

Provisional Agenda
Fourteenth Operating Model and Management Procedure Technical Meeting
 Seattle, USA, 24-28 June 2024

Terms of Reference

Discuss, implement, and evaluate changes to the Operating Model (conditioning and projections) and continue to provide training on the use of the new software developed by Dr. Darcy Webber using the TMB-Stan platform.

Provisional Agenda

1. Summary progress report on the Operating Model Specification and Software Upgrade project
 - 1.1. Review of project components and progress.
 - 1.2. Matching of ADMB and TMB likelihoods and results.
2. Handling of uncertainty and Bayesian Inference
 - 2.1. Comparison of uncertainty approximated by sampling the grid versus MCMC
This requires implementation of the grid sampling code in R
 - 2.2. Evaluation of possible reduced grid structures for applying MCMC.
A reduced grid may involve just a range of steepness values or may be other grid parameters like Psi
3. Operating model changes specified at the Tokyo modeling workshop (November 2023)
Some of these changes would have been implemented prior to OMMP14 to be evaluated by the WG. Others may be explored during the workshop if time permits
 - 3.1. Changes to the tag likelihood
Deduct initial tag recoveries from releases and eliminate the H^ parameters (harvest rate for mixing periods) (see <https://github.com/quantifish/sbt/issues/17>).*
 - 3.2. Treatment of LL3 and LL4 fisheries as removals by age
This involves cohort slicing the size compositions.
 - 3.3. Time-varying selectivity for LL1, LL2, Indonesia, and surface fisheries
An approach based on a Gaussian Markov random field was proposed (see <https://github.com/quantifish/sbt/issues/22>).
 - 3.4. Evaluate the Dirichlet-multinomial likelihood for age/length composition data
 - 3.5. Incorporate the age-uncertainty for the adult part of the POP calculations (the possible ages given length)
 - 3.6. Review harvest rate function and determine if a penalty is required to keep it below 0.9 (currently there is no penalty in the *sbt* model)

3.7. Categorize what to add to REPORT and ADREPORT in the TMB code

3.8. Implement “one-step ahead residuals” diagnostics

4. Discussion of further changes to the OM

For example: overhauling the model to track the numbers of fish by age and length bin; begin recoding of projection code; review of outstanding GitHub issues.

5. Next Steps

5.1. Review and clean-up of TMB code and model documentation.

6. Workplan