

Proposed Amendments to “Exceptional Circumstances” Rules for the OMP for the South African Hake Resource

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Abstract

This document suggests amendments to the list of issues to be considered annually to determine whether there need be deviations from the TAC recommendation output by the OMP, or initiation of an OMP review earlier than the customary four-year revision period. The suggestions attempt to incorporate some of a set of earlier industry suggestions, together with requirements under Condition 7 of the MSC re-certification in regard to target and limit reference points.

Introduction

The possibility of deviations of recommendations for a hake TAC from the output from the OMP is governed by the over-arching document:

"Procedures for Deviating from the hake OMP output for the recommendation for a TAC, and for initiating an OMP review"

A part of the hake OMP revision process is the consideration of possible amendments of the hake-specific entries in this “exceptional circumstances” document. The process does not consider any changes to the general framework of this document, only the species-specific (in this case hake-specific) insertions. Proposals to change the general framework can be made separately, but would require consideration by all DAFF SWGs with responsibility for resources managed under OMPs.

Such species-specific insertions are made in two contexts, with the present wording for hake along the following lines:

1) Examples of what might constitute exceptional circumstances, with the following non-exhaustive set listed (the three bullets following repeat exactly the current wording):

- Survey estimates of abundance that are appreciably outside the bounds predicted in OMP testing
- CPUE trends that are appreciably outside the bounds predicted in OMP testing
- Catch species composition in major components of the fishery or surveys that differ markedly from previous patterns (and so may reflect appreciable changes in selectivity).

2) Issues to be considered annually in checks of whether the OMP is running “on track” – note that the Reference Case assessment (here RS1) is updated every year in this process, and every second year the process includes updates for the full Reference Set (RS) and some major robustness tests:

- Whether over recent years the species splits of catches from the major fisheries differ substantially from the species splits considered in projections in the OMP testing
- Whether selectivities-by-age for the major fisheries differ substantially from assumptions made to generate operating model projections
- Whether CPUE and survey abundance estimates are within the bounds projected by the operating model projections
- Whether future recruitment levels are within the bounds projected by the operating models.

Proposed Changes

Probably only the entries under 2) need revision, as they embellish what seem a sufficient set of non-exhaustive examples given under 1). Although industry has suggested some additions under 1), it is suggested that these can, where considered appropriate, all be included under 2).

The following revised wording is put forward for entries under 2):

- Whether over recent years the species splits of catches from the major fisheries differ substantially from the species splits considered in projections in the OMP testing
- Whether selectivities-at-length for the major fisheries differ substantially from assumptions made to generate operating model projections
- Whether standardised CPUE and survey abundance estimates are within the bounds indicated in operating model projections, where bounds here and in similar cases following shall be taken to be the 2.5%ile and 97.5%ile of projections under the Reference Set a (RSa) of operating models.
- Whether future recruitment levels are within the bounds projected by the RSa operating models.
- Whether new data suggest appreciably increased plausibility of the RSb scenarios which reflect a much more depleted *M. capensis* population than is the case under RSa.

- Whether the “survey-standardised-CPUE discrepancy statistic” defined below for each species as:

$$D_y^{WC_surv,spp} = \Delta I_y^{WC_surv,spp} - \frac{(\Delta I_y^{WC_CPUE,spp} + \Delta I_y^{SC_CPUE,spp})}{2}$$

$$D_y^{SC_surv,spp} = \Delta I_y^{SC_surv,spp} - \frac{(\Delta I_y^{WC_CPUE,spp} + \Delta I_y^{SC_CPUE,spp})}{2}$$

where

$$\Delta I_y^i = \frac{(I_{y+1}^i - I_y^i)}{I_y^i}$$

falls outside the bounds indicating in the OMP testing.

- Whether updates of major data sets or ageing practices indicate substantial differences from what were used to condition the operating models for the OMP testing.
- Whether there have been a series over substantial differences between TACs allocated and the catches subsequently made.
- Whether fishing strategies have changed substantially, and in a manner such that continuing use of the agreed GLM-standardisation procedures would likely introduce substantial bias in resource abundance trend estimates based on CPUE indices.
- Whether new data or information suggest a substantial revision of estimates of the spawning biomass at MSY which is the target reference point for the fishery.
- Whether updated assessments suggest that the spawning biomass for the *M. paradoxus* population has fallen below its 2007 level, which will be considered a limit reference point for the fishery. Given that the OMP intends recovery of this population, an upward revision of this reference point will be considered at the next four-yearly OMP review.

Note: Additions made here have attempted:

- a) to incorporate many of the suggestions made earlier by Industry, and
- b) to address Condition 7 of the MSC re-certification which required explicit consideration of target and limit reference points in the OMP revision process.