



**SCIENTIFIC COMMITTEE
TWENTY-SECOND REGULAR SESSION
11-19 August 2026
Apia, Samoa (Hybrid)**

**CONSIDERATIONS FOR DEVELOPING THE SOUTHWEST PACIFIC SWORDFISH
MANAGEMENT PROCEDURE**

**WCPFC-SC22-2026-MI-WP11
12 July 2026**

Submitted by Australia

I. Executive Summary

1. This paper recalls SC21's endorsement of Project 131 to develop an MSE framework to evaluate candidate management procedures for Southwest Pacific swordfish. It also recalls WCPFC22's adoption of the Indicative Workplan for Developing a Southwest Pacific Swordfish Harvest Strategy as a Commission workplan to guide further development of a management procedure for Southwest Pacific swordfish.
2. The paper notes that under the adopted workplan, SC22 is due to consider the operating models for use in MSE, provide any advice on potential MPs to evaluate, and provide advice on baseline swordfish catch levels and candidate management controls for all fisheries catching Southwest Pacific swordfish within the WCPFC-CA. Further, WCPFC23 is due to consider the objectives for the management of the stock and provide advice on candidate management procedures to evaluate.
3. Recognising there have been some initial delays in commencing Project 131, and in an effort to provide some guidance to support progress, this paper provides some preliminary suggestions associated with the milestones within the workplan for discussion at SC22. The paper also proposes that there is an informal discussion among interested members at SC22 to advance Project 131.

II. Background

4. SC21 endorsed a project (now Project 131) to develop an MSE framework to evaluate candidate management procedures for Southwest Pacific swordfish. The relevant SC21 text is as follows:

645. SC21 recognized that the Commission has agreed to develop a management strategy evaluation framework to evaluate candidate management procedures for Southwest Pacific swordfish and to consider developing a Harvest Strategy. SC21 endorsed the project scope, addressing this decision provided in SC21-GN-WP-04, Project P21x03, and recommended that the development of the MSE take into account the key uncertainties highlighted in the 2025 swordfish assessment (for example, population scale, growth, and spatial structure), as these will be challenges for both the operating models and estimation methods. SC21 also recommended that the commission consider the broader Indicative Workplan for Developing a Southwest Pacific Swordfish Harvest Strategy contained in Attachment 1 of the scope.

5. In response to those recommendations, at WCPFC22:

487. The Commission adopted the Indicative Workplan for Developing a Southwest Pacific Swordfish Harvest Strategy as a Commission workplan to guide further development of a management procedure for Southwest Pacific Swordfish (Attachment 23).

6. Within that workplan (see Annex 1) the steps identified for 2026 were as follows:

SC consider the operating models for use in Management Strategy Evaluation (MSE).

SC provide any advice on potential Management Procedures (MP) to evaluate.

SC provides advice on baseline swordfish catch levels and candidate management controls for all fisheries catching Southwest Pacific swordfish within the WCPFC-CA.

The Commission consider the Objectives for the management of the stock.

The Commission provide advice on candidate management procedures to evaluate.

III. Guidance to support progress on the Swordfish harvest strategy workplan

7. Here we provide guidance to support progress on Project 131 and the wider Southwest Pacific Swordfish Harvest Strategy Workplan via suggestions associated with the milestones within the workplan. We recommend these suggestions are discussed by the SC and the SC provides advice on each of these points at SC22.

Operating models for use in Management Strategy Evaluation

8. In developing the OMs for the MSE, SC21 recommended that the development of the MSE take into account the key uncertainties highlighted in the 2025 swordfish assessment (for example, population scale, growth, and spatial structure), as these will be challenges for both the operating models and estimation methods.

9. We suggest that the OM set is based on the 2025 swordfish assessment, noting that alternative or simplified models may be considered following guidance to be developed as part of the Pacific tRFMO bycatch methods workshop organised under Project 130. We further suggest that a wide range of areas of uncertainty, including, inter alia, those identified at SC21, are included either among the reference set or the robustness set for MP evaluations.
10. In terms of specific aspects of uncertainty to be captured within either the reference set or the robustness set, we suggest it would be prudent to consider the uncertainties from the stock assessment, such as growth, M, and recruitment (including steepness, regional distributions, environmental influences), as well as other elements like spatial sub structure, catches outside the model region, movement rates, effort creep and climate change.
11. We suggest the SC reviews the above list of uncertainties and provides advice on any additional uncertainties to include. We also suggest the SC provides advice on which uncertainties might form the basis of the reference set or the robustness set.

Potential Management Procedures to evaluate

12. Regarding potential MPs to evaluate, the structure of any potential MP must consider the features and dynamics of the swordfish fishery. There are two quite different kinds of fisheries that catch swordfish; target fisheries and other fisheries for which swordfish is a bycatch/byproduct. Recognising that we do not wish to impose undue burden on fisheries that are managed under other MPs, especially in the case of those managed with effort limits, we suggest a possible swordfish MP design that provides for differential treatment of the two types of fisheries (see Figure 1).
13. For the target fisheries, we propose a catch-based limit is set via a harvest control rule that follows the conventional shape applied in other WCPFC fisheries (i.e. a Hillary step). Acknowledging the multispecies nature of some target fisheries, we suggest a relatively wide Hillary step to promote management stability. For other fisheries in which swordfish is a bycatch/byproduct, we suggest that catches should be fixed in the MP (and possibly capped) until the stock approaches the lower edge of the Hillary step at which point a graduated or scaled non-retention policy should apply. The precise specifications for that policy would need to be determined and we would value the SC's feedback on this point.
14. Regarding which fisheries would apply each management approach, we suggest this is explored as part of the initial specification of the MPs for MSE testing. If it is clear which fisheries are likely to fall in each category, this may be straightforward. If the division is less clear, then criteria could be specified to classify the fisheries *a priori*, or alternatively Members may decide to select which approach they wish to apply to their fleet. We welcome feedback on this point.

15. We welcome SC feedback on this suggested design and indeed any other potential MP specifications that would enable us to address the features and dynamics of the Southwest Pacific swordfish fishery.

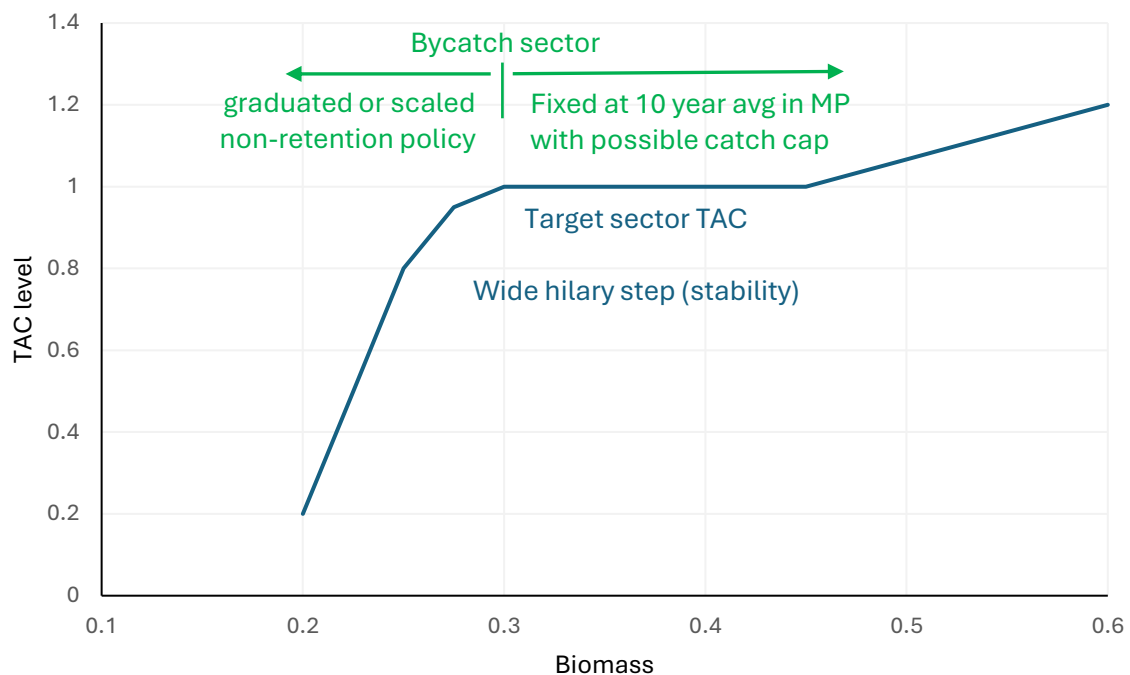


Figure 1. A schematic representation of a possible Southwest Pacific swordfish harvest control rule for testing and potential implementation via management procedure.

16. In terms of evaluating MP performance via MSE, we suggest that recent MSE testing for the South Pacific albacore and bigeye MPs have enabled us to develop a good set of candidate performance indicators which could probably be applied for Southwest Pacific swordfish MP testing without too many modifications, but we would be grateful for SC feedback on this point too.
17. We note there may also be specific aspects related to the design of the MP(s) and the management approach that need to be considered for sensitivity analysis (i.e. alternative catch and/or fisheries mortality levels associated with specific management interventions including possible non-retention policy options, permutations of HCR shape such as the length of the Hillary step).

Baseline swordfish catch levels and candidate management controls for all fisheries catching Southwest Pacific swordfish within the WCPFC-CA

18. As outlined above, we suggest that the target fishery is subject to a catch-based limit derived from a harvest control rule, implemented via an MSE-tested MP. For other fisheries in which swordfish is a bycatch/byproduct, we suggest two different potential constraints for these fisheries. While biomass remains above the edge of

the Hillary step, we suggest a catch cap could be considered. If biomass drops below the level at the edge of the Hillary step, we suggest a non-retention policy should apply. For the purposes of MSE testing, we suggest bycatch/byproduct catches are fixed at 10-year average levels. That analysis may also provide useful insights for determining an appropriate potential catch cap, although we acknowledge other factors also need to be considered (e.g. bycatch levels changing with stock size and/or climate signals).

19. We welcome SC feedback on the swordfish catch levels and candidate management controls for all fisheries catching Southwest Pacific swordfish within the WCPFC-CA.

IV. Next steps on the Swordfish harvest strategy workplan

20. Following the SC22 discussion of the OMs, HCR, potential MPs, baseline catch levels and candidate management controls, the Commission is scheduled to discuss management objectives and provide advice on candidate MPs at WCPFC23. We anticipate some of that discussion may be premature given Project 131 is only just commencing. Also, looking ahead to next year's milestones, we may have some scope to progress some of these matters over a slightly longer timeframe. The milestones for 2027 are as follows:

SC consider a set of Performance Indicators for evaluating candidate MPs.

SC consider the performance of candidate MPs and provide technical advice for subsequent work.

SC consider the candidate Limit Reference Point or set of reference points for Southwest Pacific swordfish.

The Commission record the set of Objectives for the management of the stock and a set of Performance Indicators for evaluating candidate MPs.

Commission consider candidate TRPs to be evaluated within candidate MPs.

21. Given next year's milestones, we don't necessarily need to fully resolve questions relating to management objectives and MP specifications this year, but progress will need to be made intersessionally ahead of SC23 if we are to remain on track next year.
22. We propose that a Swordfish Harvest Strategy Steering Committee is established to provide guidance on Project 131 and the wider Southwest Pacific Swordfish Harvest Strategy Workplan. We suggest interested Members convene to establish this group in the margins of SC22, and that this group continues to meet informally intersessionally to ensure progress against the milestones of Project 131 and the wider Southwest Pacific Swordfish Harvest Strategy Workplan. We suggest this group

meets virtually or opportunistically in the margins of other WCPFC meetings throughout the life of Project 131.

V. Recommendations

23. The Scientific Committee is invited to:
- a. **recall** SC21's endorsement of Project 131 to develop and MSE test MPs for Southwest Pacific swordfish and WCPFC22's adoption of the Southwest Pacific Swordfish Harvest Strategy Workplan.
 - b. **provide** feedback on the suggestions provided within this paper associated with the design of the swordfish harvest strategy, including the OMs, HCR, potential MPs, baseline catch levels and candidate management controls.
 - c. **establish** a Swordfish Harvest Strategy Steering Committee to provide guidance on Project 131 and the wider Southwest Pacific Swordfish Harvest Strategy Workplan.

Annex 1: Indicative Workplan for Developing a Southwest Pacific Swordfish Harvest Strategy, as adopted at WCPFC22.

Note some items (in blue) are outside of the MSE project scope, so will need to be progressed separately.

- 2025** [Scheduled SW Pacific swordfish stock assessment]
- 2026** SC consider the operating models for use in Management Strategy Evaluation (MSE). SC provide any advice on potential Management Procedures (MP) to evaluate.
SC provides advice on baseline **swordfish** catch levels and candidate management controls for all fisheries catching Southwest Pacific swordfish within the WCPFC-CA.
The Commission consider the Objectives for the management of the stock.
The Commission provide advice on candidate management procedures to evaluate.
- 2027** SC consider a set of Performance Indicators for evaluating candidate MPs.
SC consider the performance of candidate MPs and provide technical advice for subsequent work.
SC consider the candidate Limit Reference Point or set of reference points for Southwest Pacific swordfish.
The Commission record the set of Objectives for the management of the stock and a set of Performance Indicators for evaluating candidate MPs.
Commission consider candidate TRPs to be evaluated within candidate MPs.
- 2028** SC formally agree on the operating models for MSE.
SC provide advice to the Commission on the performance of candidate MPs, including their associated candidate TRP.
The Commission consider and refine the candidate set of MPs, including their associated candidate TRP.
The Commission consider adopting a Limit Reference Point or set of reference points for Southwest Pacific swordfish together with acceptable levels of risk.
- 2029** SC provide advice to the Commission on the performance of candidate management procedures.
SC consider appropriate monitoring strategy elements.
The Commission consider adopting an MP.
[Scheduled SW Pacific swordfish stock assessment]
- 2030** SC provide advice to the Commission on the monitoring strategy.
The Commission consider adopting any required implementing arrangements.