

14th MEETING OF THE SCIENTIFIC COMMITTEE

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SC14 - JM 09

Response to the Independent SC14 MSE Desk Review

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¹Generative AI tools assisted with document organization, editing, and formatting. The authors retain responsibility for the scientific content and conclusions.

Response to the independent SC14 MSE desk review

Overall response

The review concludes that the report is a strong scientific summary of a credible MSE and supports its use to continue SC14 discussion and identify a provisional shortlist. Its central concern is consistency across the report, CMP specifications, registries, source and public data, figures, Slick results, and annual-application material.

The authors accept that central finding. The full MSE report, SC14 questions and tasks paper, technical paper, and this response use the same final results. The immediate request is for SC14 to agree that the scientific work is sound, agree the decision criteria, identify a provisional shortlist, and provide management guidance. Adoption can follow completion of the instructions and checks needed for annual use.

Response to the Terms of Reference

Table 1: Response to the six review questions.

ToR finding	Response
Design is broadly consistent with SCW17, but reported results and public files are not consistently aligned	Save one final SC14 set of results and use it to remake all public products; document how the candidates changed from SCW17 to the final comparison
Overall MSE structure is appropriate, but tuning, allocation, precision, performance measures, and criteria for alternative cases need further support	Put definitions and complete CMP-by-OM results in the technical paper and ask SC14 to agree the minimum biological performance requirements and how alternative cases should be used. Treat allocation analysis as complete; add the author's explanation of why the existing work is sufficient
Uncertainties and limitations are clear in prose but not always supported by one checkable numerical account	Add one biological-performance table, results for each component in the two-stock OMs, uncertainty due to the number of runs, effort and low-catch results, and a comparison using alternative reference points
A provisional shortlist may be supportable, but the supporting results and annual rules are incomplete	Ask for a provisional shortlist and a list of work to finish rather than immediate adoption
Material inconsistencies occur in settings, data timing, candidate membership, results, and figure construction	Require the important numbers to agree across all products before publication and identify every product that is no longer current
Scientific findings and management choices are not always separated	Separate minimum biological performance, results under alternative assumptions, and management preferences, and place management questions in the decision table

Response to the main issues

Table 2: Response to the review's eight principal issues.

Priority and review issue	Response	Work needed	Timing
High — align published files	Completed for SC14-MSE-2026-RC1	All 47 automatic checks passed. The report, CMP list and pages, annual-use pages, figures, CSVs, Slick file, simulation and file lists, and SHA-256 fingerprints are tied to the same release; see the automatic agreement report	Completed before SC14 submission
High — limit current request to shortlist consideration	Completed for submission	The requested advice is limited to scientific endorsement, agreement on criteria, and a provisional shortlist. The decision paper contains an explicit list of work required before recommendation or adoption	Completed before SC14 submission

Priority and review issue	Response	Work needed	Timing
High — clarify minimum biological requirements and difficult cases	Decision package completed; SC14 judgment required	The report relates COMM8 and K60, proposes risk measures, and publishes a 112-row CMP-by-OM/stock table , including separate components and om23. OM roles are stated without inventing plausibility weights	Evidence completed before submission; requirements requested at SC14
High — describe HS versus PR as complete configurations	Completed for submission	Results are described as comparisons of complete, retuned configurations. The matched illustration is explicitly conceptual and used only to isolate rule shape	Completed before SC14 submission
Medium — assess whether 500 simulations are sufficiently precise	Agreed	Description of how uncertainty was represented, use of the same random draws, uncertainty ranges, and whether conclusions change with more runs or different draws	Before final recommendation
Medium — treat scorecard rankings as preliminary	Submission framing completed	Rankings were removed from the executive summary; raw outcomes remain primary; inputs, exclusions, scaling, three weighting sensitivities, and candidate-set dependence are documented. OM and finite-run sensitivity remain before final recommendation	Submission framing completed; full sensitivity before final recommendation
Medium — document and test index errors	Core documentation completed	The report publishes the simulation equation, final SD and autocorrelation values, correlation matrix, series overlap and gaps, treatment of posterior uncertainty, and what the model does not cover. Gradual drift, abrupt change, revised data, missing-survey rules, regional balance, and reliability weighting remain continuing tests	Core documentation completed before SC14; additional tests in continuing work
Medium — show candidate evolution and retain reviewer caveats	Completed for submission	A machine-readable chronology links the SCW17 trial subset, MP29/MP32 refinement, MP43–MP48 variants, and the named release. It identifies analyst-added comparisons and separates external-review caveats from the author response	Completed before SC14 submission

How to tell when the work is complete

Agreement among the published files

This action is complete for SC14-MSE-2026-RC1. All 47 automatic checks passed. They compare CMP settings, candidate membership, tuning, performance statistics, time periods, labels, two-stock components, scorecard inputs, public downloads, reported statements, and file fingerprints. The complete results are recorded in the [checks of agreement among the SC14 files](#).

Minimum biological performance requirements

The 60% dynamic Kobe-green probability remains a common tuning target, not the only requirement for biological performance. The report now explains how K60 relates to the earlier COMM8 objectives and reports dynamic Kobe status, low-biomass diagnostics, and overfishing risk for every CMP, OM, and stock component. The very low northern result under om23 is brought forward explicitly. SC14 must still agree the requirements and record any decision to accept a known weakness as a management judgment.

Ready for annual use

Completion requires a complete set of instructions from which two independent analysts obtain identical advice. It must address units, providers, cut-off dates, missing and revised data, weighting, prior advice, annual limits, rounding, allocation, realized catch, effort, fallback, verification, and ECP rules for who reviews a problem and what action can be taken.

Spatial results and the allocation comment

The allocation analysis is complete for this paper. The author's response will explain the purpose of the fixed-split tests, how they relate to the allocation method in the CMP, and why no additional allocation analysis is needed. The spatial results remain relevant where they help SC14 understand stock structure, movement, or regional monitoring.

Banking and borrowing

The updated runs may be reported as work in progress. A conclusion about the incremental effect of banking and borrowing requires a matched without-banking-and-borrowing comparison using identical OM draws and all other CMP settings held constant.

Overall conclusion

The authors thank the reviewer and accept the central recommendation that the scientific synthesis and its supporting products must present one consistent account. The MSE is sufficiently advanced for Scientific Committee review and provisional shortlisting. Final recommendation or adoption should depend on agreement of minimum biological performance requirements, instructions for annual use, and exceptional-circumstances items recorded in this response. The checks on published results are complete for SC14-MSE-2026-RC1.

The complete reviewer text will accompany this response or be submitted as a separate official information paper. These response tables do not replace the independent review.