



**Development of a Revised Tropical Tuna Measure Workshop 4
29 to 30 September 2023
Pohnpei, FSM, and online**

Table of Requested SSP Analysis and SC19 Advice and Relevance to CMM 2021-01

**WCPFC-TTMW4-2023-02
9 September 2023**

Chair's Paper

1. The purpose of this paper is to assist CCMs in considering the requested analysis of the Scientific Services Provider and SC19 advice and recommendations that are relevant to the revisions to CMM 2021-01. It is accompanied **WCPFC-TTMW4-2023-02** which for convenience of CCMs sets out the relevant paragraphs of advice and recommendations from the SC19 Outcomes Document that are referred to in that paper.
2. This Table provides an overview of the paragraphs of CMM 2021-01 that I have identified as potentially requiring review in 2023. Against each identified paragraph is an indication of which CCM or groups of CCMs supported this identification, as well as where there is either a requested analysis relevant to the paragraph or advice available from the 19th Scientific Committee (SC19).
3. The purpose of this Table is to assist CCMs to focus consideration and discussion at TTMW4 on the paragraphs of the CMM that have been agreed as requiring review, mindful of the Commission's agreement at WCPFC19 that CMM 2021-01 does not require a full overhaul. To further assist CCMs with making progress on the review of relevant provisions, a column labelled "Drafting Elements" is included to capture any draft text that members wish to propose at TTMW4 for ongoing consideration through to WCPFC20.
4. I wish to reiterate my intention to keep us focused on the key paragraphs that many of us have agreed are in need of review, particularly in light of recent SC19 advice which is now available for consideration alongside analyses results requested of our Scientific Services Provider. I expect that this approach will help us make the most of limited time and ensure we are moving toward reaching agreement on a revised CMM in December.
5. I invite CCMs to review the Table ahead of the 4th Workshop on the Tropical Tuna Measure and be prepared to engage in constructive discussions. To facilitate these a reference paper will also be prepared on SC19 Outcomes relevant to CMM 2021-01.

Table of CMM paragraphs proposed for revision according to the table of SSP requests from TTMW3 and/or SC19 advice

CMM Paras proposed by the Chair for revision/review	CCM Support	SPC requested analysis and/or SC19 advice (all paragraph references in this column are to the SC19 Outcomes Document) Refer to SC19-MI-WP-08 Updates to table 9 of the evaluation of CMM 2021-01 for the review of CMM 2021-01	SPC analysis available YES/NO	Drafting Elements
Preamble PP3 re SC advice	PNA+ US EU	<p>SC19 advice:</p> <p>SC19 stock assessment results on bigeye tuna (Paras 48 – 63)</p> <ol style="list-style-type: none"> Stock Status and trends (paras 48 – 55) Management advice and implications (paras 56 – 62) Research Recommendations (para 63) <p>SC19 stock assessment results on yellowfin tuna (Paras 28 – 42, SC19 Outcomes Document)</p> <ol style="list-style-type: none"> Stock status and trends (paras 27 – 34) Management advice and implications (paras 35 – 40) Research recommendations (para 41) <p>SC19 stock assessment results on skipjack tuna (Paras 66 – 73) – Update of 2022 skipjack tuna stock assessment information</p>	Yes	
Paras 11 – 13 Interim (objectives of BET, SKJ and YFT)	PNA+ US EU	<p>SC19 advice:</p> <p>HS and Interim Objectives for Bigeye Tuna (Paras 56 and 63)</p> <p>HS and Interim Objectives for Skipjack Tuna (Paras 130, 131 and 136)</p> <p>HS and Interim Objectives for Yellowfin Tuna (Paras 36 – 38)</p>	Yes	
Paras 14, 15 (FAD Closure)	AS PNA+	SPC analysis: Trade-off between FAD closure period (EEZ/HS), and LL catch. Cf EEZ vs HS FAD closure, FAD closure and LL catch (table 9 of WCPFC-TTMW2-2021-01_rev4/ Tables 11-13 in WCPFC18-2021-15)	Yes	

CMM Paras proposed by the Chair for revision/review	CCM Support	SPC requested analysis and/or SC19 advice (all paragraph references in this column are to the SC19 Outcomes Document) <u>Refer to SC19-MI-WP-08 Updates to table 9 of the evaluation of CMM 2021-01 for the review of CMM 2021-01</u>	SPC analysis available YES/NO	Drafting Elements
	Korea US EU	No specific advice is available from SC19 on FAD closure. For evaluation on FAD closure, refer to SC19-MI-WP-08 Updates to table 9 of the evaluation of CMM 2021-01 <u>Review of effectiveness of CMM-2021-01 (Paras 197 – 202: these paragraphs are all that were endorsed by SC19 for the review of TTM)</u>		
Paras 14, 15	as above	SPC analysis: Include stock projections for different scenarios of reduced FAD closure (10% 20%, 30% reduction, status quo) in their analyses to be presented to SC19. No specific advice on this issue from SC19. However, SC19-MI-WP-08 should be referred for assessments/evaluations on relevant issues.	Yes	
Paras 14, 15	as above	SPC analysis: Include stock projections for different scenarios of increased FAD closure (10%, 20%, 30% increase) in their analyses. No specific advice on this issue from SC19. However, SC19-MI-WP-08 should be referred for assessments/evaluations on relevant issues.	Yes	
Paras 14, 15	as above	SPC analysis: What is the impact to juvenile BET and YFT from decreasing the FAD closure period in terms of $SB/SB_{F=0}$? Refer to the text above and further note that the updates to SC19-MI-WP-08 be forwarded to both TTMW4 and the Commission for their consideration in reviewing the Tropical Tuna Measure. SC19 has no specific recommendations on this as BET and YFT stock assessments have just been accepted by SC19, analysis on this will be	Yes	

CMM Paras proposed by the Chair for revision/review	CCM Support	SPC requested analysis and/or SC19 advice (all paragraph references in this column are to the SC19 Outcomes Document) Refer to SC19-MI-WP-08 Updates to table 9 of the evaluation of CMM 2021-01 for the review of CMM 2021-01	SPC analysis available YES/NO	Drafting Elements
		conducted by SSP after SC19 using the 2023 BET and YFT assessment and expected to be available at TTMW4 and/or the Commission.		
Paras 14, 15	as above	SPC analysis: Examine the implications of the FAD closure on foregone catches of SKJ and YFT SC19 has no specific recommendations on this as BET and YFT stock assessments have just been accepted by SC19, analysis on this will be conducted by SSP after SC19 using the 2023 BET and YFT assessment and is expected to be available at TTMW4 and/or the Commission.	Yes	
Paras 14, 15	as above	SPC analysis: Identify the biomass depletion levels associated with various candidate TRPs (i.e., 2012-2015 depletion, 2004 depletion, depletion associated with a risk level, 2001-2004 average levels), and the LL/PS scalars that achieve those biomass depletion levels. SC19 has no specific recommendations on this as BET and YFT stock assessments have just been accepted by SC19, analysis on this will be conducted by SSP after SC19 using the 2023 BET and YFT assessment and is expected to be available at TTMW4 and/or the Commission.	Yes	
Paras 14, 15	as above	SPC analysis: Examine the conditions necessary to achieve a BET TRP at 2012-15 depletion levels, where the FAD closure has been removed SC19 has no specific recommendations on this as BET and YFT stock assessments have just been accepted by SC19, analysis on this will be conducted by SSP after SC19 using the 2023 BET and YFT assessment and is expected to be available at TTMW4 and/or the Commission.	Yes	
Paras 14, 15	as above	SPC analysis: Update Tables 9 and 10 of WCPFC18-2021-15 based upon the new assessment	Yes	

CMM Paras proposed by the Chair for revision/review	CCM Support	SPC requested analysis and/or SC19 advice (all paragraph references in this column are to the SC19 Outcomes Document) Refer to SC19-MI-WP-08 Updates to table 9 of the evaluation of CMM 2021-01 for the review of CMM 2021-01	SPC analysis available YES/NO	Drafting Elements
		SC19: Refer to SC19-MI-WP-08		
Paras 14, 15	as above	<p>SPC analysis: Provide an updated analysis on the potential level of high seas purse seine effort based on the SKJ TRP (SKJ MP output).</p> <p>SC19: Refer to Para 137, SC19 Outcomes Document: 137. SC19 recommended that the Commission take into consideration the successful running of the skipjack MP as outlined in SC19-MI-WP-01 and its output, which sets maximum effort in the purse seine and pole-and-line fisheries and maximum catches in all other fisheries to their respective baseline levels for the period 2024-2026, when implementing CMM-2022-01.</p> <p>An updated analysis on the potential level of high seas purse seine effort based on the SKJ TRP (SKJ MP output) is expected to be available at TTMW4 and/or the Commission.</p>	Yes	
Paras 14, 15	as above	<p>SPC analysis: Table with future purse seine scalars under current conditions, without footnote 1 exemptions, without paragraph 15 exemptions (previous paragraph 17), without HS effort by CCMs in table 2, without HS effort by CCMs not in table 2</p> <p>SC19: Refer to SC19-MI-WP-08</p>	Yes	
Paras 14, 15	as above	<p>SPC analysis: Update of Tables 14 and 15 of WCPFC19-2021-15, with the updated TRP from the interim skipjack MP for the reference periods 2012, 2016-2018 and 2018-2021</p> <p>SC19: Refer to SC19-MI-WP-08</p>	Yes	

CMM Paras proposed by the Chair for revision/review	CCM Support	SPC requested analysis and/or SC19 advice (all paragraph references in this column are to the SC19 Outcomes Document) Refer to SC19-MI-WP-08 Updates to table 9 of the evaluation of CMM 2021-01 for the review of CMM 2021-01	SPC analysis available YES/NO	Drafting Elements
Paras 14, 15	as above	<p>SPC analysis: Updated figures 9 and 10 of SC18-MI-IP08 with PS effort in waters under national jurisdiction (EEZs and AWs), in the HS by CCMs in table 2 of CMM, in the HS by the Philippines, in the HS by Pacific Island fleets fishing in high seas adjacent to their home waters during the HS closures, in the HS by CCMs not listed in Table 2 (not including the effort already included in update of data summaries).</p> <p>SC19 has no specific recommendations on this as SSP will conduct this analysis after the TTMW4.</p>	Post TTMW4	
Paras 14, 15	as above	<p>SPC analysis: Update Table 6 and 7 of WCPFC18-2021-15 with a TRP at 2012-15 levels, without a FAD closure.</p> <p>SC19 has no specific recommendations on this as SSP will conduct this analysis after the TTMW4</p>	Post TTMW4	
Paras 17, 18, 19, 20	PNA+ US EU	<p><i>The following paragraphs in this cell and the next cell (paragraphs 206 – 223) are all related to the review on FADs by SC19.</i></p> <p>SC19 advice:</p> <p>FAD Impacts</p> <ul style="list-style-type: none"> a. Research on non-entangling and biodegradable FADs (Project 110) (paras 205-210) b. FAD Management Options IWG Issues (paras 211-215) 	For FADMO IWG & TCC	
Paras 21, 22, 23	PNA+ Korea US EU	<p>SC19 advice:</p> <p>Instrumented Buoys (paras 216 – 222)</p>	For FADMO IWG & TCC	

CMM Paras proposed by the Chair for revision/review	CCM Support	SPC requested analysis and/or SC19 advice (all paragraph references in this column are to the SC19 Outcomes Document) Refer to SC19-MI-WP-08 Updates to table 9 of the evaluation of CMM 2021-01 for the review of CMM 2021-01	SPC analysis available YES/NO	Drafting Elements
Paras 24 – 27, Tables 1 & 2	AS PNA+ PH Japan US	SPC analysis: Produce the usual depletion/risk matrices (nuclear grid) for BET and YFT based on LL and PS scalars using the 2023 assessment grids. SC19: Refer to SC19-MI-WP-08 and an update is expected for the TTMW4. BET also relevant for paras 14 and 15.	Yes	
Paras 24, 25 Table 2	as above	SPC analysis: Examine the conditions necessary to achieve a BET TRP at 2012-15 depletion levels, where the FAD closure has been removed SC19: Refer to SC19-MI-WP-08 and, as BET and YFT stock assessments have just been accepted by SC19, further analyses on this will be conducted by SSP after SC19 using the 2023 BET and YFT assessment and is expected to be available at TTMW4 and/or the Commission. Also relevant for paras 14 and 15.	Yes	
Paras 25-27; Table 2	as above	SPC analysis: Provide an updated analysis on the potential level of high seas purse seine effort based on the SKJ TRP (SKJ MP output). SC19 Outcomes, para 137: 137. SC19 recommended that the Commission take into consideration the successful running of the skipjack MP as outlined in SC19-MI-WP-01 and its output, which sets maximum effort in the purse seine and pole-and-line fisheries and maximum catches in all other fisheries to their respective baseline levels for the period 2024-2026, when implementing CMM-2022-01.	Yes	
Paras 25-27; & Table 2	as above	SPC analysis: Table with future purse seine scalars under current conditions, without footnote 1 exemptions, without paragraph 15 exemptions (previous	Yes	

CMM Paras proposed by the Chair for revision/review	CCM Support	SPC requested analysis and/or SC19 advice (all paragraph references in this column are to the SC19 Outcomes Document) Refer to SC19-MI-WP-08 Updates to table 9 of the evaluation of CMM 2021-01 for the review of CMM 2021-01	SPC analysis available YES/NO	Drafting Elements
		paragraph 17), without HS effort by CCMs in table 2, without HS effort by CCMs not in table 2 SC19: Refer to the text above related to the Review of the Effectiveness of CMM 2021-01 and further note that the updates to SC19-MI-WP-08 be forwarded to both TTMW4 and the Commission for their consideration in reviewing the Tropical Tuna Measure. Also relevant for paras 14 and 15.		
Paras 25-27, Table 2	as above	SPC analysis: Update of Tables 14 and 15 of WCPFC19-2021-15, with the updated TRP from the interim skipjack MP for the reference periods 2012, 2016-2018 and 2018-2021 As noted by SC19 the successful running of SKJ MP, refer to SC19-MI-WP-08 and its updates that is expected to be available at TTMW4 and/or the Commission.	Yes	
Table 2	as above	SPC analysis: Provide information to support inclusion of the catch by the Philippines in the high seas limit and how this could be implemented. Refer to SC19-MI-WP-08 and its updates be forwarded to TTMW4 and the Commission.	Yes	
Paras 24 Table 1	as above	SPC analysis: Update Table 6 and 7 of WCPFC18-2021-15 with a TRP at 2012-15 levels, without a FAD closure SC19 has no specific recommendations on this as SSP will conduct this analysis after the TTMW4.	Post TTMW4	
Tables 1 & 2	as above	SPC analysis: Updated figures 9 and 10 of SC18-MI-IP08 with PS effort in waters under national jurisdiction (EEZs and AWs), in the HS by CCMs in table 2 of CMM, in the HS by the Philippines, in the HS by Pacific Island fleets fishing	Post TTMW4	

CMM Paras proposed by the Chair for revision/review	CCM Support	SPC requested analysis and/or SC19 advice (all paragraph references in this column are to the SC19 Outcomes Document) Refer to SC19-MI-WP-08 Updates to table 9 of the evaluation of CMM 2021-01 for the review of CMM 2021-01	SPC analysis available YES/NO	Drafting Elements
		in high seas adjacent to their home waters during the HS closures, in the HS by CCMs not listed in Table 2 (not including the effort already included in update of data summaries). SC19 has no specific recommendations on this as SSP will conduct this analysis after the TTMW4.		
Paras 24, 25, Table 2	as above	SPC analysis: Develop methods to convert between purse seine effort and longline catch. What does a day of fishing and sets of fishing equate to in terms of catch- both on the high seas and inside EEZs. (note also para 136 of TTMW3-2023-IP02) SC19 has no specific recommendations on this as SSP will conduct this analysis after the TTMW4.	Post TTMW4	
Para 37, Table 3	FFA PNA+ Korea US EU	SPC analysis: Produce the usual depletion/risk matrices (nuclear grid) for BET and YFT based on LL and PS scalars using the 2023 assessment grids. SC19 has no specific recommendations on this as BET and YFT stock assessments have just been accepted by SC19, analysis on this will be conducted by SSP after SC19 using the 2023 BET and YFT assessment and is expected to be available at TTMW4 and/or the Commission.	Yes	
Para 37, Table 3	as above	SPC analysis: Identify the biomass depletion levels associated with various candidate TRPs (i.e., 2012-2015 depletion, 2004 depletion, depletion associated with a risk level, 2001-2004 average levels), and the LL/PS scalars that achieve those biomass depletion levels. Refer to the text above related to the Review of the Effectiveness of CMM 2021-01 and further note that the updates to SC19-MI-WP-08 be forwarded	Yes	

CMM Paras proposed by the Chair for revision/review	CCM Support	SPC requested analysis and/or SC19 advice (all paragraph references in this column are to the SC19 Outcomes Document) Refer to SC19-MI-WP-08 Updates to table 9 of the evaluation of CMM 2021-01 for the review of CMM 2021-01	SPC analysis available YES/NO	Drafting Elements
		to both TTMW4 and the Commission for their consideration in reviewing the Tropical Tuna Measure.		
Paras 37 Table 3	as above	SPC analysis: Analysis of catch, effort, and catch-per-unit-effort (in weight per day) by zone and high seas, for longline fisheries and fleets Refer to SC19-MI-WP-08 and, as BET and YFT stock assessments have just been accepted by SC19, updates is expected to be available at TTMW4 and/or the Commission.	Yes	
Paras 37	as above	SPC analysis: Update Tables 9 and 10 of WCPFC18-2021-15 based upon the new assessment Refer to SC19-MI-WP-08 and, as BET and YFT stock assessments have just been accepted by SC19, updates is expected to be available at TTMW4 and/or the Commission.	Yes	
Para 37, Table 3	as above	SPC analysis: Develop methods to convert between purse seine effort and longline catch. What does a day of fishing and sets of fishing equate to in terms of catch- both on the high seas and inside EEZs. (note also para 136 of TTMW3-2023-IP02) SC19 has no specific recommendations on this as SSP will conduct this analysis after the TTMW4.	Post TTMW4	
Paras 37 Table 3	as above	SPC analysis: Update Table 6 and 7 of WCPFC18-2021-15 with a TRP at 2012-15 levels, without a FAD closure SC19 has no specific recommendations on this as SSP will conduct this analysis after the TTMW4.	Post TTMW4	

CMM Paras proposed by the Chair for revision/review	CCM Support	SPC requested analysis and/or SC19 advice (all paragraph references in this column are to the SC19 Outcomes Document) Refer to SC19-MI-WP-08 Updates to table 9 of the evaluation of CMM 2021-01 for the review of CMM 2021-01	SPC analysis available YES/NO	Drafting Elements
Para 52	PNA+ US	n/a		
Attachment 2		SPC analysis: Provide information to support inclusion of the catch by the Philippines in the high seas limit and how this could be implemented. Refer to the SC19-MI-WP-08 and updates may be made available at the TTMW4.	Yes	
Attachment 2		SPC analysis: Updated figures 9 and 10 of SC18-MI-IP-08 with PS effort in waters under national jurisdiction (EEZs and AWs), in the HS by CCMs in table 2 of CMM, in the HS by the Philippines, in the HS by Pacific Island fleets fishing in high seas adjacent to their home waters during the HS closures, in the HS by CCMs not listed in Table 2 (not including the effort already included in update of data summaries). SC19 has no specific recommendations on this as SSP will conduct this analysis after the TTMW4.	Post TTMW4	
All		SPC analysis: Update of data summaries as in SC18-MI-IP-08 – LL catch and PS/PL effort by area (AW, EEZ, HSP, other HS) and HS v flag) SC19 has no specific recommendations on this as SSP will conduct this analysis after the TTMW4.	Post TTMW4	

Other paras CCMs proposed for revision/review	CCM Support	SPC requested analysis and/or SC19 advice (all paragraph references in this column are to the SC19 Outcomes Document)	SPC analysis available YES/NO	Drafting Elements
Preamble, PP2, SKJ MP	EU US	Proposed revisions: n/a		
Para 1	EU	SKJ MP reference: n/a		
Para 4	EU	<p>SPC analysis: Updated figures 9 and 10 of SC18-MI-IP08 with PS effort in waters under national jurisdiction (EEZs and AWs), in the HS by CCMs in table 2 of CMM, in the HS by the Philippines, in the HS by Pacific Island fleets fishing in high seas adjacent to their home waters during the HS closures, in the HS by CCMs not listed in Table 2 (not including the effort already included in update of data summaries).</p> <p>SC19 has no specific recommendations on this as SSP will conduct this analysis after the TTMW4.</p>	Post TTMW4	
Para 24	Japan	Revisions: n/a		
Para 41 bis	PNA+ US	Monitoring and control LL fishery: n/a		
Para 41 ter	EU	Catch retention: LL n/a		
Paras 44, 45	EU	"Targeting": n/a		
Para 47	PNA+ US EU	<p>SC advice on Indonesia's handline fishery</p> <p>SC19 provided no specific recommendations on this.</p>		
Attachment 2	PH	See above		