow@noaa.gov](mailto:keith.bigelow@noaa.gov)  Hiroshi Minami (4); [hminami@affrc.go.jp](mailto:hminami@affrc.go.jp) |
| MI Theme | Robert Campbell (12); [robert.campbell@csiro.au](mailto:robert.campbell@csiro.au)  Co-Convener: TBD |
| EB Theme | Yonat Swimmer (3); [yonat.swimmer@noaa.gov](mailto:yonat.swimmer@noaa.gov)  Co-Convener: TBD |

(*x*): *number of* *years of convenership*

*Deadline for the submission of papers*

According to the decision made at SC2 (Attachment S, SC2 Summary Report) and supported suggestions at SC14 (Paras 680 and 682, SC14 Summary Report), earlier submission of all meeting documents in advance of the deadline below will be highly encouraged:

* 7 July 2021: Titles and preliminary abstracts;
* 12 July 2021: Submission of Annual Report Part 1; and
* 24 July 2021: submission of full papers. All papers will be posted by 28 July, two weeks in advance of the SC17.

Authors who wish to submit any papers MUST refer to *Guidelines for submitting meeting papers* section in the SC17 Meeting Notice on SC17 website.

* 1. **Adoption of agenda**

Posting of the Provisional Agenda for SC17 was delayed due to the meeting arrangements for SC17 as a result of the continued disruptions caused by the COVID-19 pandemic.

The Provisional Agenda for the electronic SC17 meeting was finalized among the Secretariat, SC Chair, Vice-Chair, Theme Convenors and the Scientific Services Provider, which was posted on 04 June 2021. Any other matters to be discussed under Agenda Item 8 may be proposed here.

SC17 will review and adopt the abbreviated agenda.

* 1. **Reporting arrangements**

A DRAFT Summary Report will be developed and adopted intersessionally with an Executive Summary. The Executive Summary will include a brief overview of the meeting, all theme recommendations adopted during the meeting, including a synopsis of stock status and management advice, and any other initiatives arising from SC (Paragraph 2, Article 12 of the Convention).

In accordance with the Rule 33 of the Commission’s Rules of Procedure, the text of all decisions adopted by the SC17 will be distributed in the form of *Outcomes Document* to all members, territories and observers within seven (7) working days following the adoption of such decision.

The WCPFC Secretariat will hire a lead rapporteur to produce the DRAFT Summary Report, and the theme conveners may arrange their own support rapporteurs as required.

1. **DATA AND STATISTICS THEME**
   1. **Data gaps of the Commission**
      1. Data gaps

SPC-OFP will present the data gaps paper, including continued improvements to the charter notification requirements and/or the treatment of chartered vessels. SC17 will consider, comment, and where relevant, recommend actions on how to address any identified data gaps.

* + 1. Potential use of cannery data

Taking into consideration the draft *Guidelines for the Voluntary Submission of Purse Seine Processor Data by CCMs to the Commission* (Annex in the SC16-ST-IP-03: *An update on cannery data with potential use to the WCPFC*), which was reviewed under Topic 2 of the SC16 Online Discussion Forum (SC16-ODF), SC17 will consider endorsement of the updated guidelines for forwarding to TCC17 and WCPFC18.

* 1. **Other commercial fisheries for bigeye, yellowfin and skipjack tuna**

WCPFC17 noted that Indonesia and Philippines had submitted delegation papers to SC16, TCC16 and WCPFC17 (WCPFC17-2020-DP04 and WCPFC17-2020-DP05) in response to the request from TCC15 to inform the Commission discussion on the application of paragraph 51 of CMM 2020-01. However, the virtual format of these meetings made it difficult to consider these papers at SC16 and TCC16. As requested by the Commission, SC17 will review these papers and provide advice to the Commission to facilitate a decision by WCPFC18 on the application of paragraph 51 of CMM 2020-01 (Paragraphs 198 – 200, WCPFC17 Summary Report).

(CMM 2020-01)

*51. CCMs shall take necessary measures to ensure that the total catch of their respective other commercial tuna fisheries for bigeye, yellowfin or skipjack tuna, but excluding those fisheries taking less than 2,000 tonnes of bigeye, yellowfin and skipjack, shall not exceed either the average level for the period 2001-2004 or the level of 2004.*

1. **STOCK ASSESSMENT THEME** 
   1. **WCPO tunas**

An indicator paper SC17-SA-IP-15 (*A compendium of fisheries indicators for target tuna stocks in the WCPFC Convention Area*) provides empirical information on recent patterns in fisheries for all `key' target tuna species (skipjack, bigeye, yellowfin and South Pacific albacore tuna) for those years when a stock assessment is not conducted, with explanatory details for the figures and a brief interpretation of the trends. The SC participants will visit the online discussion forum and provide comments and questions for the review of this paper.

* + 1. **South Pacific albacore tuna (*Thunnus alalunga*)**
       1. Review of 2021 South Pacific albacore tuna stock assessment

The last South Pacific albacore tuna stock assessment was conducted in 2018. Noting SC15 recommendation in Paragraph 240 below, SC17 will review the results of the 2021 South Pacific albacore tuna stock assessment, any proposed future research and budget implications, and provide recommendations to the Commission as required.

(SC15 Summary Report)

*240. SC15 noted that the assumed future recruitment can have a large impact on the projection result. It was recommended that research be undertaken to quantify autocorrelation behaviour of recruitment to be included in the future projection.*

* + - 1. Provision of scientific information

SC17 will provide agreed text for the following:

1. Status and trends
2. Management advice and implications
   1. **WCPO sharks** 
      1. **Southwest Pacific blue shark (*Prionace glauca*)**
         1. Review of 2021 Southwest Pacific blue shark stock assessment (Project 107)

Because of the data-poor nature of the Southwest Pacific blue shark assessment in the last 2016 assessment, no stock status and management advice have been provided for Southwest Pacific blue shark (Paragraphs 461 – 467, SC12 Summary Report). SC17 will review the 2021 stock assessment of Southwest Pacific blue shark including any improvements in catch reconstruction, CPUE time series, biological information and assessment models, and provide recommendations on stock status and management advice to the Commission if appropriate.

* + - 1. Provision of scientific information

SC17 will provide agreed text for the following:

1. Status and trends
2. Management advice and implications
   1. **WCPO billfishes**
      1. **Southwest Pacific swordfish (*Xiphias gladius*)** 
         1. Research and information
   2. Structural Uncertainty Grids and Projections

Regarding future improvements related to the structural uncertainty and projections, and considering a series of recommendations related to evaluating the inclusion of axes and respective weighting within each axis (Paragraphs 179 – 182 of the SC16 Summary Report), SC17 will review the progress made by SPC to address the structural uncertainty issues, and provide recommendations for future research.

* 1. Review of 2021 Southwest Pacific swordfish stock assessment

The last assessment was conducted in 2017. SC17 will review the results of the 2021 Southwest Pacific swordfish stock assessment and any future research including budget implications, and provide recommendations to the Commission as required.

Though WCPFC16 tasked SC17 to provide an evaluation of the long-term future of the southwest Pacific swordfish stock status under CMM 2009-03 based upon the latest SC-agreed stock assessment, utilising a limited number of projections (Para 481 of the WCPFC16 Report), the evaluation work will be provided to WCPFC18 after SC’s agreement on the 2021 stock assessment.

* + - 1. Provision of scientific information

SC17 will provide agreed text for the following:

1. Status and trends
2. Management advice and implications
   * 1. **Pacific blue marlin (*Makaira nigricans*)** 
        1. Review of 2021 Pacific blue marlin stock assessment

The last assessment was conducted by the ISC in 2016. This year, the ISC conducted a benchmark stock assessment of Pacific blue marlin. SC17 will review the results of the assessment and provide updated stock status and management advice to the Commission.

* + - 1. Provision of scientific information

SC17 will provide agreed text for the following:

1. Status and trends
2. Management advice and implications
   1. **Peer Review**

SC16 provided the provisional time-line for the external expert, and tasked the SSP with preparing a draft terms of reference (TOR) for the external expert review. SC17 will review and provide inputs on the initial range of testing and analysis tasked under Year 1, and finalize the TOR for the implementation of the external experts peer review commencing at the start of 2022 (Para. 188-192, SC16 Summary Report).

(SC16 Summary Report)

1. *SC16 supports an external expert peer review of the yellowfin stock assessment. This would also allow several components of the bigeye tuna assessment to be reviewed given the similar data input structure. This review would examine a number of issues such as model complexity, weighting of data sources, spatial approaches and the extreme sensitivity to assumptions on growth amongst a range of other issues.*
2. *SC16 provides the following provisional time-line for an external expert peer review.*
3. *Year 1 would be set aside to allow the SSP to conduct an initial range of testing and analysis internally focused on YFT and report these findings to SC17. SC17 to finalize ToRs for the external expert review.*
4. *Year 2 would be set aside for the SSP to conduct further testing and analysis internally focused on BET and YFT, following SC17 input, and* *for the external expert review (commencing at the start of 2022) with the review reporting to SC18.*
5. *Year 3 would provide updated YFT and BET stock assessments which respond to the review. The two assessments would be reported to SC19.*
6. *In accordance with this, SC16 identified the external review as a project in the budget (provisionally estimated at $USD 50,000) but with no funding commitment until 2022 and 2023.*
7. *SC16 also* *tasked the SSP with preparing a draft terms of reference for the external expert review for the consideration of SC17 which would be informed by their analyses during 2021. The draft terms of reference would give consideration to including the bigeye stock assessment in the external review process.*
8. *Further, SC16 noted that* *peer review experts of the required calibre may not be easy to secure, thus efforts should be made during late 2020/early 2021 to have them express interest and availability.*
9. **MANAGEMENT ISSUES THEME**
   1. **Development of the Harvest Strategy Framework for key tuna species**
      1. **Overview on the progress and updates to the harvest strategy workplan**

SC17 will note any changes and updates to the work plan for the adoption of the WCPFC Harvest Strategy under CMM 2014-06 (Attachment H, WCPFC17 Summary Report) and the scheduled plan for 2022. Further detailed discussions will be available under Agenda Item 4.1.7.

* + 1. **Target reference points (TRPs)**
       1. Bigeye and yellowfin tuna TRP analyses

WCPFC17 noted the results of analyses on candidate TRPs for bigeye and yellowfin (WCPFC17-2020-12\_rev1) but the TRPs could not be agreed at WCPFC17. Instead, the Commission requested SPC to include skipjack equivalent depletion levels and to provide separate TRP presentations for bigeye and yellowfin in the future to aid the Commission’s consideration of candidate TRPs for bigeye and yellowfin (Para 167, WCPFC17 Summary Report).

SC17 will review any updated information on TRPs for bigeye and yellowfin tuna including the Commission’s request and provide advice on potential TRPs for the Commission’s adoption at WCPFC18.

* + - 1. Skipjack tuna TRP analyses

WCPFC17 reviewed WCPFC17-2020-11 (*Updates to WCPO Skipjack Tuna Projected Stock Status to Inform Consideration of an Updated Target Reference Point*) and agreed to continue intersessional work to review and revise, as appropriate, a TRP for skipjack in the future. In addition, the Commission requested SPC to update the skipjack TRP work by including additional candidates, including 36%, 38% and 40% in the median depletion table (Paragraph 157 – 159, WCPFC17 Summary Report).

SC17 will review updated information provided by SPC-OFP on the performance of candidate target reference points and provide advice to the Commission for its potential update of the skipjack TRP.

* + 1. **Review of the overall harvest strategy work**

With reference to the revised work plan for the adoption of the WCPFC Harvest Strategy under CMM 2014-06 (Attachment H, WCPFC17 Summary Report), SC17 will note the overall progress to date in the development of the harvest strategy covered by this workplan. This will include a summary of the discussion and questions posed and responses associated with the related Information Papers presented in the ODF at SC16.

* + 1. **Skipjack MSE framework**

Noting the planned schedule of adopting the management procedure for skipjack tuna in 2022, SC17 will review the progress on analysing the performance of candidate management procedures and provide advice to the Commission for consideration and further instruction as needed.

* + 1. **Mixed fisheries**

An information paper *Further consideration of the mixed fishery management strategy evaluation framework for WCPO tuna stocks* (SC16-MI-IP-06) was posted on the HS-ODF, under Topic 5. SC17 may close the review of SC16-MI-IP-06 by noting the progress in developing the multi-species modelling framework as the initial approach for including mixed ﬁshery interactions when developing and testing harvest strategies for the four main WCPO tuna stocks. SC17 will review any updates on the development of a mixed fishery MSE framework and provide recommendations to the Commission for further research.

* + 1. **Review of future progress of the WCPFC Harvest Strategy Workplan**

SC17 will review the steps required to further progress the WCPFC Harvest Strategy Workplan and highlight issues for further guidance by the Commission, including how decisions on MPs can be made and what role of SC might be in this process.

Noting the Commission’s recommendation in Para. 275, WCPFC17 Summary Report, SC17 will review the need and options to convene a science-management dialogue to assist this process and provide recommendations to the Commission as needed.

(WCPFC17 Summary Report)

*275. The Commission acknowledged the utility of a science-management dialogue in progressing the implementation of the Indicative Workplan for the Adoption of Harvest Strategies but was unable to agree on the staging of such a dialogue. The Commission agreed to continue to explore in 2021 options to convene a science-management dialogue.*

* 1. **Limit Reference Points for Species other than Tuna**
     1. **Limit reference points for elasmobranchs**

Project 103 (*LRPs for elasmobranchs within the WCPFC*) was posted on the SC16-ODF, under Topic 11. One CCM stated that it is advisable to close Project 103 and no objections were raised to close the project. Though one CCM suggested to support the Project 103 outputs, several other CCMs offered a number of comments on the project outputs: i) it is not clear that the analyses and results have clearly identified appropriate reference points; ii) agreement is required regarding the objective of the LRPs for non-target stocks, the metrics to be used to describe stock status, and their levels; and iii) consideration needs to be given to empirical reference points (Paragraph 46, Attachment F of the SC16 Summary Report).

Noting the feedback in the SC16-ODF Topic 11, SC17 may consider how to address the Commission’s request on developing appropriate LRPs for elasmobranchs (Paragraph 484 below) and provide recommendations to the Commission as needed.

(WCPFC16 Summary Report)

*484. The Commission noted that the Scientific Committee is working on appropriate LRPs under Project 103 and encouraged the Scientific Committee to develop appropriate LRPs given their importance in harvest strategies.*

* + 1. **Review of appropriate LRPs for SWPO striped marlin and other billfish (Project 104)**

At WCPFC16, the Commission noted with concern the current status of South Pacific striped marlin and agreed to revisit identification of an appropriate limit reference point for this species in 2020 at WCPFC17 (Para. 459, WCPFC16 Summary Report). Terms of reference for a Project 104 to identify appropriate LRPs for Southwest Pacific Ocean striped marlin and consideration of other billfish species (SC16-MI-IP-12) was posted on the SC16-ODF, under Topic 12, and the Project 104 was endorsed by the WCPFC17. The objective of the Project 104 is to provide recommendations for performance indicators and related LRPs for SWPO striped marlin and consider their relevance for other billfish in the WCPO.

SC17 will review the report of the Project 104 and provide recommendations for consideration by the Commission.

1. **ECOSYSTEM AND BYCATCH MITIGATION THEME** 
   1. **Review of potential mitigation measures to reduce fishing-related mortality on silky and oceanic whitetip sharks (Project 101)**

Based on the analysis in SC10-EB-WP-01 (*Analysis of WCPO longline observer data to determine factors impacting catchability and condition on retrieval of oceanic white‐tip, silky, blue, and thresher sharks*), SC10 recommended a new project (*Monte Carlo simulation of mitigation options for longline shark bycatch*) as a priority.

SC11 reviewed SC11-EB-WP-02 (*Monte Carlo simulation modelling of possible measures to reduce impacts of longlining on oceanic whitetip and silky sharks*) and SC12 reviewed two follow-up working papers: SC12-EB-WP-06 (*Potential implications of the choice of longline mitigation approach allowed within CMM 2014-05[[1]](#footnote-1)*) and SC12-EB-WP-03 (*Monte Carlo simulation modelling of purse seine catches of silky and oceanic whitetip sharks*).

SC15 recommended Project 101 (*Updated Monte Carlo simulations of the potential of longline shark mitigation approaches incorporating updated knowledge*) and the Finance and Administration Committee at WCPFC16 noted that the Project 101 will be done by the United States with no cost. The Project 101 updates analyses undertaken in SC12-EB-WP-06 incorporating the latest information on shark post release mortality. SC17 will review the results of the analyses and provide recommendations to the Commission as needed.

* 1. **Best handling practices for the release of cetaceans**

Taking into account that that WCPFC16 tasked SC16 to develop and recommend best handling practices for the release of cetaceans but SC16 could not complete not only this task but also many other tasks due to the limited agenda resulting from COVID-19, the Commission requested the Scientific Committee to consider how to handle these outstanding tasks at SC17 (Paragraph 417, WCPFC17 Summary Report).

(WCPFC16 Summary Report)

*520. The Commission tasked the Scientific Committee in 2020 (SC16) to develop and recommend best handling practices for the release of cetaceans, taking into account existing standards or guidelines adopted in other fora, for consideration at WCPFC17.*

As requested by the Commission, SC17 will review any proposals related to best handling practices for the release of cetaceans, if available, or will consider a timetable and scope of work for developing the best handling practices in longline and/or purse seine fishery, and provide recommendations to the Commission.

* 1. **Other issues**

SC17 will consider other papers that are not related to any specific items on the existing agenda but are useful to the work of the Commission.

* + 1. Review of the ODF outputs on seabird mitigation measures

SC17 will consider the results of the ODF-TOPIC 23 in relation to the proposed recommendation text provided in SC17-EB-IP-15 (*Seabird Mitigation Measures on Small-Scale Longline Vessels North of 23 North*):

*“SC17 recommends that Commission Members, Cooperating Non-Members, and participating Territories (CCMs) with small-scale longline vessels (< 24m) operating north of 23° North provide the SC with information on the specific mitigation measures used by those vessels and the associated seabird interaction rates for each mitigation measure, including streamer-less tori lines, and that SC18 review such information, to make findings and recommendations with respect to the effectiveness of the streamer-less tori line designs to inform the Commission’s review under CMM 2015-03 (and its successor measures).”*

1. **FUTURE WORK PROGRAM AND BUDGET**
   1. **Development of the 2022 work programme and budget, and projection of 2023-2024 provisional work programme and indicative budget**

SC17 will develop the 2022 SC work programme and budget and provisional work programme and indicative budget for 2023-2024 for the Commission’s endorsement. To draft the 2022 work programme, all conveners and relevant agencies will submit proposals and SC Chair will coordinate an informal small group for discussion.

SC17 will note a recommendation from the Finance and Administration Committee to the Commission (Para 71, FAC9 Summary Report) that “*WCPFC12 task SC with carefully considering proposed scientific projects in the context of the indicative budget agreed for the coming year.*”

1. **ADMINISTRATIVE MATTERS**
   1. **Election of Officers of the Scientific Committee**

The SC17 will consider the appointment of the SC Chair, SC Vice-Chair and SC theme conveners for SC18 meeting in 2022.

* 1. **Next meeting**

At SC16, Tonga offered to host SC18 in 2022. Members are invited to confirm a time and venue for SC18 in 2022, and to propose a time and venue for SC19 in 2023.

1. **OTHER MATTERS**

SC17 will consider any other issues that are raised under Agenda Item 1.3.

* 1. **Review of Online Discussion Forum outputs**

SC17 will take actions as needed on the results of Online Discussion Forum.

* 1. **Consideration of SC17-ST-IP-06 and SC17-ST-IP-10**

As requested at the Heads of Delegation Meeting, SC17 will consider two information papers and associated comments.

1. **ADOPTION OF THE SUMMARY REPORT OF THE SEVENTEENTH REGULAR SESSION OF THE SCIENTIFIC COMMITTEE**

SC17 will adopt recommendations of the Seventeenth Regular Session of the Scientific Committee. The SC17 Summary Report will be adopted intersessionally after the meeting.

1. **CLOSE OF MEETING**

The meeting will close at 14:00 on 19 August 2021.

1. Previous CMM for Sharks [↑](#footnote-ref-1)