



Planning for review of the CCSBT Cape Town Management Procedure

Davies CR and Preece AL.
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Abstract

A review of the Management Procedure (MP) is part of the schedule of activities outlined in the meta-rules adopted with the Cape Town Procedure in 2019 (Anon 2020, Appendix 8). It's timed to occur after 3 total allowable catch (TAC) decisions have been made (2020, 2022 and 2025), and should occur a year when the MP TAC recommendation is not being calculated. The requirements for a review of the management procedure and potential terms of reference for the review are outlined, based on the initial discussions for review of the Bali Procedure (Davies et al 2015). This paper aims to initiate the conversation on the expectations and work plan for review of the performance of the Cape Town Procedure, and to provide sufficient time for consideration of terms of reference and preparatory work required for the review.

1 Introduction

A review of the MP is part of the schedule of activities outlined in the meta-rules adopted with the Cape Town Procedure (CTP) in 2019 (Anon 2020 Appendix 8). It's timed to occur after 3 TAC decisions have been made (2020, 2022 and 2025), and should not occur in the year that MP TAC recommendation is provided.

A review of the Bali Procedure was scheduled for 2017, following the running of the MP for three quota block recommendations (in 2011, 2013 and 2016) that were used to set the TACs for 2012 to 2020. The review did not proceed because the CCSBT priorities were focussed on development of a new MP. The new MP was triggered by loss of one of the key inputs to the Bali Procedure, the data from the aerial survey.

Some thought had been given to potential Terms of Reference (ToR) for the 2017 review of the MP (Davies et al, 2015), and these have been updated to reflect the CCSBT's current rebuilding plan.

This paper aims to initiate the conversation on the expectations and work plan for review of the performance of the Cape Town Procedure.

2 The Cape Town Procedure Objectives:

2.1 Objectives for the Bali Procedure

The objectives of the Bali Procedure were:

- Reduce the risk of further declines in SSB
- Reduce the risk of further very low recruitments
- Rebuild the SSB with a high probability (~ 0.7) to $>20\%$ by 2035
- Use aerial survey data series as a fisheries independent input to provide early index of recruitment and mitigate against uncertainties associated with the CPUE series.

2.2 Objectives for the Cape Town Procedure

The CTP objectives are built on those of the Bali Procedure above, but is designed and tuned to reach the new rebuilding target:

- 50% probability of reaching 30% of TRO_0 by 2035.
- The interim 20% rebuilding target of the Bali Procedure is still a minimum requirement of the CTP (Anon 2018a). In addition, it was agreed there should be a very high probability of not falling back below 20%, once this interim target (0.20) had been achieved.

The new rebuilding target was adopted because the stock was forecast to reach the 20% TRO_0 interim target in the first few years of operation of the CTP (Anon, 2018b). In addition, the design of the Bali Procedure meant that it was likely to rebuild to the interim rebuilding target and then increase catches to a level where it would reduce the TRO back down to 20%. A desirable characteristic for the new MP was to provide for relatively stable TAC once the rebuilding objective had been met (Anon. 2018a and b).

The aerial survey ceased in 2017. Hence, that data set is not used in the CTP.

Two new data sets were evaluated and are included in the CTP: close-kin data for information on adults and gene-tagging data for information on recruitment, in addition to the LL1 CPUE used in the Bali Procedure. A final set of CMPs were evaluated at ESC24 and the Cape Town Procedure was recommended to and adopted by the Commission (Anon 2019a and Anon 2019b).

3 Review guidelines

The CCSBT meta-rules for the Cape Town Procedure state that:

“Every six years (not coinciding with years when a new TAC is calculated from the MP) the ESC will:

- *Review the performance of the MP; and*
- *On the basis of the review determine whether the MP is on track to meet the rebuilding objective or a new MP is required.”*

The rationale behind timing of the original MP review was to allow enough time for three TAC decisions (~ 9 years of TAC recommendations) to have had some impact on rebuilding of the stock, and to not leave it too long before acting on recommendations to revise operating models or the MP to improve performance. The MP review is intended to review medium-term performance as opposed to the annual review of evidence for exceptional circumstances, which allows for a safety-check on implementation of TAC advice each year and a process for decisions on whether to change TAC in extreme circumstances.

The CTP was adopted in 2019 and TAC recommendations were made in 2020 and 2022. The next MP TAC recommendation is due in 2025. The tentative date for the MP review would be 2026 or 2027, which is around the mid-point of this rebuilding phase. The next full stock assessment is scheduled for 2026, and this is likely to be a substantial input to the review.

The schedule for completion of the new operating model code and any other key SRP projects that might directly inform the review are other considerations that should be taken into account.

4 Draft Terms of Reference from 2017

Terms of reference were proposed in 2017 (Davies et al, 2015) and are included here as a starting point for ideas and discussion (with slight updates to dates and rebuilding target to reflect the adoption of the CTP).

Given the objectives and inputs to the MP, reasonable ToRs for the MP review might include:

1. Review of data, including:
 - Input data series to the MP. This should include a review of data collection, reliability, costs, standardisation and potential alternative data sources.
 - Review of the data predicted by the OM versus those observed in the monitoring series.
 - Review of alternative indices and new information on population and fishery dynamics.
2. Review of observed MP performance for stock rebuilding, including for example:
 - Estimated SSB in year of review and projected 5yr trend from the OM.

- Estimated average recruitment and 5yr trend from the OM.
 - Estimated period to achieve the rebuilding target, currently 2035.
 - Updated Close-kin estimate of abundance and trend in spawning potential.
3. Review of grid and other key assumptions used in testing and tuning in the year of adoption (2019).
- Natural mortality (M), steepness (h) and unfished biomass (B₀) interaction.
 - Re-estimate of R₀.
 - Form and values of natural mortality schedule.
 - Form of CPUE standardisation.
 - Initial consideration on Performance measures and MP for beyond rebuilding target.
 - Given the outcome of the above, is re-tuning of the MP warranted.
4. Timetable, priority and funding arrangements for future ESC MP work program.

5 Summary

This paper provides background and preliminary ideas for the ESC to consider in planning for the review of the management procedure.

References


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1300 363 400
+61 3 9545 2176
[csiro.au/contact](https://www.csiro.au/contact)
[csiro.au](https://www.csiro.au)

For further information

Environment
Ann Preece
+61 3 6232 5336
ann.preece@csiro.au
www.csiro.au/en/research/animals/Fisheries