

**DRAFT PROPOSED PROCEDURES FOR DEVIATING FROM THE HAKE OMP  
OUTPUT FOR THE RECOMMENDATION FOR A TAC, AND FOR INITIATING  
AN OMP REVIEW**

D S Butterworth

MARAM (Marine Resources Assessment and Management Group)  
Department of Mathematics and Applied Mathematics  
University of Cape Town  
Rondebosch 7701

This document follows from Document WG/10/05/D:H:40 and is essentially an adaptation of the Annex of that document, which was an extract from the specification document for a Management Procedure (OMP-equivalent) for Southern Bluefin Tuna by the Commission for the Conservation of Southern Bluefin Tuna (CCSBT).

## **1. Metarule Process**

Metarules can be thought of as “rules” which prespecify what should happen in unlikely, exceptional circumstances when application of the TAC generated by the OMP is considered to be highly risky or highly inappropriate. Metarules are not a mechanism for making small adjustments, or ‘tinkering’ with the TAC from the OMP. It is difficult to provide firm definitions of, and be sure of including all possible, exceptional circumstances. Instead, a process for determining whether exceptional circumstances exist is described below (see Fig. 1). The need for invoking a metarule should only be evaluated by the MCM Demersal Working Group (hereafter indicated by WG) based on information presented and reviewed at a WG meeting. (Note: All examples provided below are illustrative, and not meant as complete or exhaustive lists.)

### ***1.1 Description of Process to Determine Whether Exceptional Circumstances Exist***

Except for identifying broad circumstances that may invoke the metarule process, it is not possible to pre-specify the data that may trigger a metarule. If a WG Member or Observer (or MCM Management) is to propose an exceptional circumstances review, then that Member or Observer must outline in writing the reasons why they believe exceptional circumstances exist, and must either indicate where the data or analyses are to be found supporting the review, or must supply those data or analyses in advance of the WG meeting.

Every year the WG will:

- Review stock and fishery indicators, and any other relevant data or information on the stock and fishery, and conduct a simple routine updated assessment (likely no more than

core reference set models used in the OMP testing refitted taking a further year's data into account).

- On the basis of this, determine whether there is evidence for exceptional circumstances.

Examples of what might constitute an exceptional circumstance include, but are not limited to:

- Survey estimates of abundance that are appreciably outside the bounds predicted in the OMP testing.
- CPUE trends that are appreciably outside the bounds predicted in the OMP testing.
- Catch species composition in major components of the fishery that differ markedly from previous patterns.

Every two years the WG will:

- Conduct an in depth stock assessment (more intensive than the annual process above, and in particular including the conduct of a range of sensitivity tests)
- On the basis of the assessment, indicators and any other relevant information, determine whether there is evidence for exceptional circumstances (a core example of exceptional circumstances here is if the stock assessment provides results substantially outside the range of simulated stock trajectories considered in OMP evaluations).

(Every year) IF the WG concludes that there is no or insufficient evidence for exceptional circumstances, the WG will:

- Report to the the Director Research, MCM that exceptional circumstances do not exist

IF the WG has agreed that exceptional circumstances exist, the WG will:

- Determine the severity of the exceptional circumstances
- Follow the "Process for Action" described below.

### ***1.2 Specific issues that will be considered annually (Underlying Assumptions of the Operating Models (OMs) for the OMP Testing Process)***

The following critical assumptions underlying the OMs need to be monitored after OMP implementation. Any substantive deviation from these underlying assumptions may constitute an exceptional circumstance (i.e. potential metarule circumstance) and will require a review, and possible revision, of the OMP:

- Over recent years species splits of catches from the major fisheries considered in projections are not substantially different from those assumed for the OM projections, or (as appropriate) not outside the bounds for which associated feedback to changes has been incorporated within the OMP.
- Selectivities-by-age of the major fisheries do not differ substantially from assumptions for OM projections.
- New CPUE and survey abundance estimates are within the bounds projected by the OMs.

- Recruitment levels are within bounds projected by the OMs.

### ***1.3 Description of Process for Action***

Having determined that there is evidence of exceptional circumstances, the WG will in the same year:

- Consider the severity of the exceptional circumstances (for example, how severely “out of bounds” are the CPUEs or recruitment)
- Follow the principles for action (see examples below).
- Formulate advice on the action required (this could include an immediate change in TAC, a review of the OMP or the relatively urgent collection of ancillary data or conduct of analyses to be reviewed at a further WG meeting in the near future).
- Report to the Director Research, MCM that exceptional circumstances exist and provide advice on the action to take.

The Director Research, MCM will:

- Consider the advice from the WG.
- Decide on the action to take, or recommendations to make to his/her principals.

#### ***Examples of ‘Principles for Action’***

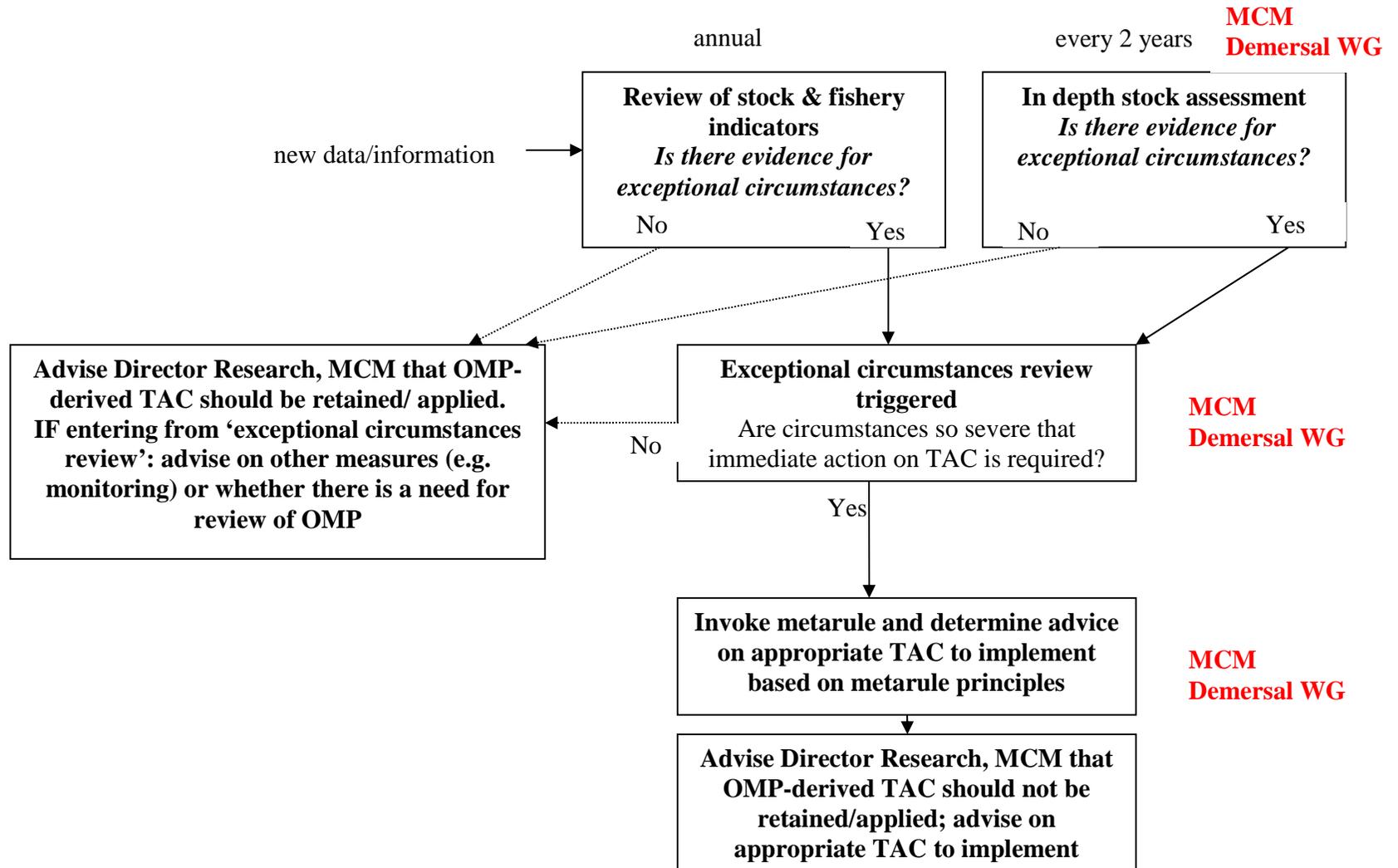
If the risk is to the resource, principles may be:

- The OMP-derived TAC should be an upper bound.
- Action should be at least an x% decrease in the TAC output by the OMP, depending on severity.

If the risk is to the fishery, principles may be:

- The OMP-derived TAC could be a minimum.
- Action should be at least an x% increase in the TAC output by the OMP, depending on severity.

**Figure 1: Flowchart for Metarules Process**



## **2. Regular OMP Review and Revision Process**

The procedure for regular review and potential revision of the OMP is the process for updating and incorporating new data, new information and knowledge into the management procedure, including the operating models (OMs). This process should happen on a relatively long time-scale to avoid jeopardising the performance of the OMP, but can be initiated at any time if the WG consider that there is sufficient reason for this, and that the effect of the revision would be substantial. During the revision process the OMP should still be used unless a metarule is invoked.

All examples given in this document are meant to be illustrative, and NOT meant as complete or exhaustive lists.

### ***2.1 Description of Process for Regular Review (see Fig. 2)***

Every year the WG will:

- Consider whether the procedure for Metarule Process has triggered a review/revision of the OMP

Every two years the WG will:

- Conduct an in depth stock assessment and review stock and fishery indicators, and any other relevant data or information on the stock and fishery.
- On the basis of this, determine whether the assessment (or other) results are outside the ranges for which the OMP was tested (Note that evaluation for exceptional circumstances would be done in parallel with this process; see procedure for Metarule Process), and whether this is sufficient to trigger a review/revision of the OMP.
- Consider whether the procedure for Metarule Process triggered a review / revision of the OMP.

Every four years since the last revision of the OMP the WG will:

- Review whether enough has been learnt to appreciably improve/change the operating models (OMs), or improve the performance of the OMP, or to provide new advice on tuning level (chosen to aim to achieve management objectives).
- On the basis of this, whether the new information is sufficient to trigger a review/revision of the OMP.

In any year, IF the WG concludes that there is sufficient new information to trigger a review/revision of the OMP, the WG will:

- Outline the work plan and timeline (e.g. over a period of one year) envisaged for conducting a review.
- Report to the Director Research, MCM that a review/revision of the OMP is required with details of the proposed work plan and timeline.

- Confirm to the Director Research, MCM that the OMP can still be applied while the revision process is being completed.

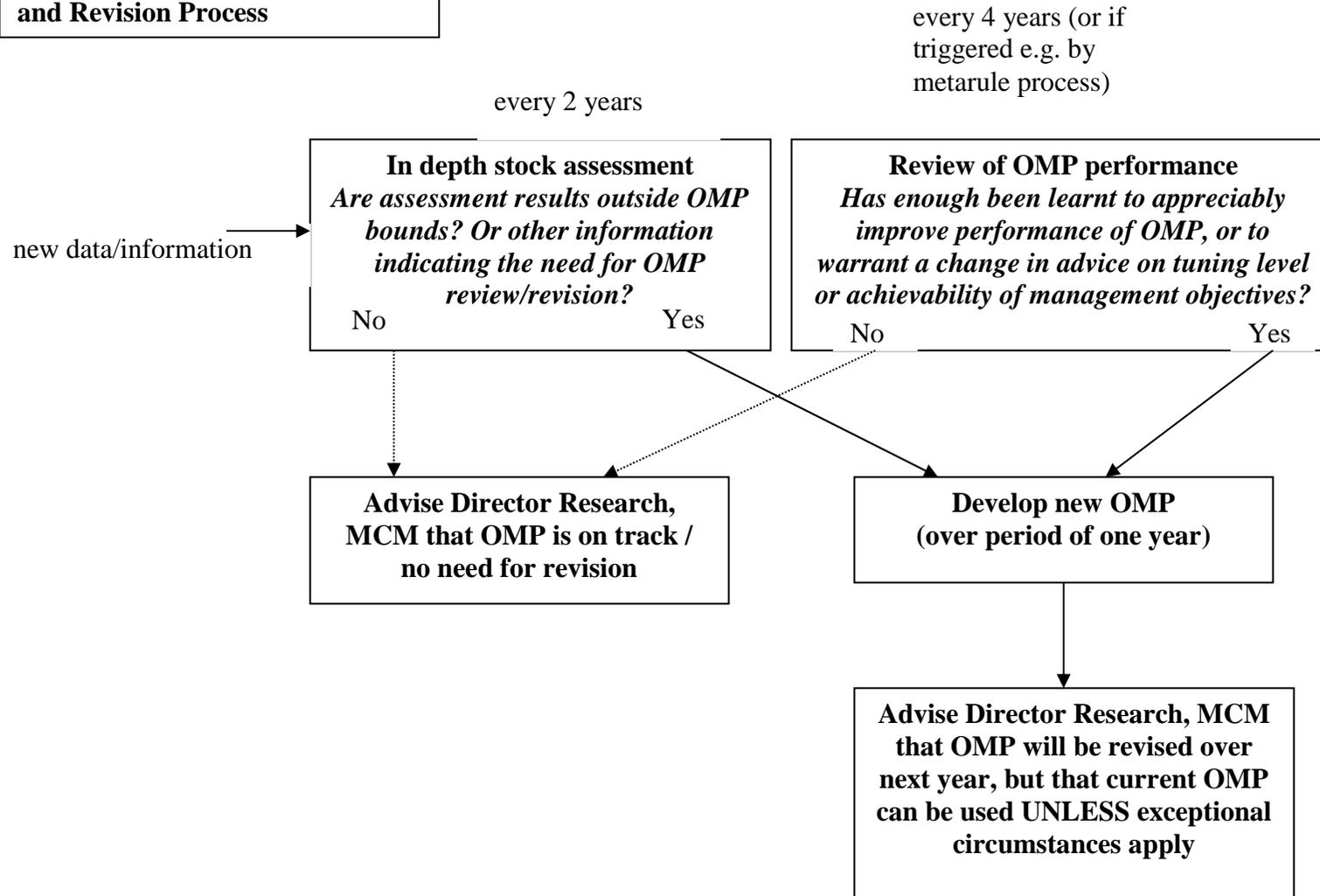
In any year, IF the WG concludes that there is no need to commence a review/revision of the OMP, the WG will:

- Report to the Director Research, MCM that a review/revision of the OMP is not yet required.

The Director Research, MCM will:

- Review the report from the WG.
- Decide whether to initiate the review/revision process.

**Figure 2. Flowchart for Review and Revision Process**



**MCM  
Demersal WG**