

Working Group on Integrated Ecosystem Assessment of the Greenland Sea (WGIEAGS)

2019/FT/IEASG05 Working Group on Integrated Ecosystem Assessment of the Greenland Sea (WGIEAGS), chaired by Jesper Boje*, Denmark/Greenland, and Colin Stedmon*, Denmark, will work on ToRs and generate deliverables as listed in the Table below.

	Meeting dates	Venue	Reporting details	Comments (change in Chair, etc.)
Year 2020	February 11-13	ICES HQ, Copenhagen, Denmark	Interim report to ICES by 30 th April	
Year 2021	January TBD	Nuuk, Greenland	Interim report to ICES by 30 th April	
Year 2022	January TBD	Copenhagen, Denmark	Final report to ICES by 30 th November	

ToR descriptors¹

TO R	DESCRIPTION	BACKGROUND	SCIENCE PLAN CODES	DURATION	EXPECTED DELIVERABLES
a	Assemble relevant data for describing spatial and temporal changes in the Greenland Sea	The database will contain physical, chemical and biological (incl. higher trophic levels) oceanographic data.	1.1	Years 1-3	Merged database. Metadata to be reported to ICES.
B	Review and consider methodological approaches and analytical tools for conducting integrated ecosystem assessment for the Greenland Sea	Before starting data analysis, basic discussions on suitable methodological/analytical approaches are required. This can be started after initial datasets are assembled.	1.1	Years 1-3	Report to ICES
C	Report on the status and trends of the Greenland Sea, based on integrated analysis of multivariate datasets, incl. associated with major hydroclimatic changes and human activities	This ToR will be based on activities and advancements of the above. It is a hope to produce scientific manuscript.	1.1	Years 2-3	Report to ICES. Manuscript to be submitted to peer-reviewed science journal
d	Prepare an Ecosystem Overview for the Greenland Sea	This is advisory requirement.	1.3	Year 1	Ecosystem Overview submitted to ICES

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

e	Identify knowledge gaps and priority research needs to improve future integrated ecosystem assessments. Provide recommendations for improvement of data collection and monitoring in the ecoregion	To further advance the IEA for the region, identification of knowledge and data gaps is inevitable, together with considering improvements in data collection.	1.1, 3.1, 3.2	Year 3	Report to ICES
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Summary of the Work Plan

Year 1	<p>Start assembling relevant data that can be used to describe spatiotemporal changes in the Greenland Sea. Create first merged database containing physical, chemical and biological (incl. higher trophic levels) oceanographic data.</p> <p>Develop Ecosystem Overview (as advice request).</p> <p>Start discussions on methodological approaches and analytical tools for conducting integrated ecosystem assessment.</p> <p>Identify additional scientists/partners and invite them to join the EG.</p>
Year 2	<p>Continue assembling relevant datasets and update the database.</p> <p>Continue discussions on methodological approaches and analytical tools for conducting integrated ecosystem assessment. Prepare first analysis on the ecosystem status and trends.</p>
Year 3	<p>Finalise the database.</p> <p>Prepare manuscript on the status and trends of the Greenland Sea ecosystem.</p> <p>Identify knowledge gaps and priority research items that can improve future integrated ecosystem assessments and provide recommendations to improve the monitoring.</p>

Supporting information

Priority	<p>igh. A status for the region is currently lacking and at the same time the region are experiencing change and is a potential candidate to continue severe changes.. Arctic amplification of global warming and increaseing meltwater flux from Greenland icesheet are changing the oceanographic conditions. Biological resources are subsequently also shifting in response. This effort will set the baseline in the process to permit sustainable development regional fisheries.</p>
Resource requirements	<p>Past and current research programs will provide the data. These will be gathered from public databases and through research networks. There are no current external funds to support the initiative so it will be started with in kind contributions from DTU and GINR in the form of person months. Once underway national funds will be sought via respective national ministries.</p> <p>The research initiatives that may arise from the activity have the opportunity to align with EU framework funding.</p>
Participants	<p>Initiated by DTU and GNIR participation will be seeked from Iceland and Norway, with expertise spanning oceanography and fisheries. Participants from other nations are also welcomed.</p>
Secretariat facilities	<p>SharePoint site. Support for meetings at ICES HQ, when appropriate</p>
Financial	<p>No financial implications</p>
Linkages to ACOM and groups under ACOM	<p>Link to ACOM through development of Ecosystem Overview, NWWG and WGWIDE.</p>
Linkages to other committees or groups	<p>All ICES IEASG expert groups, several EGs under APISG (human pressures) and EPDSG</p>
Linkages to other organizations	<p>Arctic Council, PAME, IASC, NEAFC</p>