Commission for the Conservation of Southern Bluefin Tuna



みなみまぐろ保存委員会

CCSBT-EC/1910/12

Adoption of a new Management Procedure

Background

A management procedure (MP) is a pre-agreed set of rules that can specify changes to the total allowable catch (TAC) based on updated monitoring data. From 2002 to 2011, the CCSBT conducted extensive work to develop an MP in order to guide its global TAC setting process for southern bluefin tuna. The CCSBT tested a variety of candidate MPs (CMPs) with the aid of an operating model of the fishery that simulated the characteristics of the SBT stock and fishery. The candidate MPs were tested against a range of uncertainties so that a robust procedure could be identified. The final MP, known as the "Bali Procedure", was recommended by the CCSBT's Extended Scientific Committee (ESC) in July 2011. Parameters of the recommended decision rule could be adjusted to set different time horizons for rebuilding, and to constrain the maximum TAC changes allowed every time the TAC is updated. A range of options was presented to the Extended Commission (EC).

The EC adopted the Bali Procedure and the following associated management parameters as its MP at the CCSBT's eighteenth annual meeting in October 2011:

- The MP is tuned to a 70% probability of rebuilding the stock to the interim rebuilding target reference point of 20% of the original spawning stock biomass by 2035;
- The minimum TAC change (increase or decrease) is 100 tonnes;
- The maximum TAC change (increase or decrease) is 3,000 tonnes;
- The TAC will be set for three-year periods, subject to paragraph 7 of the Resolution on Adoption of a Management Procedure;
- For the second (2015-2017) and subsequent three-year TAC setting periods, there will be a one-year lag between TAC calculation by the MP and implementation of that TAC (e.g. the 2015-2017 TAC was calculated in 2013 and the 2018-2020 TAC was calculated in 2016); and
- The national allocation of the TAC within each three-year period will be apportioned according to the Resolution on the Allocation of the Global Total Allowable Catch.

The CCSBT also adopted a meta-rule process for dealing with exceptional circumstances in the SBT fishery. The meta-rule process describes: (1) the process to determine whether exceptional circumstances exist; (2) the process for action; and (3) the principles for action.

The technical specifications of the Bali Procedure, including data inputs (standardised longline CPUE and the Aerial Survey Index) and details of the meta-rule process are provided in <u>Attachment 10 of the Report of the Eighteenth Meeting of the Scientific Committee</u>.

The Bali Procedure has successfully recommended the global SBT TAC for the fishing seasons from 2012 to 2020 inclusive. However, in 2015, the EC decided to discontinue the scientific aerial survey after the 2017 survey and replace the aerial survey index of recruitment with estimates of 2-year old abundance from the new gene tagging program that was being developed. As a consequence of this decision, a new MP with different data inputs is required to recommend the TAC for 2021 to 2023 and onwards. In addition, a new MP, that has objectives beyond those of the interim rebuilding target reference point is required.

The New Management Procedure

The schedule for development of the new MP requires that the EC adopt the new MP in time for the ESC to run the MP in 2020 to recommend the global total allowable catch for 2021 to 2023 inclusive. This means that the new MP must be adopted at CCSBT 26 (this meeting) or that a special meeting of the EC and Commission be held early in 2020 to adopt the MP.

CMPs are currently being developed by Member scientists based on standardised longline CPUE, estimates of 2-year old abundance from the gene tagging program and spawning stock abundance indices from the close-kin mark recapture project.

The EC has already made some decisions relating to the new MP. These include:

- The new MP should achieve the current objective of providing at least a 70% probability of reaching 20% of the initial spawning stock biomass (SSB₀) by 2035;
- The TAC will be set for three-year periods; and
- The first TAC decision from the new MP will be made in October 2020 and that this will provide the TAC for the 2021-2023 fishing seasons. For the second and subsequent TAC recommendations from the new MP, an additional one-year gap will be added between those recommendations and the implementation of the TAC.

In selecting a new MP, a number of additional decisions on management parameters need to be made, including:

- The tuning (target) biomass level;
- The desired probability of achieving the target biomass level;
- The timeframe to achieve the target; and
- The maximum TAC change.

The EC has given CMP developers guidance in relation to these management parameters for initial CMP testing, as follows:

- Tuning biomass levels of 0.25, 0.30, 0.35 and 0.40 percent of SSB₀ should be considered;
- CMPs should be tuned to a 50% probability of achieving the tuning biomass levels;
- The timeframe to achieve the target will be 2035 provided the projection period is not too short and does not lead to numerical issues (projections should extend to 2045 to evaluate post-2035 performance); and
- Maximum TAC changes of 2,000t, 3,000t, 4,000t and possibly 5,000t should be considered.

A review of preliminary results at the 2018 OMMP meeting indicated that for the 2035 timeframe, the 0.25 and 0.40 SSB₀ targets exhibited behaviour that might not be acceptable¹. Consequently, the ESC agreed that CMP developers should focus on two combinations of target level and timeframe, these being 30% of SSB₀ by 2035 and 35% of SSB₀ by 2040.

The June 2019 OMMP meeting reconditioned the operating model to the most recent data available and agreed on a set of CMPs that will be further refined and put forward to the ESC. Members scientists will update their CMPs as appropriate after the OMMP meeting and present these in papers for the September 2019 meeting of the ESC. The ESC will review the CMPs that are presented to it and will aim to provide advice to the EC on a very limited set

¹ Substantial reductions in TAC (to achieve the higher target), or for the lower target, increased TACs in the short term to much higher levels followed by substantial TAC decreases once the target was achieved.

of CMPs or ideally a single CMP tuned to achieve different targets. The aim is to assist the EC with its Management Procedure selection process.

In choosing a MP, the EC will need to consider not only the desired management parameters mentioned above, but also whether the MP has desirable performance characteristics (e.g. low probability of a TAC decrease in the first few TAC three-year periods). The EC has provided the ESC with guidance as to the types of performance measures the EC wishes to examine for CMPs. These will be provided by the ESC to further assist the EC with its decision making.

In addition to choosing a Management Procedure, the EC will also need update its "Resolution on the Adoption of a Management Procedure". A draft update of this Resolution is provided at **Attachment A** for the EC's consideration. Changes may be required to the highlighted sections of the draft to reflect the EC's final decision on a MP.

Resolution on the Adoption of a Management Procedure

(adopted updated at the Eighteenth Twenty Sixth Annual Meeting – 10-1314-17 October 2019+)

The Extended Commission for the Conservation of Southern Bluefin Tuna

Seized by the need to ensure the conservation and optimum utilisation of southern bluefin tuna based on the best available scientific advice,

Taking account of the current status of the stock and, in particular, the most recent stock assessment from the Extended Scientific Committee advising that the spawning stock biomass is between 311% and 717% of the original spawning stock biomass,

Determined to rebuild the status of spawning stock to an interim <u>re</u>building target reference point of 20% of the original spawning stock biomass by 2035,

Noting that the CCSBT's original management procedure presided over the rebuilding of the stock from approximately 5% of the original spawning biomass to approximately 13%,

<u>Targeting to further rebuild the stock to $\frac{110}{100}$ of the original spawning biomass by</u> 20 $\frac{110}{100}$,

Taking account of the integrated management procedure developed by the Extended Scientific Committee at its annual meeting in July 2011September 2019,

Recalling the Resolution on the Total Allowable Catch and Future Management of Southern Bluefin Tuna adopted by the Extended Commission at its annual meeting in 2009,

Further to the Resolution on the Allocation of the Global Total Allowable Catch adopted-updated by the Extended Commission at its annual meeting in 2017+,

Recognising the obligations of each Member and Co-operating Non-Member to take the necessary steps to ensure that the level of its catch complies with its national allocation and to give effect to the Resolutions adopted by the Extended Commission.-

In accordance with paragraph 3(a) of Article 8 of the Convention for the Conservation of Southern Bluefin Tuna, the Extended Commission decides as follows:

- The Extended Commission adopts the Management Procedure (MP), the 'Bali <u>Cape Town</u> Procedure', developed by the Extended Scientific Committee at its annual meeting in 2019+ and incorporating the meta-rule process described in Attachment 10 of the 15th-18th Report of the Extended Scientific Committee.
- 2. The MP shall be used to guide the setting of the global total allowable catch (TAC) to ensure the SBT spawning stock biomass achieves the interim rebuilding target.

- 3. The Extended Commission shall set the TAC based on the outcome of the MP, unless the Extended Commission decides otherwise based on information that is not otherwise incorporated into the Management Procedure.
- 4. The MP shall be used to guide the setting of the TAC for 202142 and beyond.
- 5. The MP will recommend the TAC for 2012-20142021-2023 inclusive (i.e. no lag), but after that, there will be a one year lag between TAC calculation by the MP and implementation of that TAC (i.e. the 20152024-2017-2026 TAC would be calculated in 20132022).
- 6. The parameters of the MP shall be as follows:
 - (i) <u>The MP shall have at least a 70% probability of To</u>-rebuilding the status of stock to an interim building target reference point of 20% of the original spawning stock biomass by 2035;
 - (ii) The MP shall <u>have be tuned to a 7050</u>% probability of achieving <u>a</u> biomass level of <u>##%</u> of the original spawning stock biomass by 20<u>##</u>the interim rebuilding target;
 - (iii) The minimum increase or decrease TAC change shall be 100 tonnes;
 - (iv) The maximum increase or decrease TAC change shall be 3000 tonnes; and
 - (v) The TAC shall be set for three-year periods., subject to paragraph 7; and
- 7. The national allocation of the TAC within each three-year period will be apportioned according to the Resolution on the Allocation of the Global Total Allowable Catch¹.
- 8. For the first three year TAC setting period (2012-2014):
 - (i) The TAC for 2012 shall be 10, 449 tonnes. This is an increase of 1000 tonnes above the 2010-2011 TAC of 9, 449 tonnes;
 - (ii) The TAC for 2013 shall be 10, 949 tonnes. This is an increase of 1, 500 tonnes above the 2010-2011 TAC of 9, 449 tonnes; and
 - (iii) The TAC for 2014 shall be 12, 449 tonnes or the output of the MP for 2015 2017 based on the 2013 stock assessment (whichever is the less), unless the Extended Commission decides otherwise based on the assessment of the Compliance Committee. This increase is based on the 2010-2011 TAC of 9, 449 tonnes.

¹ Adopted Updated by the Extended Commission at its annual meeting in 201<u>7</u>4.