

**WGINOR – Working Group on the Integrated Assessments of the Norwegian Sea
2015/MA2/SSGIEA09**

A Working Group on the Integrated Assessments of the Norwegian Sea (WGINOR), chaired by Guðmundur J. Óskarsson, Iceland, and Per Arneberg, Norway, will work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	VENUE	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 2016	28 November-2 December	Bergen, Norway	Interim report by 9 January 2017 to SSGIEA	
Year 2017	27 November-1 December	Torshavn, Faroe Island	Interim report by 8 January 2018 to IEASG	
Year 2018	26–30 November	Reykjavik, Iceland	Final report by 7 January 2019 to IEASG	

ToR descriptors

ToR	Description	Background	Science Plan topics addressed	Duration	Expected Deliverables
a	Perform up to date integrated assessment for the Norwegian Sea ecosystem focussing on fisheries, but also considering other human pressures.	<i>a) Science Requirements</i> <i>b) Advisory Requirements</i>	1, 6, 7, 9, 19, 20, 27, 30	Years 1-3	Report to SSGIEA in 2019 and research papers
b	Utilize multispecies and ecosystem models to investigate effects of single and multispecies harvest control rules on fishing yield and ecosystem state for the purpose of developing ecosystem based advice.	<i>a) Science Requirements</i> <i>b) Advisory Requirements</i>	5, 19	Years 1-3	Report to SSGIEA in 2019 and a research paper
c	Update the Ecosystem Overview for the Norwegian Sea.	<i>a) Science Requirements</i> <i>b) Advisory Requirements</i>	1	Year 3	Ecosystem Overview to SSGIEA in 2019

Summary of the Work Plan

Year 1	Focus on understanding expectations of IEA end-users, continue the compilation of relevant time-series, and continue the work on integrated assessment for the Norwegian Sea
Year 2	Focus on, through modelling, single vs. multispecies harvest control rules for development on ecosystem based advice, and outstanding issues for integrated assessment,
Year 3	Focus on advancing IEA in management advice, revise the time series, perform integrated assessment, and update the Ecosystem Overview.

Supporting information

Priority	WGINOR aims to conduct and further develop Integrated Ecosystem Assessments for the Norwegian Sea, as a step towards implementing the ecosystem approach.
Scientific justification	<p>Term of Reference a)</p> <p>There have been international fish-plankton centred surveys in the Norwegian Sea in May and since the mid 90s. In the most recent years these surveys have transitioned into ecosystem surveys that capture most of the key components of the ecosystem. These data sets are a firm foundation for undertaking integrated assessment of ecosystem status in the Norwegian Sea which is yet to be done. A fairly recent book on the Norwegian Sea ecosystem is a good starting point for the assessment.</p> <p>Term of Reference b)</p> <p>At present a multispecies fisheries model and an end to end ecosystem model are being set up for the Norwegian Sea. These models are ideal for investigating the effects of existing single species and alternative multispecies harvest control rules on the ecosystem structure and functioning. Although there is some petroleum exploration in the outskirts of the Norwegian Sea, fishing by far represents the most important anthropogenic impact on this ecosystem. The model analyses will be an integrated part of the assessment.</p> <p>Term of Reference c)</p> <p>Update ecosystem overview for the Norwegian Sea.</p>
Resource requirements	Several national and international research projects support the activities indicated and no further resources are needed in the short term. In the long term the group should try to develop an integrated project
Participants	We expect around 15 people to attend.
Secretariat facilities	None.
Financial	No financial implications.
Linkages to advisory committees	It is very important to link this group to ACOM and ensure cooperation between science and advice.
Linkages to other committees or groups	There are linkages to the other regional seas programmes and WGIPS which is the survey planning group and WGWIDE where the stock assessment for the key pelagic Norwegian Sea stocks is performed.
Linkages to other organizations	No recognised links.