



## Report from the Extended Scientific Committee

### Purpose

To consider the Report of the Twentieth Meeting of the Scientific Committee (SC20), incorporating the Extended Scientific Committee (ESC).

### Introduction

The Report of the Twentieth Meeting of the Scientific Committee (SC20) is provided to this meeting as CCSBT-EC/1510/Rep02. The ESC Chair's presentation of this report is provided as paper CCSBT-EC/1510/21.

The ESC meeting provided advice to the Extended Commission (EC) in the following six areas:

1. Review of SBT Fisheries and fisheries indicators;
2. Updated estimation of unaccounted catch mortality;
3. Evaluation of exceptional circumstances;
4. SBT stock status and management advice;
5. Scientific Research Program for 2016 to 2018; and
6. Response to requests from the July 2015 meeting of the Strategy and Fisheries Management Working Group (SFMWG).

A detailed summary for each of these six areas of advice is provided in the ESC Chair's presentation (CCSBT-EC/1510/21).

Some of the key points arising from the ESC meeting include:

- The reported catch of CCSBT Members and Cooperating Non-Members exceeded the global TAC by 485 t and 354 t for the 2013 and 2014 fishing seasons respectively.
- The total catch of SBT by non-Members in the IOTC and WCPFC Convention Areas was estimated to be 120 t to 580 t (mean estimate for 2011-13 using two different estimation approaches).
- The ESC advised the Extended Commission (EC) to take steps to ensure adherence to its TAC and as a matter of urgency, to take steps to quantify all sources of unaccounted SBT mortality. If substantial levels of unaccounted mortality (UAM) are confirmed, then there will be a need to retune the Management Procedure (MP) to achieve the EC's rebuilding objective.
- The ESC noted the combination of the individual issues (UAM, over-catch, potential loss of recruitment monitoring) represent a serious concern in terms of the potential risks to the stock and the rebuilding performance of the MP. The ESC reiterated its previous advice on the priority for completing the Commission's work program for UAM and the importance of the MP to meeting the Commission's objective to rebuild the stock.
- Based on the results of the MP operation for 2015-17 in 2013 and the outcome of the review of exceptional circumstances in 2015, the ESC recommended that there is no need to revise the decision regarding the TACs for 2016-17. The recommended annual TAC for the years 2016-2017 is 14,647.4 t.
- The ESC recommended that an allocation of 7.7 t in 2016 be made to cover mortality associated with approved research projects.

- Provided there is an aerial survey in 2016, and effective recruitment monitoring in the future, the MP can be used to recommend TACs in 2016. If the aerial survey is cancelled after 2016, then the current MP cannot be used to set TACs after 2018-2020
- In considering alternative MP's the ESC agreed the following:
  - A fishery-independent index of recruitment is necessary;
  - Gene tagging provides the most promising reliable recruitment index to be included both in the MP and Operating Model; and
  - Interim transitional MP's with less informative information on recruitment were not considered to be a viable option as it would require the development of a short-term MP and followed by the development of the longer term MP, which would substantially increase the cost. The ESC considered that the most efficient and rapid MP development would be via adjustments to the current MP where possible.
- The ESC developed three options for the EC to consider if the EC decides not to continue with the aerial survey and the current MP. Budgets, developed by the Secretariat, for two of these options have been included in paper CCSBT-EC/1510/06.

The July 2015 meeting of the SFMWG requested that the ESC provide advice to the EC in 2015 on:

- The ESC's relative research priorities for 2016 to 2018 inclusive, noting that the research budget is limited;
- The costs and benefits of continuing with the current MP including conducting the aerial survey from 2017 to 2019; and
- Any preliminary consideration of alternatives to the current MP approach including an indication of their relative costs and benefits if possible.

The ESC's responses to this request for advice are provided at **Attachment A**.

**Response of the ESC to the request from SFMWG 4**

*(extract of paragraph 181 of the Report of the Extended Scientific Committee for SC20)*

181. The ESC provided the following in response to the requests from the fourth meeting of the Strategy and Fisheries Management Working Group (shown in italics).

***1) The ESC's relative research priorities for 2016 to 2018 inclusive, noting that the research budget is limited;***

- Research recommendations were formulated by assigning the highest priority to the two elements considered essential for the rebuilding strategy: (i) the continued monitoring of recruitment through a fishery-independent index, and (ii) the availability of a fully tested MP for TAC-setting.
- If the EC decides to continue with the current MP, then it is essential for the AS to continue annually, while an alternative recruitment index is developed to supersede it.
- In the event that the EC decides not to continue with the aerial survey, the ESC recommends that the transition to a new MP that uses gene tagging as input be brought forward. In this case, the AS 2016 must occur and the gene tagging should be fast-tracked for 2016.
- Gene tagging is recommended as the most cost-effective approach for recruitment monitoring. It is, therefore, a priority for transitioning to the new MP. The first estimate of recruitment from gene tagging could be available in 2018.

***2) The costs and benefits of continuing with the current MP including conducting the aerial survey from 2017 to 2019; and 3) Any preliminary consideration of alternatives to the current MP approach including an indication of their relative costs and benefits if possible.***

- The ESC notes that the current MP requires the aerial survey to be conducted from 2017 to 2019 for the TAC-setting in 2019.
- Retention of the current MP would provide continuity in the rebuilding strategy and greater certainty of outcomes throughout the transition to a new MP, which will be required in the short-term (3-5 years), given the increasing logistic vulnerability of the aerial survey.
- In the event that the aerial survey is discontinued and the current MP can no longer be used, three options (A, B and C in paragraphs 157-163) were developed for fast-tracking the transition to a new MP.
- Their strengths and limitations were considered and the ESC preferred option A to provide overlap between the two indices of recruitment during the transition period. Recognizing budget issues, and weighing the relative benefits of the other two options, Option B was preferred over Option C.