**Key Issues to be discussed at International Fisheries Stock Assessment Review Workshop**

**West Coast Rock Lobster**

**Updated Assessments and Projections (A sessions)**

* How do these compare with previous assessments?
* Selectivity functions – are these acceptable?
* What are the key robustness tests to conduct?
* Assumptions for projecting into the future:
1. Somatic growth (is a future increase still plausible?)
2. Recruitment
* What are key focus areas for future research?

**OMP development (A and B sessions)**

* Summary of past OMPs and management targets
* Where are we now w.r.t. resource recovery levels
* Where do we want to go – what are appropriate management targets?
* How should OMP take implementation error (particularly as regards takes in sectors effectively under effort control, and for which the resource monitoring data are of poorer quality) into account?
* Should a model-based OMP be retained, or move to an empirical OMP? If the latter, should estimates of recent catches be included?

**Management Related Issues (B sessions)**

* Should we continue to manage at a spatial level?
* Should OMP continue to split global TAC not only into five super-areas, but also into different user groups? Pros and Cons.
* How might the OMP be adjusted to provide more flexibility, and what would be the associated “costs”?

**Penguins**

**Models of the impact of fishing on penguins through reducing overall prey abundance (A sessions)**

* Consideration of basic model structure and Bayesian estimation procedure proposed
* Simulation testing of estimation process
* Treatment of estimates close to demographic constraint boundaries
* Specification of robustness tests, particularly as regards the functional form of the penguin parameter-fish abundance relationships
* Extension of model to incorporate further penguin-related data (e.g. tag-recapture)
* Specification of priors
* Incorporation of immigration effects
* Extension to multiple Western Cape colonies

**Consideration of analyses related to the impact of pelagic fishing close to breeding colonies (B session)**

* What alternative GLM (or other) model formulations, including ones with multiple dependent variables, might be considered to analyse results from the experiment of opening and closing to fishing around pairs of penguin colonies?
* What open/close alternation (if any) scheme within each colony pair might be most appropriate, and what interval for alternation should be considered (single or multiple year periods)?
* Can methods put forward to estimate experiment power be improved?

**Data-Poor Fisheries Generic Management Procedures**

**Generic issues and Southern Hemisphere (Aus, NZ & SA) Collaboration aspects**

* Testing of generic MPs – appropriate choices for operating models, candidate procedures and performance statistics
* Development of guidelines for development and testing of management procedures
* Development of a database of resource parameters and monitoring indices with their key statistical properties (e.g. variances and autocorrelation)
* Suggested initial Southern Hemisphere Collaboration initiatives

**Potential local application particularly to line fisheries**

* Primary candidates for application amongst local fisheries
* Potential associated monitoring indices for associated management procedures
* Best methods to obtain index data: surveys *vs* observers *vs* skippers.

**Sardine-anchovy OMP revision**

* How do we best model recruitment and its variability in the future for both sardine and anchovy?
* How do we best account for implementation uncertainty in the OMP, particularly as regards likely undercatch of anchovy?
* How do we best calculate the TAC if abundance estimates from the most recent hydroacoustic survey, upon which computations are highly dependent, are unavailable (e.g. because of a survey vessel breakdown)?
* How do we best calculate the risk to the resources, which is used to tune the OMP?
* How do we best determine relative plausibility for alternative sardine stock structure hypotheses?

**Hake OMP - potential impact of MPAs**

* In what ways have MPAs elsewhere influenced fishing fleet behaviour and how has CPUE been affected?
* What sizes/locations of MPAs are likely to have a non-trivial impact on CPUE?
* What are appropriate robustness tests to evaluate the potential impacts on the new hake OMP of the introduction of offshore MPAs?
* How is this OMP appropriately retuned to adjust for the impact of MPAs on CPUE, and what are the implications for performance statistics?

**Miscellaneous**

**Humpback whale modelling - how best to handle Borel paradox problems**

* Recently specified models for the west African humpback stock complex are hitting genetic constraints on minimum population abundance; how are priors on biological parameters best sampled to deal with the resultant instance of Borel’s paradox?

**Estimator robustness to account for the impact of year-dependent selectivity variations on catchability q**

* How might the “spatial” operating model proposed to lead to apparent temporal changes in selectivity be improved?
* What are the most appropriate performance statistics to consider in comparing the performance of alternative estimators for standardising for q?