**Western and
Central Pacific
Fisheries
Commission**

**SCIENCE-MANAGEMENT DIALOGUE**
**FIRST SESSION**
Online
19, 22 August 2022

**Functions of the monitoring strategy for WCPO skipjack tuna**

**SPC-OFP**
Pacific Community (SPC), Noumea, New Caledonia

**SCIENTIFIC COMMITTEE**
**EIGHTEENTH REGULAR SESSION**

Online meeting
10-18 August 2022

**Functions of the monitoring strategy for WCPO skipjack tuna**

**WCPFC-SC18-2022/MI-IP-13**

**9th August 2022**

**SPC[1]**

[1] Oceanic Fisheries Programme (OFP), Pacific Community (SPC), Noumea, New Caledonia

# 1. INTRODUCTION

Under the harvest strategy approach, the management of stocks and fisheries will be determined by a management procedure (MP). These comprise pre-agreed rules that set future fishing opportunities depending on the status of the stock to try to achieve defined management objectives. An MP should be tested prior to implementation to see if it is expected to achieve the desired objectives. Similarly, once implemented it should be monitored to ensure that it is performing as expected.

The performance of the MP is monitored under the monitoring strategy, but the remit of the monitoring strategy extends beyond just checking the performance of the MP. All aspects of the harvest strategy may be considered to ensure that the harvest strategy as a whole remains appropriate. In broad terms, this will include consideration of the modelling framework used for testing candidate MPs; the performance of any adopted MP; the potential occurrence of exceptional circumstances; as well as that the management objectives and overall goals of the harvest strategy remain relevant (see also SC18-MI-IP-03).

The frequency with which the monitoring strategy will be run will depend to a large extent on data availability. Some data (e.g. catch estimates) will be available annually, whilst others (e.g. the results of stock assessments) will be available at longer, perhaps triennial, intervals. As such the scope of the monitoring strategy may vary from one year to the next and an in-depth review of all aspects of the harvest strategy approach may not be required (or possible) on an annual basis.

There are no prescribed rules for what should, or should not, be included in a monitoring strategy. Just as the overall harvest strategy will develop to meet the specific requirements of the WCPFC membership, so too the monitoring strategy will be tailored to the specific requirements of the harvest strategy it serves.

The scope of the monitoring strategy will require input from the Scientific Committee (SC), the Technical and Compliance Committee (TCC) and the Commission itself. We summarise some of the key areas that might be considered as part of the monitoring strategy and the bodies of the Commission in which those aspects of the harvest strategy can be evaluated.

# 2. MONITORING STRATEGY OUTLINE

The overall objectives of the monitoring strategy are:
1. To ensure the MSE framework, used to evaluate candidate MPs, continues to be appropriate.
2. To monitor the performance of the MP in achieving stated objectives, using specified performance indicators.
3. To ensure the overall harvest strategy continues to meet the needs of CCMs.

The scope of the monitoring strategy is quite broad, including consideration of technical modelling issues; data availability and compliance issues; MP performance; as well as high-level consideration of management objectives (Table 1). It would be impractical for all of these issues to be considered together in a single meeting. Instead, information for the monitoring strategy may progressively accumulate through the considerations of the separate bodies of the Commission throughout a year, and ultimately coalesce at the annual Commission meeting.

The progressive accumulation of information will be a rolling process occurring over several years as the latest assessments of each tuna species become available. As such, monitoring of the performance of the MP, and of the harvest strategy in general, may occur on an annual basis, but the extent and focus of the monitoring may vary from year to year depending on the information available.

The SC is invited to:
- Consider the elements of the harvest strategy to be included in the monitoring strategy and in which body of the WCPFC framework they should be considered;
- The process by which information on monitoring can be progressively accumulated for presentation to and consideration by the Commission.

Table 1. Aspects of the harvest strategy that may be considered for inclusion in the monitoring strategy and the Commission body at which those considerations can be made (Cmsn = Commission)

| Harvest Strategy Element | Commission Body | Monitoring Considerations |
|---|---|---|
| **Review the MSE framework** | | |
| OM grid | SC | Ensure that the most important sources of uncertainty are included in the OM grid |
| Calculation of performance indicators | SC | Appropriate representation of objectives by performance indicators |
| Modelling assumptions | SC | Consider the technical details of the simulation and testing framework. |
| Data availability to support the MSE framework | SC/TCC | Improvements to data collection to either enhance the OM framework and/or reduce the uncertainty included in the OM grid |
| **Review performance of the MP** | | |
| Comparison of MP performance against latest stock assessment | SC | Check that the MP is performing as expected |
| Data availability to run the MP | SC/TCC | Check availability, quantity, quality of data necessary to run the MP (e.g. the estimation model) |
| Other sources of data to monitor performance not included in the MSE framework | SC/TCC | Identify other data as available to inform calculation of performance indicators (economic, social, ecosystem, …) |
| **Review harvest strategy** | | |
| Management objectives | Cmsn | Check that the overall objectives of the harvest strategy still appropriate? |
| Exceptional circumstances | SC/TCC/Cmsn | Drawing on all of the above, have events (unexpected, extra-ordinary) occurred such that remedial action is required to either review, modify or replace the MP? |