WGINOSE - Working Group on North Sea Integrated Ecosystem Assessment

2020/FT/IEASG01 The **Working Group on North Sea Integrated Ecosystem Assessment (WGINOSE)**, chaired by Andrew Kenny, UK and Erik Olsen, 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 2021	10 - 14 May	Online meeting	E-evaluation	
Year 2022	TBD April/May	ICES HQ	E-evaluation	
Year 2023	TBD April/May	ICES HQ	Final ICES Scientific Report by 31st May to IEASG	

ToR descriptors[1]

ToR	Description	Background	Science Plan Codes	Duration	Expected Deliverables
a	Update and operationalise strata specific ecosystem trends analysis including the development and/or application of 'warning' indicators of ecosystem state by working closely with WGECO, WGSFD and WKINTRA. Investigate methods for communicating trends in ecosystem state, especially significant changes, using ecosystem summary sheet or report card style approaches.	a) Science Requirements b) Support Advisory Requirements c) Requirements from other EGs	1.1, 2.1	3 years and on-going annually	Review paper on report card/ESS methods in supporting IEA science that supports advice
b	Operationalise the integration of human activity and pressure data, including data pathways, into strata specific IEAs for the Greater North Sea Ecoregion distinguishing between fixed structures (e.g. pipelines, windfarms) and on-going activities (e.g. dredging, fishing, shipping, underwater noise, litter) by working with WGSFD, WGSHIP, WGCEAM to establish appropriate methods for CEAs	a) Science Requirements c) Requirements from other EGs	4.1	3 years and on-going annually	Updated dynamic map of assessed human activities, pressures and impacts for WGINOSE webpage.

[1] Avoid generic terms such as "Discuss" or "Consider". Aim at drafting specific and clear ToR, the delivery of which can be assessed

c	Continue to develop and test/validate strata specific decision support tools to support ecosystem management and advice (e.g. through mental models, bow-tie and EwE/Ecospace models and network analysis)	a) Science Requirements	2.2, 2.3, 3.2	3 years and ongoing annually	Paper on application of validated qualitative ecosystem models in supporting ecosystem assessments and management advice
d	Update the greater North Sea Ecosystem Overview as required	a) Science Requirements b) Advisory Requirements c) Requirements from other EGs	1.2, 2.1	As required - ongoing	Updated North Sea ecosystem overview

Summary of the Work Plan

Year 1	The first year will focus on further development of strata specific trend analysis and communication, especially in relation to 'warning' indcators and scoping ecosystem summary sheet/report card reporting at the North Sea scale. Work will also begin on drafting a review paper on trend analysis methods and communication approaches for IEA science that supports advice. Updates on human activities, pressures and impacts, especially in relation to CPUE and fisheries data from the English Channel will be undertaken. Further development of ecosystem assessment support tools, especially in relation to validating conceptual model outputs will be undertaken and a paper describing the integration of quantitative/qualitative models will be finalised.
Year 2	In addition to continuing work on the above items, a stakeholder workshop will be convened for the Kattegat so as to update stakeholders and managers on the validation and refinement of the Kattegat asessment tool/model, effectively as a follow on to WKKEMSSP. Plans will also be initiated to implement additional strata specific EwE models of the North Sea (e.g. Southern Bight and Norwegian Trench) so as to initaite subsequent follow-up engagement with stakeholders in these two regions. An update of the North Sea ecosystem overview will also be initiated this year.
Year 3	In addition to continuing with activities initiated in year 1 and 2, additional stakeholder workshops wil be organised as follow-on to either the Norwegian Trench and/or Southern Bight strata.

Supporting information

Priority	The current activities of this Group will lead ICES into issues related to the development of Integrated Ecosystem Assessments for the North Sea (a data rich ecosystem) as a step towards implementing the ICES Science Plan and the ecosystem approach, these activities are considered to have a very high priority.
Resource requirements	Assistance of the Secretariat in maintaining and exchanging information and data to potential partcipants, especially the services of the ICES data centre to generate data tables for analysis from selected variables held in the database and potentially web-hosting relevant material
Participants	The Group is generally attended by 10–20 members and guests.
Secretariat facilities	None.
Financial	No financial implications.
Linkages to ACOM and groups under ACOM	Relevant to the work of ACOM and SCICOM
Linkages to other committees or groups	There is a very close working relationship with all the IEASG working groups. It is also very relevant to the following ICES expert groups: WGSFD, WGECO, WGSHIP, WGCEAM, WKINTRA, WGBESIO, WGFBIT
Linkages to other organizations	OSPAR, NAFO, DG-ENV, DG-MARE