Workshop on Age Estimation Methods of Deep Water Species

The **Workshop on Age Estimation Methods of Deep Water Species 2** (WKAMDEEP2), chaired by Gróa Pétursdóttir, Iceland, and Kélig Mahé, France will meet in Reykjavik, Iceland, 21-25 August 2017, to:

- a) Collect and review the consistency of age data used in stock evaluations of deep water fish, including, but not restricted to, tusk (*Brosme brosme*), ling (*Molva molva*), blue ling (*Molva dypterygia*), roundnose grenadier (*Coryphaenoides rupestris*), greater silver smelt (*Argentina silus*), black scabbardfish (*Aphanopus carbo*), black-spotted sea bream (*Pagellus bogaraveo*), greater forkbeard (*Phycis blennoides*) and orange roughy (*Hoplostethus atlanticus*);
- b) Review new information on precision and accuracy of age estimation of the seven first species listed above, for which WKAMDEEP1 agreed on individual ageing protocols, and revise those protocols as appropriate;
- c) Review age estimation procedures, and propose new ageing protocols for deep water species not considered by WKAMDEEP1;
- d) Assemble age reading experts on deep water species for training on age reading of several species, following the recommendation from WKAMDEEP1 to conduct age reading comparisons collectively for the whole group of slow-growing deep water fish;
- e) Estimate the bias for the long-life species.

WKAMDEEP2 will report by 22 September 2017 for the attention of SSGIEOM and WGBIOP.

Priority:	Essential. Age data are essential in evaluation of fish stocks. Age data are provided by different countries and are estimated using standard ageing criteria. These are generally not fully validated, and regular workshops are needed to increase the knowledge base, harmonizing interpretations and estimating precision and relative bias. A basis was established in 2013 by the previous WKAMDEEP.
	Therefore, a WKAMDEEP-2 should be carried out in order to update the methodology, and evaluate new information on otolith growth and age determination issues for commercially harvested deep water fish species. And as well for the purpose of bringing scattered experts together to develop a coherent approach to age estimation of these typically hard-to-interpret otoliths.
Scientific justification:	The necessity of accurate and precise age data for all species assessed in WGDEEP is massive. The stock-assessment is severely hampered by the lack of valid age-structured data and the fact that the agreement in the age-data supplied to the assessment is very low (as seen in previous exchanges).
	The aim of the workshop is to establish or update age reading protocols for each species based on recent validation and corroboration studies, and based on these protocols conduct an age reading comparison across labs and for each species in order to increase the reliability of age estimates to be used in stock assessments.
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 and key technicians with expertise in age determination methods, deep water species biology and assessment, as well as data analyses and scientific publication.
Secretariat facilities:	None.

Supporting Information

Financial:	Travel costs will be eligible for participants from Member States of the European Union through the EU Data Collection Framework (DCF). Funding for external experts on the age determination methods may be required.
Linkages to advisory committees:	ACOM
Linkages to other committees or groups:	WGDEEP,WGBIOP
Linkages to other organizations:	There is a direct link with the EU DCF.