
OUTCOMES OF THE 21st SESSION OF THE SCIENTIFIC COMMITTEE

PREPARED BY: IOTC SECRETARIAT, 21 MAY 2019

PURPOSE

To inform participants at the 3rd Technical Committee on Management Procedure (TCMP03) of the recommendations arising from the 21st Session of the Scientific Committee (SC21) held in 3rd to 7th December 2018, specifically relating to the work of the TCMP.

BACKGROUND

At the 21st Session of the SC, the SC noted and considered the recommendations made by the TCMP02 and WPM09 in 2018 that included updates on the MSE process for various IOTC species. Based on these recommendations, the SC21 made a set of requests (see extracts from the SC21 Report below). In addition, the SC21 reviewed and endorsed a Program of Work for the WPM, as detailed in [Appendix A](#).

DISCUSSION

The following extracts from the SC21 Report (IOTC–2018–SC21–R) are provided here for the consideration and action of the TCMP03:

Outcomes of the 2nd Technical Committee on Management Procedures (TCMP02)

(Para 190): *The SC noted the presentation of the Report of the 2nd IOTC Technical Committee on Management Procedures (IOTC–2018–TCMP02–R).*

(Para 191): *The SC noted a key benefit of the meeting was that it provides a forum whereby managers could work towards agreement on management objectives and associated tuning of the management procedures.*

(Para 192): *The SC **AGREED** that the term ‘tuning’ and other relevant terms should be defined more clearly in relevant reports to ensure it is understood by all CPCs. It was noted that the joint tRFMO MSE working group report includes a glossary of these definitions and that WPM has adopted this glossary.*

(Para 193): *The SC noted the limited number of experts available to run the complex MSE and operating model analyses and noted that the FAO is developing a list of experts that could be drawn on to contract experts in future. The SC **REQUESTED** CPCs to contact the IOTC Secretariat if they are interested in nominating experts to be included on this list.*

(Para 194): *Acknowledging that stakeholders often have competing interests, the SC noted the importance of ensuring that products being derived from the MSE processes are transparent and unbiased, and that peer review (including desktop reviews) had been used effectively to fulfil this need. The SC noted the need to implement mechanisms to ensure the results of expert reviews are fed into the process.*

(Para 195): *Acknowledging the existing processes for internal and external review of MSE and operating model processes, the SC **AGREED** that terms of reference for reviews would be beneficial and **REQUESTED** that these terms of reference are determined by WPM and TCMP.*

Report of the 9th Session of the Working Party on Methods (WPM09)

(Para 138): *The SC noted the good progress made in Management Strategy Evaluations exercises for IOTC species in 2018 including the initiation of the swordfish MSE work.*

(Para 139): *The SC noted that MSE is a dynamic and iterative process that represents an interface between science and management. The SC further noted that the WPM and SC were the appropriate forums for technical aspects while the Commission’s focus is on management. The SC **AGREED** that forums such as the TCMP were effective in bridging this interface and maintaining interaction between the SC/WPs and the Commission.*

(Para 140): *The SC noted that the WPM schedule had been optimistic and there had been some delays. Based on these delays, the SC **AGREED** that 2019 is an important year to report back to TCMP on discussion to be subsequently endorsed by Commission and TCMP in 2020.*

(Para 141): *The SC noted the importance of ensuring CPCs, particularly those with limited capacity, are aware of the potential implications of harvest control rules and operating models and **AGREED** that strong engagement between CPCs, SC/WPs and the Commission was required to ensure these implications are understood.*

(Para 142): *The SC noted paper IOTC–2018–SC21–INF03, which was a report of the 7th workshop on MSE of IOTC WPM Scientists. The workshop was held in Lisbon at the Portuguese Institute for the Ocean and Atmosphere in March 2018.*

Yellowfin tuna and Bigeye tuna MSE

(Para 143): *The SC noted papers IOTC–2018–SC21–INF04 and IOTC–2018–SC21–INF05 which provided updates on IOTC Bigeye and Yellowfin Tuna MSE Operating Model Developments, respectively.*

(Para 144): *The SC noted that the same tuning criteria can lead to different outcomes amongst populations. The SC further noted that TCMP has identified some changes in the tuning criteria to be applied and **AGREED** there is the need to develop protocols on the refinement or changes of tuning criteria in the future.*

Albacore MSE

(Para 145): *The SC noted that the MSE for albacore commenced about 8 years ago and that the development of the operating model and management plan has been a long process.*

(Para 146): *The SC noted that a new assessment for albacore is expected in 2019 and that this may postpone the finalisation of the albacore MSE/MP, particularly if the assessment results differ significantly from the current assessment and in that case, there might be the need to re-condition the OM.*

(Para 147): *Acknowledging that there may be circumstances in which understanding of the productivity of stocks changes markedly, or where management or fleet changes result in large changes to the fishery, the SC **REQUESTED** that the WPM and MSE working groups discuss the issue of exceptional circumstances in the context of how these influence the validity of operating models, and produce a guideline or protocol and a series of recommendations for the SC's consideration. The WPM Chairperson agreed to progress this work during 2019.*

Skipjack tuna MSE

(Para 148): *Noting that the skipjack tuna harvest control rule is not a fully specified management procedure, the SC **RECOMMENDED** that a workplan and budget should be developed to undertake review and possible revision of the skipjack tuna harvest control rule under Resolution 16/02.*

(Para 149): *The SC noted that catches of skipjack tuna had exceeded the catch limits derived from the harvest control rule and suggested that urgent work is required to evaluate the harvest control rule with a view towards developing full management procedures. However, the SC noted that it would not be possible to undertake this work at TCMP in 2019 because the work had not been started and is currently unfunded. SC noted that 2020 or later is more realistic for this priority.*

Review of IOTC MSE Process and Methods Meetings

(Para 151): *The SC noted that the WPM has made plans for internal review for technical issues of MSE, and experts within the WPM have been identified to undertake this work. The SC queried whether there was discussion around external peer review process on the various MSEs that had been conducted and **AGREED** that external peer review processes should be considered in the formulation of budgets and workplans. The SC noted that the external review undertaken in 2015 was beneficial, and suggested that a guidelines be developed to assist the incorporation of external review results into the IOTC MSE process.*

(Para 152): *The SC noted the issue of budget/resourcing in terms of the schedule of MSE development but that so far, the budgetary commitment from the Commission has been limited. The SC therefore **RECOMEMNDED** that the Commission allocate additional resources to the MSE work.*

(Para 153): *The SC noted that the chair will work in conjunction with the Secretariat to prepare a budget for the scientific activities 2019-2020, including MSE, to be presented to SCAF; which will avoid a situation where the budget is approved before SC recommendations are presented to the Commission.*

Management Strategy Evaluation joint tuna RFMO meeting

(Para 154): *The SC noted that a joint tuna RFMO meeting took place in Seattle in June 2018 to discuss common matters in relation to MSE process. The SC noted that this meeting falls under the Kobe process and referred CPCs to IOTC–2018–WPM09–INF04 for additional details.*

RECOMMENDATION

That the TCMP:

- 1) **NOTE** paper IOTC-2019-TCMP03-06 which outlined the main outcomes of the 21st Session of the Scientific Committee, specifically related to the work of the TCMP.
- 2) **CONSIDER** how best to progress these issues at the present meeting.

APPENDICES

Appendix A: Program of Work (2019-2023) for the IOTC Working Party on Methods (WPM).



APPENDIX A
WORKING PARTY ON METHODS PROGRAM OF WORK (2019-2023)

Table 1. Priority topics for obtaining the information necessary to deliver the necessary advice to the Commission. Resolution 15/10 elements have been incorporated as required by the Commission.

Topic	Sub-topic and project	Research Priority	Funding Priority	Lead	Est. budget (potential source)	Timing				
						2019	2020	2021	2022	2023
1. Management Strategy Evaluation	1.1 Albacore	High	1	EU (JRC)	Funded (EC JRC)					
	1.1.1 Revision of Operating Models based on WPM and SC feedback, including possible robustness tests									
	1.1.2 Implementation of initial set of simulation runs and results									
	1.1.3 Revision of Management Procedures and Indicators after presentation of initial set to TCMP and Commission									
	1.1.4 External peer review (2018 or date TBD)					US\$15,000				
	1.1.5 Evaluation of new set of Management Procedures (if required)									
	1.2 Skipjack tuna	High	5	Maldives						
	1.2.1 Review of model implementation and participation in MSE process				US\$75,000 (EC) to be finalised					
	1.3 Bigeye tuna	High	3							

1.3.1	Update OM & present preliminary MP results to TCMP, WPTT/WPM review of new OM			Australia (CSIRO)	\$75,000 (ABNJ/CSIRO) pending					
1.3.2	External peer review (2018 or date TBC)				US\$15,000					
1.3.3	Present revised MP results to TCMP with target adoption date of 2019				\$30,000 (Jan - Jun 2018)					
1.3.4	Additional iterations if required				(TBD)					
1.4	Yellowfin tuna	High	2							
1.4.1	Update OM & present preliminary MP results to TCMP, WPTT/WPM review of new OM			Australia (CSIRO)	\$75,000 (ABNJ/CSIRO) pending					
1.4.2	External peer review (2018 or date TBD)				US\$15,000					
1.4.3	Present revised MP results to TCMP with target adoption date of 2018; iteratively update development if required)				US\$30,000 (Jan-Jun 2018)					
1.4.4	additional iterations if required				(TBD)					
1.5	Swordfish	High	4	TBD	USD\$2,500 (EC)					
1.5.1	Initial OM									
1.5.2	Conditioning and OM set up									
1.5.3	Generic MP tests									
1.5.4	Final Model with MPs									
1.5.5	External peer review				US\$15,000					
2. Presentation of stock status advice for data limited stocks	2.1 Explore potential methods of presenting stock status advice to managers from a range of data limited scenarios, e.g. through the development of a 'Tier' approach for providing stock status advice, based on the type of indicators used to determine stock	Medium	7	Consult.						

	status (e.g. CPUE series, stock assessment model)			US\$30,000 (EC)					
3. Multiple stock status derived from different model structures	3.1 Develop specific guidance for the most appropriate models to be used or how to synthesize the results when multiple stock assessment models are presented. (see IOTC-2016-WPTT18-R, para.91)	Medium	6	\$?? (TBD)					