

Specifications of the CCSBT Management Procedure

1. Introduction

The CCSBT adopted a Management Procedure (MP) to guide its global TAC setting process for southern bluefin tuna in 2011, known as the ‘Bali Procedure’. The Bali Procedure has been used by the ESC to recommend the TAC for 2012-2020.

In 2019 the CCSBT adopted a new MP called the ‘Cape Town Procedure’ (CTP) which is described in this specification.

The CCSBT has been at the forefront of tuna RFMOs in development and implementation of Management Procedures as the basis for recommending changes in the level of fishing to meet the objectives of the Commission and its members (Hillary et al 2016). The impetus for this approach arose from a break-down in the institutional decision-making process arising from: a) high uncertainty in the status and productivity of the stock, b) conflicting views on the best approach to resolve this uncertainty, c) alternative methods for assessing the stock status, and d) lack of an agreed basis to determine the global TAC based on the scientific advice.

The issue of uncertainty in stock status and productivity was addressed by agreeing to develop a set of population dynamics models that encapsulated the range of plausible stock and fishery dynamics. This set of models are known as the CCSBT Operating Models (OMs). The SBT OMs have been modified and refined over the years to reflect the addition of data to existing datasets and new data streams (e.g. aerial survey (2009), close-kin (2013), gene-tagging (2019) and revision of assumptions as appropriate. The SBT OMs are used for i) periodic assessments of stock status, and ii) simulation testing of candidate Management Procedures.

The previously contentious issue of determining the global TAC, based on scientific advice and in a manner consistent with the Commission’s objective, has been resolved via the development and testing of a wide variety of candidate Management Procedures and the selection and implementation of the “Bali Procedure” in 2011 (Anon. 2011, Hillary et al 2015, Hillary et al, 2016), and the “Cape Town Procedure” in 2019.

The role of stock assessment and the management procedure, for scientific advice to CCSBT, is distinct and is briefly explained below:

Assessment of stock status

The CCSBT Scientific Committee completes a “full stock assessment” every three years, as originally specified in the Meta-rules for the Bali Procedure. The stock assessment provides information on whether the stock is rebuilding, the projected timeframe to meet the objective of the rebuilding plan (i.e. 30% of TRO₀) and current stock size and fishing mortality relative to commonly used reference points. The stock assessment is **not** used to:

- Run the MP
- Recommend the TAC.

Running the MP for TAC advice

The Management Procedure is used to calculate the global TAC recommended by the ESC to the Commission for decision. The Cape Town Procedure uses **only** three monitoring series as inputs, the defined analyses and decision-rule to recommend the change in TAC. The MP is fully specified (as originally tested in the MSE process, 2019) and is not changed following selection by the Commission.

The running of the MP is independent of the SBT stock assessment. The MP is **not** used to:

- Estimate the spawning stock biomass
- Estimate if the rebuilding target has been met.

Technical details of the Cape Town Procedure, together with specifications of the monitoring data input to the MP, and the Metarule process that the Extended Commission has adopted for dealing with exceptional circumstances in the SBT fishery, are provided in the following sections of this document.

- 2. Non-Technical description of the Cape Town Procedure**
- 3. Specification of the population model and HCR used in the MP**
- 4. Data analysis specification for the Gene-tagging abundance estimates used in the MP**
- 5. Specification for the Close-Kin Mark-Recapture data used in the MP**
- 6. Specification of Standardised CPUE for the MP**
- 7. Metarule Process**