



CCSBT-ESC/0509/43

Intersessional Discussion on Management Procedure Implementation Issues

Purpose

To summarise the progress of intersessional discussions about implementation issues for the management procedure.

Background and Progress

The MPWS4 meeting requested the data manager to conduct an inter-sessional canvassing of opinions regarding the process for provision of data for running the MP (paragraph 97) and to provide a summary of some potential data mismatches and ambiguities (paragraph 101).

A paper summarising the issues was prepared by the data manager (see Attachment A) as a focal point for discussion and was circulated by e-mail on 26 July 2005. The paper sought comment and provided some suggestions on 4 main items:

- The process for provision of data for the MP and for running the MP.
- Options for validating and improving the reliability of data.
- For the four CMPs, what is meant by 'Catch' and 'Years'.
- Should changes made to historical catch data be used by the MP?

The paper also advised that the Secretariat would provide the necessary documentation regarding the catch calculation process for the MP¹ and recommended that the CPUE modelling group should review CPUE calculation requirements and consider the issues related to the effects of changing fishing patterns on CPUE following catch reductions².

One comment has been received on the paper regarding what is meant by 'Catch' in the four CMP's. This comment is provided at Attachment B. No further comments have been received by the Secretariat at the time of finalising this paper.

Prepared by the Secretariat

¹ This is provided as paper CCSBT-ESC/0509/11

² The Chair of the CPUE Modeling Group agreed to discuss these issues with the CPUE Modeling group.

Intersessional Discussion on MP Implementation Issues

Process for provision of data for the MP and for running the MP

(1) Provision of Data including Data Preparation

The data required for the MP will be included in the Data Exchange Requirements (DER) document that is produced each year by the Extended Scientific Committee. This document specifies who is responsible for provision of each data item (including calculated items), and the due date for the provision of each data item. All data provided in the data exchange is sent to the Secretariat which is responsible for managing that data.

The responsibilities of individual members and the Secretariat as specified in the DER for 2005 (Attachment 11 of the SC9 report) will continue unless otherwise specified. The DER for 2005 already specifies responsibilities and timeframes for some of the data required for the MP¹. However, the following items are either not specified tightly enough, or are a requirement for a specific CMP and have yet to be specified in the Data Exchange Requirements.

- Please list (as separate dot points) data required by the CMPs that are not listed in the DER for 2005 or that have not been specified with sufficiently stringent requirements. Also indicate who is best suited to drafting these specifications. Some such data items have been provided below.
- The catch calculation process for the MP needs to be clearly documented (dot point 3, paragraph 101 of the MPWS4 report). The Secretariat has conducted these calculations in the past to produce the inputs required by the operating model according to the methods agreed for this process and will produce the requested documentation for SAG6/SC10.
- CPUE series for the MP:
 - Five CPUE series are listed as requirements in the DER for Australia (Nominal, Laslett Core Area) and Japan (B-Ratio proxy [W0.5], Geostat proxy [W0.8], and ST Windows) to provide;
 - However, it seems that the requirements for these series and/or amalgamation of the series may not have been specified tightly enough for the MP (inferred from paragraph 98 of the MPWS4 report);
 - Perhaps the best way to proceed would be for the CPUE Modeling group to review the CPUE calculation requirements for the MP and if necessary, provide more detail on exactly how the CPUE should be calculated.

(2) Running the MP

It has been proposed that the Secretariat will be responsible for running the MP. The Secretariat has accepted this proposal, but because of the importance of the MP to the CCSBT's management objectives, during the first year of operation the Secretariat intends to contract running of the MP to a person with well developed skills in this area (probably the existing MP Consultant), while the Secretariat gains experience by checking its ability to replicate this computation.. This will help to reduce risks in case of unexpected issues arising

¹ The DER for 2005 specifies all the data required for updating the Operating Model, which includes some of the data that is required for the MP. It has been agreed that these data will be provided every year, regardless of whether the operating model is updated (e.g. for an assessment) in that year. Therefore the data will also be available for the MP via this process.

when running the MP and from over commitment of Secretariat staff. In subsequent years, the Secretariat may have the ability to undertake this task without additional assistance.

Options for validating and improving the reliability of data

Paragraph 97 of the MPWS4 report included the statement that “Some thought will also have to be given at SAG6 / SC10 to options for validating and improving the reliability of the data to be input to the MP”.

To help focus discussions on the most important issues, it would be helpful if you could indicate your areas of greatest concern with respect to the reliability of input data together with any suggestions you might have for validating/improving that aspect of the input data.

In addition, as indicated in paragraph 71 of the MPWS4 report, changes in fishing patterns following catch reductions may cause problems with CPUE data. It would be best if problems with CPUE data of this nature, and appropriate responses for applying the management procedure, were considered with by the CPUE modeling group.

For the four candidate management procedures, what is meant by ‘Catch’ and ‘Years’

Paragraph 101 of the MPWS4 report requested that 3 specific questions be addressed. The process to deal with the last of these questions (seeking documentation of the catch calculation process) was provided on the previous page. The remaining two questions are listed below.

(1) In the four CMPs, what do the developers each mean by ‘catch’? When does this mean TAC and when does this mean actual catch?

Doug raised this issue at MPWS4 and has clarified his question for me as follows:

“Catches” play two different roles in the CMPs . First the two model-based CMPs include population models fitted to data, and require catch series inputs. To my mind here what should always be used is the best estimate of the total catch that year, whether or not it equals the TAC set, and whether or not the estimate has changed since the last time the MP was applied to recommend a future TAC.

The primary difficulty that will arise is that a number of the MPs use the previous “TAC” to set the new TAC, and further may set restrictions on the extent of TAC change. This is well-defined in the simulation trials, where the assumption is (except where we are close to extinction) that every year the catch exactly equals the TAC. But in reality:

- a) the catch may differ from the TAC; and
- b) the Commission may set a TAC that differs from what the MP output indicated.

Thus there are three candidates for what the last TAC is understood to mean in the MP formulae: the TAC last recommended by the MP, the TAC last agreed by the Commission, and a recent year’s (last year’s?) annual catch. Note that the last option needs to be considered also in the context of suggestions in the last section of this draft.

Please provide your comments on these alternatives. When considering these issues, it should be noted that in recent years, the SBT catch has been well below the TAC set by the Commission. It seems likely that this will be a continuing trend in the future. In particular, Korea caught about 1,000 tonnes under its allocation and the under catch by Korea seems

likely to continue in the future. Indonesia is also under-catching. Therefore, the TAC is likely to overestimate the future catch from the fishery.

(2) What ‘years’ are used by CMP developers for inputs into their CMPs, and when would a CMP recommended TAC change actually be implemented for the various fisheries?

- Tentative answer (for discussion): The ‘years’ used as inputs to the MP are the same years as defined for input to the operating model, these being calendar years for LL1/LL2, and fishing seasons (July to June) for the surface fishery/LL3/LL4. It is recognised that these years are not the same as the quota years used to manage the fishery. In addition, the year for which the MP recommends a TAC (MPTAC) follows the same definition as the MP input years and thus also does not equate to the various quota years used to manage the fishery. Therefore an operational translation is required from the MPTAC year to the various quota years. The suggested translation is that the quota year for the TAC change is the quota year which commences closest to 1 January of the MPTAC year. So, a MPTAC for 2008, would be applied in the following quota years:
 - 1/10/2007-30/9/2008 (New Zealand)
 - 1/12/2007-30/11/2008 (Australia)
 - 1/1/2008-31/12/2008 (Taiwan, Philippines)
 - 1/3/2008-28/2/2009 (Japan, Korea)
- Only members and cooperating non-members of the CCSBT are managing their SBT fisheries to the quota set by the Commission. For the other countries which are not currently managing to the quota set by the Commission (e.g. Indonesia, South Africa, China), there is no need to set an operational translation from the MPTAC year to a quota year. This will change if these countries join the Commission as either a member or cooperating non-member. At that time, an operational translation from the MPTAC year to a quota year will need to be defined.

Should changes made to historic catch data be used by the MP?

This question may be addressed in the previous sections regarding the meaning of catch, in which case it does not need to be covered again here.

Historic data are occasionally revised and data for the most recently provided year are **always** subject to change. It could be argued that the historic data series used by an MP should be the “best” data available (i.e. data most recently accepted by the SAG), or conversely, that the historic series should be the same data as that used during MP testing. **A decision needs to be made regarding whether updates to historic data² are to be included when running the MP.**

Presumably any data used for the more recent years when running the MP after implementation would be updated each time the MP is run.

² “Historic data” in this context refers to the time series of historic data used during the MP testing process.

Comment Regarding the Meaning of Catch in the CMPs

(extract of e-mail from D. S. Butterworth on 1/8/2005)

... let me comment on the three options I offered for what is meant by "Catch" in the context of the CMPs, specifically in relation to the use in their rules of the "TAC for last year". These options were:

- 1) the TAC last recommended by the MP;
- 2) the TAC last agreed by the Commission; and
- 3) a recent (say last) year's catch.

I suggest that 2) is the most appropriate choice. My rationale is that the primary reason for this dependency in the CMP rules is to constrain the extent of change in the years where this can occur (both for the TAC as a whole and for member allocations). To me 3) seems too variable, and could be problematic if there are arguments about the actual number; it would seem rather a consideration for the Commission to vary their decision from the MP output if, say, one member's catch has consistently been appreciably less than was allocated.

Similar reasoning leads me to prefer 2) over 1): 1) could lead to frustrating intents to restrict the extent of (actual) change. There is though the counter-argument that this limits the extent of feedback possible, and hence an MP's ability to achieve medium term recovery goals (e.g. if the Commission decided not to implement a recommended reduction in one change-year, and the resource's condition deteriorated, the MP will not be able to achieve recovery to the extent suggested by the simulation trials, as the level to which the catch can be reduced at that stage will not be as low as those trials assumed). But should any supra-MP adjustment in such circumstances rather be left in the hands of the Commission?