

**Draft Provisional Agenda**  
**Fifth Operating Model and Management Procedure Technical Meeting**

Seattle, Washington, U.S.A., 24-27 June 2014

***Terms of Reference***

The OMMP5 technical meeting will focus on updating the operating model with new data so as to conduct an in-depth stock assessment at SC19. The following terms of reference for the OMMP5 were agreed by the ESC in 2013:

1. Complete specification of OM structure and sensitivity runs. The main pending issues are:
  - a. The sensitivity for flat Indonesian selectivity*
  - b. Specify the upq2008 by estimating the change in  $q$  using the OM and examining the CPUE by age and year using bubble plots or other approach (e.g., the Shepherd Nicholson method)*
  - c. Incorporation of unaccounted catch mortality*
  - d. Others as deemed appropriate during the meeting*
2. Further consider comparability of OM results with the independent close-kin assessment.
  - a. Size of SSB*
  - b. Survival rates for similar age ranges*
3. Refine OM where possible; e.g.,
  - a. Continue to evaluate OM residuals and effective sample sizes*
  - b. Better numerical scaling, an evaluation of which parameters are causing the Hessian to be non-positive definite*
  - c. Add the capability to use alternative likelihood components for the CK data (e.g., the Beta-Binomial)*
  - d. Evaluate retrospective patterns*
  - e. Check MSY calculations and reference points*
  - f. Refine use of version control for all code (MP, OM and R scripts)*
  - g. Evaluate how to incorporate within-cell uncertainty in OM grid*
  - h. Evaluate sensitivity to exclusion of the assumed linear increment in  $q$  over time*
4. Further refine diagnostic outputs
  - a. Fits to size compositions*
  - b. CPUE residuals*
5. Evaluate productivity shifts; e.g.,
  - a. Recruits per spawner over time*
  - b. Alternative initial conditions*

In addition, the EC requested the ESC to:

- (i) Conduct sensitivity analysis around all sources of unaccounted catch mortality and incorporate this information in its advice on the existence of exceptional circumstances and approach to follow in accordance with the metarule process.
- (ii) Provide preliminary advice on the impact of any unaccounted catch mortalities on the stock assessment projections and the possible Management Procedure recommendation beyond the 2015-17 quota block.

The sources of mortality should include:

- Unreported or uncertainty in retained catch by Members, for example surface fisheries, artisanal catch, non-compliance with existing measures (e.g. catch over-run);
- Mortality from releases and/or discards;
- Recreational fisheries;
- Catches by non-Members;
- Research Mortality Allowance; and
- Any other sources of mortality that the ESC is able to provide advice on (including depredation).

### *Provisional Agenda*

#### **1. Evaluation of OM results using updated data and estimates of unaccounted catch mortality.**

1.1 Incorporation of new data

1.2 Incorporation of unaccounted catch mortalities.

*Check progress. Code changes: capability to inflate the different catch components by variable amounts.*

1.3 Model diagnostics

1.4 Evaluation of sensitivity to the use of flat Indonesian selectivity.

1.5 Evaluation of possible changes in  $q$  in 2008

*Examine bubble plots of CPUE by age-year for year effects, estimate change in  $q$ .*

1.6 Other?

#### **2. Projection results**

*Specifically requested by the Extended Commission to evaluate exceptional circumstances.*

2.1. Impact of unaccounted mortalities

*Code changes: at present there is no implementation error of MP catches.*

2.2. Other?

#### **3. Comparability of OM results with the independent close-kin assessment.**

3.1. Size of SSB

3.2. Survival rates for similar age ranges

#### **4. Reconsideration of reference set and sensitivity runs.**

4.1 Definition of final grid structure.

4.2 Definition of sensitivity runs.

#### **5. Code refinements and version control system**

#### **6. Workplan and timetable**

6.1 Update code of OM and associated graphics files if needed

6.2 Identify issues to be discussed at ESC