## WKSABCAL - Workshop on Statistical Analysis of Biological Calibration Studies

2013/<mark>x</mark>/ACOM<mark>xx</mark>. A **Workshop on Statistical Analysis of Biological Calibration Studies** [**WKSABCAL**] will be established L. Worsøe Clausen, Denmark and Ernesto Jardim, Portugal, and will meet in Lisbon, 13-17 Ocotber, 2014 to:

- a) compile statistical methods for analysing reader agreement;
- b) identify the strengths and weaknesses of each method for fisheries calibration studies;
- c) review existing software for analysing calibration workshop data;
- d) define data summaries and analysis outputs required by calibration workshop participants and as stock assessment input;
- e) Draft a review paper based on workshop presentations, discussions and results.

WKSABCAL will report by August 2014 for the attention of ACOM and PGCCDBS.

Priority:	High. Age and maturity data are fundamental parts of the stock assessment process and a great deal of effort is put into ensuring the data are of high quality. Therefore it is important that the analytical tools used at age, maturity and other calibration workshops are fit for purpose, delivering informative outputs for the workshop participants and the stock assessment process.
Scientific justification and relation to action plan:	This work relates to quality assurance of biological measurements as part of ICES' goal to advise on the sustainable use of living marine resources.
	Calibration workshops dealing with age and maturity estimation are funded and held under the auspices of the PGCCDBS. The main objectives of these important workshops are to decrease bias and improve the precision of age/maturity determinations between scientists from different laboratories. The end results are published in extensive ICES reports. However, there is a question of whether the right audience is reached by these reports. Moving beyond precision is increasingly common in calibration workshops and creating outputs better tailored to input for stock assessment models would greatly improve the application of the results.
	PGCCBDS (2010) also recognized that there is a need to review current methods of analysing data from calibration studies and consider issues such as agreement measures for the age of long-lived species and the best way to incorporate histologically validated samples for maturity staging comparisons. Finally, at a broader level, there is a large body of research on agreement statistics and methodology available from the field of medical statistics so it would be beneficial to transfer this knowledge into the fisheries arena.
Resource requirements:	No specific resource requirements beyond the need for members to prepare for and participate in the meeting.
Participants:	Participants should include a mixture of scientists with expertise in statistical methods, stock assessment, age reading and maturity staging.
Secretariat facilities:	None.

## **Supporting Information**

Financial:	Funding for external experts on the statistical methods may be required. The chairs seek to collaborate with NAFO to ease the invitation of experts outside the ICES system.
Linkages to advisory committees:	The workshop will link to ACOM through PGCCDBS.
Linkages to other committees or groups:	The outputs will be directly relevant to all age reading and maturity staging workshops. PGMed
Linkages to other organizations:	This topic links to the EU DCF, the COST (European Cooperation in the field of Scientific and Technical Research) Action FA0601 "Fish Reproduction and Fisheries" (FRESH) and the WebGR project (http://webgr.azti.es).