

**DRAFT PROPOSED PROCEDURES FOR DEVIATING FROM THE WEST COAST  
ROCK LOBSTER OMP OUTPUT FOR THE RECOMMENDATION FOR A TAC,  
AND FOR INITIATING AN OMP REVIEW, TOGETHER WITH PROCEDURES  
FOR WITHIN-REVIEW SCHEDULING**

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*The first and major part of this document is an adaptation of 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). The adaptation here, though worded primarily with west coast rock lobster in mind, is put forward also in a more general context, viz. serving as a template for any South African fishery for which an OMP might be used to provide scientific recommendations for management (mainly by way of a recommended TAC). Hence in certain sections that are more species-specific, wording that might be used for other resources is also provided in italicised parentheses.*

*The document concludes with parallels drawn from procedures adopted by the Scientific Committee of the International Whaling Commission in regard to the scheduling of milestones within an OMP development or review process.*

**PROPOSED METARULE AND REVIEW/REVISION PROCEDURES**

**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 Rock Lobster 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 or size composition in major components of the fishery that differ markedly from previous patterns.

*[Note that the current OMP for the sardine and anchovy fishery already explicitly includes definitions for what constitutes such "exceptional circumstances" in certain respects.]*

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:

- New CPUE and survey abundance estimates are within the bounds projected by the OMs.
- A new somatic growth estimate is within the bounds projected by the OMs.
- Recruitment levels are within bounds projected by the OMs.
- Selectivities-by-size of the major fisheries do not differ substantially from assumptions for OM projections.

*[Note: For hake, for example, very similar items would be listed. Thus the CPUE, survey and recruitment provisions, together with one for selectivity-at-age instead of selectivity-by-size, would apply, together with perhaps:*

- *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.]*

## ***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 surveys)
- 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:

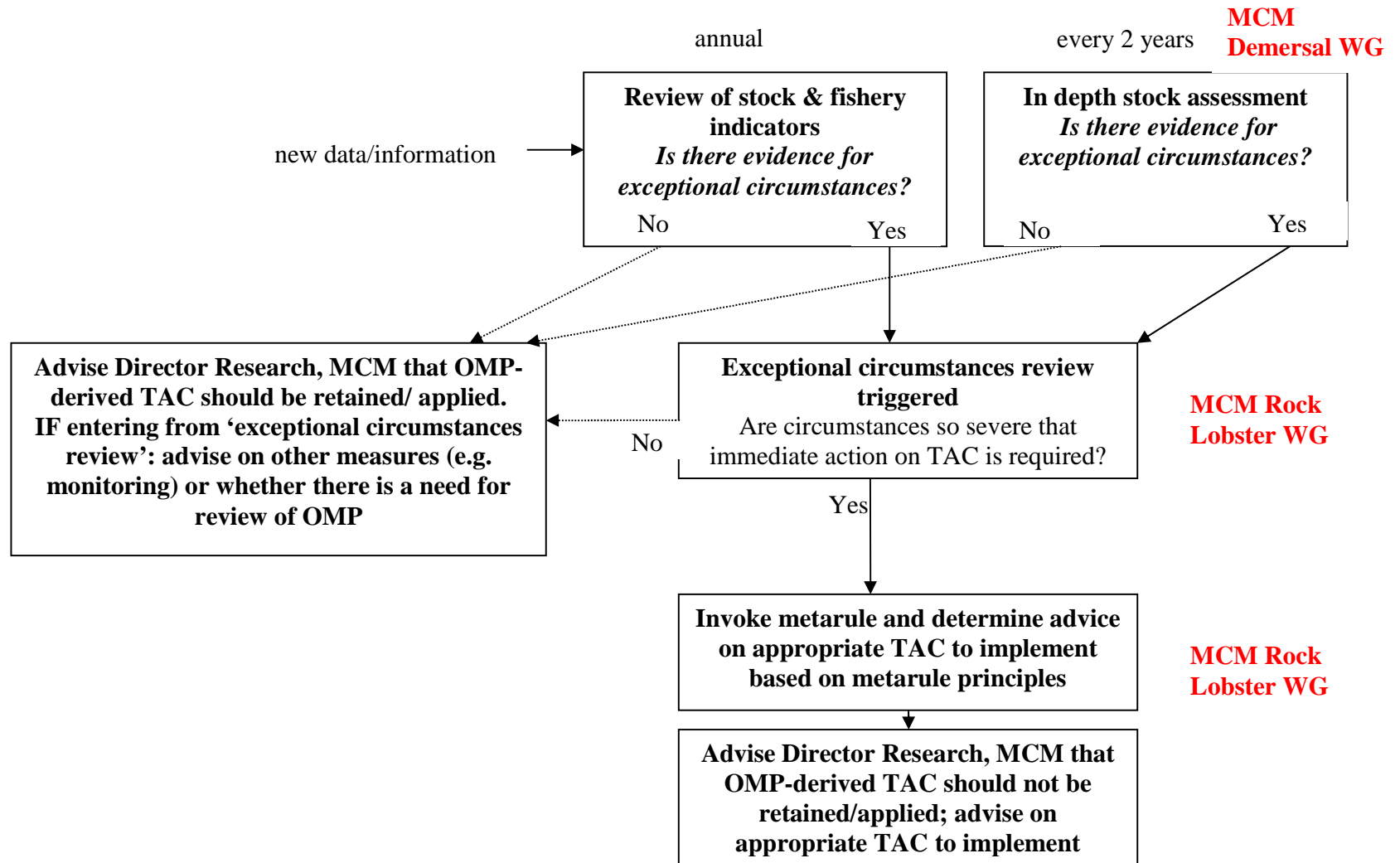
- The OMP-derived TAC should be an upper bound.
- Action should be at least an x% decrease in the TAC output by the OMP, depending on severity.

*[Note that the current OMP for the sardine and anchovy fishery already explicitly includes specifications for what actions to take for “exceptional circumstances” for which there are explicit definitions.]*

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.

## THE SCHEDULING OF MILESTONES WITHIN AN OMP DEVELOPMENT OR REVIEW PROCESS

While the process of conducting, and particularly updating, a “best assessment” of a resource can be concluded fairly quickly, an OMP development or review process is more protracted. The IWC Scientific Committee has experienced difficulties when this process becomes even more protracted than intended by “back-tracking” as it progresses to take account of new data or novel hypotheses.

To address this problem, the IWC Scientific Committee has adopted a **strict** procedure of specifying five “milestones” for the development or review process that ensure the whole exercise is completed over a two year period (*J. Cetacean Res. Manage.* 5 Suppl. (2003) 11-12). Note that it is the “five milestones”, rather than the “two years”, that is suggested for generalisation here. The “two years” in the IWC case is dictated by the practical considerations of milestones needing to be reached/agreed at meetings, so that in their case the five milestones correspond to three successive annual meetings, interspersed by two inter-sessional meetings (though naturally analyses continue between meetings). For a local process, this period would normally be truncated (ideally to one year) given the greater ease for the persons involved to attending meetings and hence to reach the “milestone agreements”, and thereby ensure that the process proceeds and concludes in an efficient, expeditious and orderly way.

Translated into more general terms, the IWC’s milestones reflect the following:

### *Milestone 1 (“Pre-implementation assessment”)*

- Broad specification of abundance estimates and/or indices available, together with other data to be used in the conditioning the operating models to be used for OMP testing
- General specification of plausible model-structure hypotheses (e.g. regarding stock structure) that are broadly consistent with available data
- This specification of plausible hypotheses should be inclusive enough that it is deemed unlikely that the collection of new data during the whole process would suggest novel hypotheses not already included in the broad trial structure

### *Milestone 2 (“Trial structure development”)*

- Precise specification of plausible hypotheses
- Determination of trial structure
- Final specification of data and methods to be used in conditioning trials to provide operating models for testing (this “conditioning” process is essentially that of the conventional stock assessment – it ensures that the trials will not be inconsistent with available information)
- **NO** new data or changes to trial structure (in the context of representing agreed plausible hypotheses) after this time



*Milestone 3 (“Conditioning and final trial structure”)*

- Review conditioning results, and if necessary change trials, but **not** trial structure
- Results of new analyses of agreed (but no new) data may be taken into account
- Determination of final trials, together with associated ranking or weighting of different hypotheses
- Discussion of what research might reduce range of uncertainty in trials, and the likely time frame for its completion

*Milestone 4 (“Review results of final trials”)*

- Review results of the application of candidate OMPs to final trials
- Make recommendations on candidate or candidates for final consideration
- Possibly link less conservative options with recommended research. If results from this research do not achieve anticipated results to refute associated “pessimistic” hypothesis by the time of the next review, specify the more conservative variant of candidate OMP that would then be substituted (“Donovan-Hammond approach”)

*Milestone 5 (“Final oversight”)*

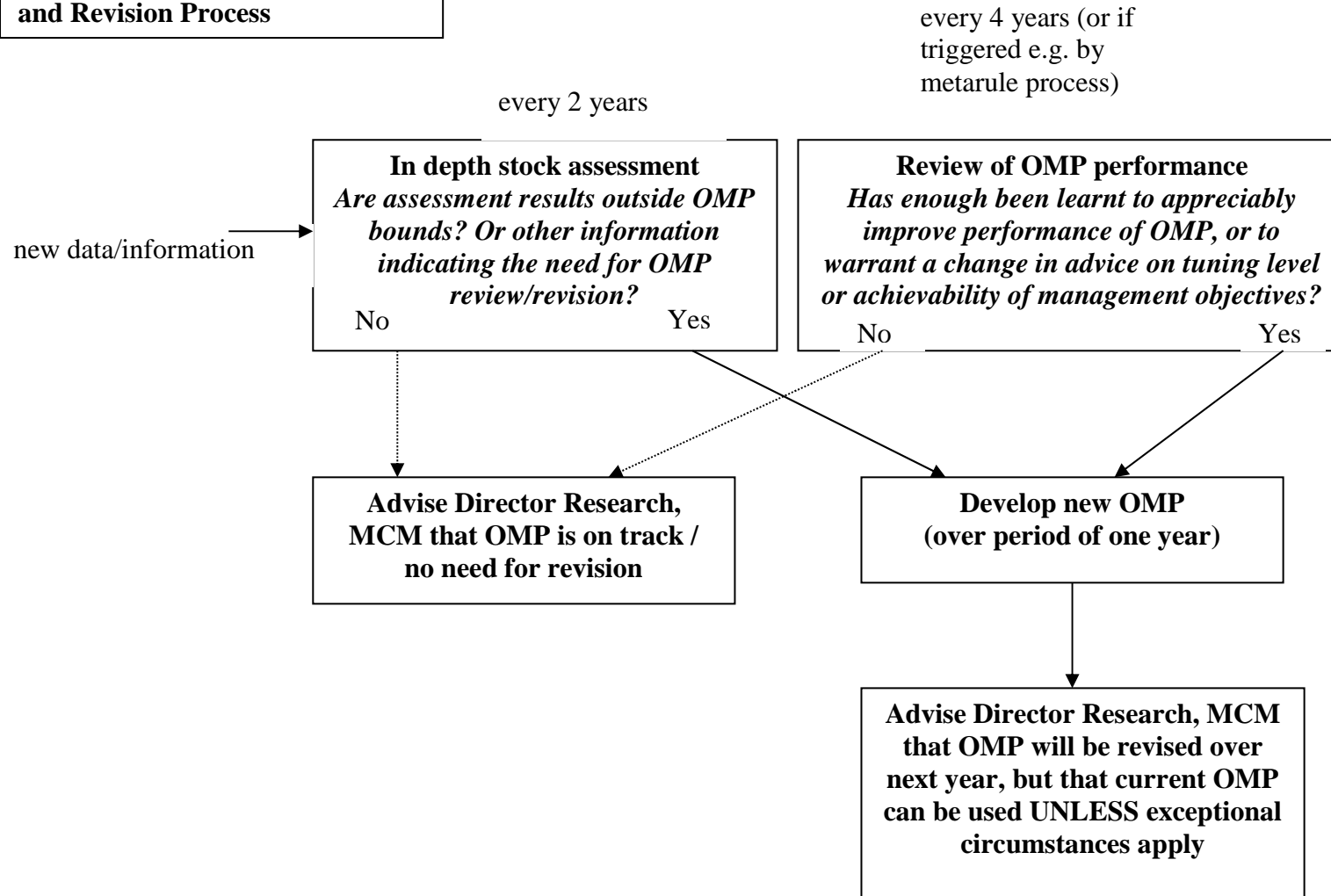
- Review and agree recommendations to management authority for OMP to be implemented, and associated data inputs
- This might include more than one option, with clarifications given of the trade-offs involved to assist the management authority in its final choice, together perhaps with different research requirements associated with the different options
- Calculate the next TAC (and/or TAE) recommendation associated with the one or more OMP options put forward

It is suggested that this “milestone” approach be instituted and strictly enforced in the processes of OMP development or review for South African fisheries. Note in particular:

- No new data or hypotheses after milestone 2
- No new trials after milestone 3

It is important to note that the “milestones” here are scientific ones. Concurrent with the scientific process, there is interaction with stakeholders to inform them on progress and to obtain their input on objectives (and desired trade-offs between them).

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



**MCM  
Demersal WG**

