

Metarules for the Cape Town Procedure

Prepared for the 2020 ESC meeting, Sept 2020.

Metarule Process

Preamble

Metarules can be thought of as a set of conventions for the implementation of the Management Procedure (MP). This includes “rules” which prespecify how to proceed in the event that exceptional circumstances arise when application of the total allowable catch (TAC) generated by the MP 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 MP. It is difficult to provide very specific definitions of, and be sure of including all possible, exceptional circumstances. Instead, a process for determining whether exceptional circumstances exist and whether the implication(s) arising from them is sufficiently severe to warrant revising the TAC advice from the MP is described below. The need for invoking exceptional circumstances provisions should only be evaluated at the ESC based on information presented and reviewed at the ESC.

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

Process to determine whether exceptional circumstances exist

Every year the ESC will:

- Review stock and fishery indicators, and any other relevant data or information on the stock and fishery; and
- Consider and examine whether the inputs to the MP are affected
- Consider if the population dynamics are potentially substantially different from those for which the MP was tested (as defined by the 2019 Reference set of operating models, OMs)
- Consider if the fishery or fishing operations have changed substantially
- Consider if recent catches and other removals have been greater than the MP’s recommended TACs

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

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

- A gene-tagging juvenile abundance estimate outside the range (95% probability intervals for projections)¹ for which the MP was tested (i.e. the 2019 reference set of OMs);
- A CPUE result outside the range for which the MP was tested;
- Substantial improvements in knowledge, or new knowledge, concerning the dynamics of the population which would have an appreciable effect on the operating models used to test the existing MP; and
- Missing input data for the MP, resulting in an inability to calculate a TAC from the MP (i.e. consistent with the manner in which it was tested).

¹ The “range” refers to 95% probability intervals for projections for the index in question made using the reference set (“grid”) of the OMs during the testing of the MP (i.e. 2019 OMs).

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

- Conduct an in-depth stock assessment; and
- On the basis of the assessment, indicators and any other relevant information, determine whether there is evidence for exceptional circumstances (an example of exceptional circumstances would be if the stock assessment was substantially outside the range of simulated stock trajectories considered in MP evaluations, calculated under the reference set of operating models).

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.

If the ESC concludes that there is no or insufficient evidence for exceptional circumstances, the ESC will:

- Report to the Extended Commission that exceptional circumstances do not exist.

If the ESC has agreed that exceptional circumstances exist, the ESC will:

- Follow the “Process for Action”.

Process for Action

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

- Consider the severity of the exceptional circumstances (for example, how severely “out of bounds” is the CPUE) and, where possible, examine its potential impacts on the performance of the MP;
- Follow the Guidelines for Action if TAC change is considered necessary (see below);
- Formulate advice on the action required (for example, there may be occasions when the severity and impacts of the ‘exceptional circumstances’ are deemed to be low, so that the advice is not for an immediate change in TAC, but rather a trigger for a review of the MP or collection of ancillary data to be reviewed at the next ESC); and
- Report to the Extended Commission that exceptional circumstances exist and provide advice on the action to take.

Guidelines for Action

If there is a risk associated with TAC being too high, then consider TAC changes where:

- a) The MP-derived TAC should be an upper bound;
- b) Action should be at least an x% change to the TAC, depending on severity.

If there are risks associated with TAC being too low, then consider TAC changes where:

- a) The MP-derived TAC could be a minimum;
- b) Action should be at least an x% change to the TAC, depending on severity.

An urgent updated assessment and review of indicators will take place, with projections from that assessment providing the basis to select the value of the x% referred to above.

The Extended Commission will:

- Consider the advice from the ESC; and
- Decide on the action to take.

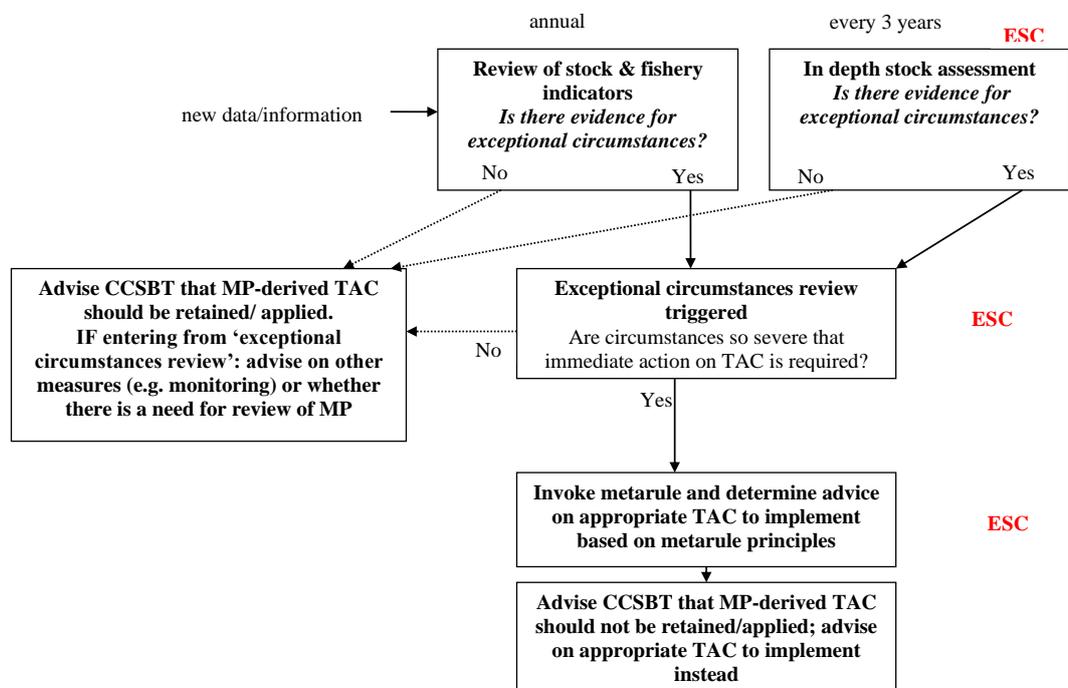
Examples of meta-rules implementation

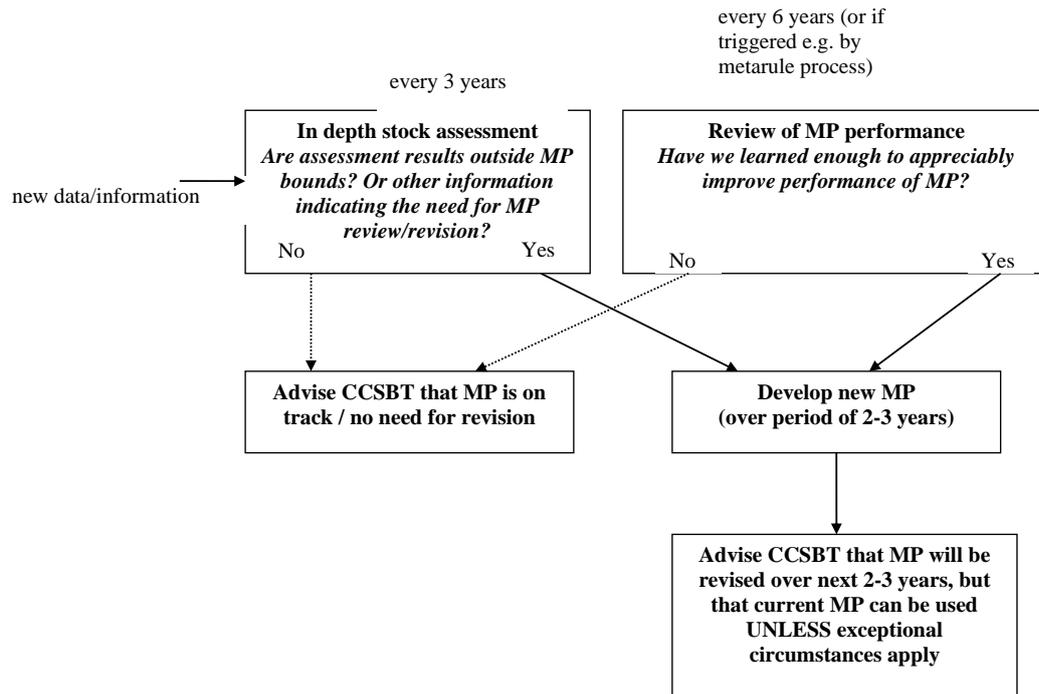
In 2012 a very low aerial survey data point in the timeseries was identified as on the border of the range of projections used for testing the Bali Procedure (NB this index is not used in the Cape Town Procedure). The ESC considered the data, analysis and additional information available on recruitment. Given that the Bali Procedure was shown to be robust to low recruitment scenarios, the ESC recommended to the Commission that there should be no action on TAC in that year, but that further analysis of environmental and fishery data should be considered at the next ESC.

In other years, exceptional circumstances (both negative and positive) have been identified but the ESC has not recommended action to alter the Bali Procedure derived TAC. Rather, the ESC has recommended gathering of additional information (e.g., implement gene tagging after suspension of the aerial survey) or alternative actions in the meta-rules process (e.g. development of a new MP), and the Commission has adopted these recommendations.

Meta-rules Flow Chart

Figure 1: Flowchart for Metarules process





ESC