North Western Waters Regional Advisory Committee Focus Group on Data Compilation & MSY / LTM plans 12th March 2008 14.00-17:30 h Manchester (UK)

Some Explanatory Documentation Prepared by Colm Lordan (Marine Institute, Ireland)

Summary of new ICES advisory structure

The changing policy landscape and advisory requirements have resulted in ICES restructuring its business model for advisory services in 2008. Figure 1 gives an overview of the "roles of" and "participation within" various groups in the new ICES Advisory Services framework. The groups where stakeholder observers are allowed to participate are indicated with a red dot on the left. The groups where advice is formulated is indicated with the blue square. This is very much an evolving framework that will develop over the coming years. The objective here is to summarise current thinking.

The key changes are listed below:

- Data compilation workshops will happen in advance of benchmark meetings and stakeholders
 are expected to be active participants at these meetings. In 2008 it is envisaged that one day
 data meetings will probably take place in advance of the benchmark meetings. In the future
 these could be longer depending on the requirements.
- Benchmark meetings will review and analyse new data from the data compilation workshops.
 They will then develop the new assessment process and update the assessment quality handbook¹. Benchmark meetings will not produce new advice. The findings of the benchmark groups will be reviewed externally.
- Expert groups produce "update assessments" according to the procedures developed by the benchmark groups and also develop the first draft advice. These are not open to stakeholder observers. It is envisaged that not all stocks will have annual update assessments². Recently, AMAWGC (the Expert group chairs) have forwarded a list of stock for which new advice will be produced in 2008 to ACOM.
- The expert group reports and draft advice are reviewed by the review groups by correspondence and are open to stakeholder observers.
- The advice drafting groups are also open to stakeholder observers and there will be a physical meeting to integrate and finalise the advice.

Timing of advice

The advice for the majority of NWWRAC stocks will be 27/06/2007.

Calendar of future ICES workshops and seminars and stakeholders participation

The meeting schedule and terms of reference for the various expert groups is given in the attached file (Workplan 2008 meetings of relevance to NWWRAC.xls).

¹ The quality handbook is a document that summarise all background procedures and data used in a stock assessment.

² Where no new assessment is carried out the advice given previously will be maintained.

ICES Advisory Services

Delivering the Advice Decision Makers Need (See ICES Workplan for 2008)

Stakeholder Observers		
	Council 2 Delegates per Country	The Shareholders of ICES
	Bureau 7 Vice Presidents	President Joe Horwood (UK) First Vice President Michael Sinclair (Canada) The Board of Directors of ICES
	ACOM 2 Nominees Per Country	Chair Mike Sissenwine + 3 Vice Chairs Responsible for Advice - Fit for Purpose Management of IAS - Review of Performance Strategic Focus - Client Interaction
	Advice Drafting Group ACOM Nominees Delegate Nominees	Final Draft of Advice to ACOM Variety of Experts Chairs of EG ACOM and Delegates Nominees
	Review Groups Experts (Some International Outside ICES) By Correspondence	Review the Technical Aspects of Expert Group Work Quality Check Some Paid International Experts
	Expert Groups Scientific Experts	Conduct Assessment Analyses Expert Technical Science Drat Advice
	Benchmark Groups Milti-diciplinary Scientific Experts & Stakholders	Adress key assessment problems Develop Assessment methodology Carry out integrated assesments Analyise and rewiew new data
	Data Compilation Stakeholders and Scientists	Stakeholder Data Signals from Data Discussion Transparency

Figure 1: A schematic explaining the roles and participation within various groups in the ICES Advisory Services framework.

Some background information on data requirements and sources of uncertainty in stock assessments.

An age based stock assessment attempts to estimate the population size and relationship between the fishery removals and the population Figure 1. This approach has fairly stringent data requirements. The fishery needs to be sampled over several years to produce age structured information for the landings or where possible catch (i.e. landings + discards). The sampled catch is raised to the total landings typically using reported landings from logbooks. Age structure survey or "reference commercial fleet" catch per unit effort data is also generally required in the stock assessment process. Several assumptions may also be required in the assessment model (e.g. natural mortality, stock structure, closed dynamic populations).

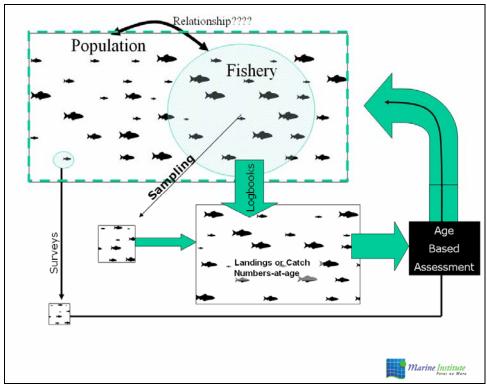


Figure 2. A conceptual model of an age based stock assessment for a single species.

The various data required for an age based stock assessments, the sampling steps and potential sources of uncertainty are shown in Figure 3. It is important to realise that the relative importance of these uncertainties varies significantly across stocks and species. From an assessment perspective it is important to tackle the most significant sources of uncertainty first but it is not always that straight forward to determine what these are. In a qualitative analysis of assessment problems across all stocks in north western waters the following were perceived to be the most significant by scientists;

- Commercial CPUE data (bias due to discarding & changing efficiency etc.)
- Discard data (imprecise weights estimates, age & length structure)
- Landings data (accuracy of data)
- Age data (imprecise, inaccurate or biased)

³ Taken from the EASE EC project final report

• Assessment method (inappropriate)

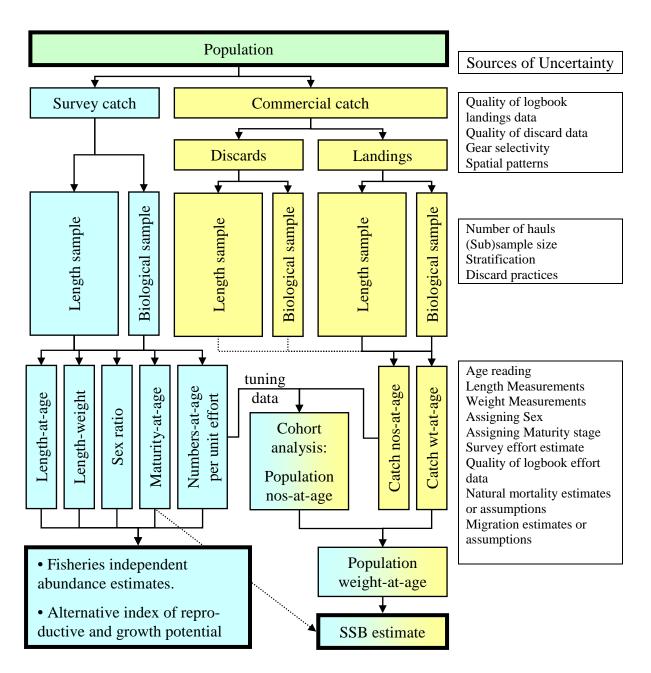


Figure 3. Diagram of the various steps involved in data collection and analysis of fisheries data for stock assessment and the potential sources of error at each step of the process.