## WGEGGS2 - Working Group on North Sea Cod and Plaice Egg Surveys in the North Sea 2015/MA2/SSGIEOM03

The Working Group 2 on North Sea Cod and Plaice Egg Surveys in the North Sea (WGEGGS2), chaired by Matthias Kloppmann, Germany, will meet to work on ToRs and generate deliverables as listed in the Table below.

	Meeting dates	Venue	Reporting details	Comments (change in Chair, e
Year 2016	25–26 October	Hamburg, Germany	Interim report by 1 December 2016 to SSGIEOM, SCICOM & ACOM	New Chair
Year 2017	10-11 October	Boulogne sur M France	Interim report by 17 November to SSGIEOM, SCICOM & ACOM	
Year 2018	TBD	TBD	Final report by XXX XXXX to SSGIEOM SCICOM & ACOM	

## ToR descriptors

ToR	Description	Background	Science Plan topics addressed	Duration	Expected Deliverables
a	Review results of the 2016-2018 surveys and plan for the 2017-2019 Survey	In 2017-2019, the MIKey-M net sampling will be conducted during the IBTS-MIK sampling	4.28, 4.30	Year 1, 2, 3	Report: reviewing survey results, need for improvment and plan for potential collaborative publications
b	Study the spatio- temporal distribution of winter spawning habitats	Spawning grounds are of primary relevance for fish stock renewal. They experienced inter-annual and long-time spatial variations that need to be quantified and related to environmental/biotic variations.	1.1, 4.28, 4.30	Year 3: Samples will be collected every year, but will be analysed every three years.	Report : review current and past spatial distribution of winter spawning grounds in the North Sea.
c	Write the MIKey-M Net manual	In 2012, a new net called the MIKey-M net was developped to collect fish eggs alongside the MIK sampling during the IBTS. Since 2012 it has been used each year, there is a need for a standard manual as recommended by ICES.	4.28, 4.30	Year 1	SISP: describe the MIKey-M Net, its implementation during the IBTS since 2012 and instructions for sampling
d	Prepare WGEGGS2 data for archiving	WGEGGS2 data need to be prepared and uploaded in the ICES Eggs and Larvae database	4.28, 4.30	Yearly, once the data is published	Data uploaded to the ICES Eggs and Larvae database by the ICES data centre and WGEGGS2 coordinator
e	Review results on molecular identification of	There is a potential problem in the visual identification of stage I gadoid eggs and in some areas it will	4.28, 4.30	Year 1, 2, 3	Report: review methods for genetically

	eggs	be necessary to utilise genetic techniques for species identifications where spawning locations of gadoids exist. The means to undertake genetic identifications should be sought were possible			identifying eggs
f	Publish first results of 2012- 2015 surveys	MIKey-M net samples represent a huge amount of data and scientific insights on winter fish spawning grounds in the North Sea that need to be published.	4.28, 4.30	Year 3	Report: list of scientific publications based on 2012-2015 surveys

## Summary of the Work Plan

Year 1	Discuss results of the 2016 survey and plan for the 2017 survey	
Year 2	Discuss results of the 2017 survey and plan for the 2018 survey	
Year 3	Discuss results of the 2018 survey and plan for the 2019 survey	

## Supporting information

Priority	The surveys are important in that they provide information on spawning location cod, plaice and other commercial (e.g. saithe and Norway pout) and non-commer species. These results are important in relation to ongoing ecosystem based management issues. Consequently, these activities are considered to have a high priority.			
	Objectives:			
	<ul> <li>Describing spawning habitat, in terms of environmental parameters (e.g. temperature, salinity, density) and geographical position, of winter spawning fish species in the North Sea.</li> </ul>			
	<ul> <li>Changes in ecosystem functioning: Describing temporal variation in the spawning habitats and early detection of changes.</li> </ul>			
	<ul> <li>Added value to routine surveys: Collecting extra information on ichthy- oplankton on the existing IBTS and IHLS surveys.</li> </ul>			
	WGEGGS2 recommends the continuance of the survey time-series by future surveys through incorporation into the IBTS and IHLS surveys, following the ICES ecosystem appraoch based surveys plan. The survey can be conducted in accordance with IBTS and IHLS surveys and WGEGGS2 recommends undertaking regular surveys for monitoring spawning areas of main fish species, which has been recommended as a high priority for Ecosystem Based Approach to Management by the Bergen Declaration Meeting of Scientific Experts.			
Resource requirements	The research programmes which provide the main input to this group are already underway, and resources are already committed.			
	ICES secretariat support for WGEGGS2 reports only and advice from the ICES Data Centre is required archival of the survey data.			
Participants	The Group is normally attended by 5-7 members and guests.			
Secretariat facilities	ICES secretariat support for WGEGGS2 reports only.			
Financial	No financial implications.			
Linkages to ACOM and groups under ACOM	Data are required by the ICES Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak			

e e	There is a very close working relationship with the IBTSWG and WGALES.
or groups	
Linkages to other organizations	No formal linkages.