

A Working Group on Cumulative Effects Assessment Approaches in Management (WGCEAM), chaired by Vanessa Stelzenmüller, Germany, Roland Cormier, Germany, and Gerjan Piet, the Netherlands, will be established and will work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	VENUE	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 2019	28 October – 1 November	ICES HQ, Copenhagen, Denmark		
Year 2020	TBD October	TBC		
Year 2021	TBD October	TBC	Report by DATE to SCICOM	

## ToR descriptors

ToR	Description	Background	<u>SCIENCE PLAN</u> <u>CODES</u>	Duration	Expected Deliverables
a	Develop a cumulative effects assessment (CEA) framework suited to guide science advice on the development and implementation of ecosystem-based management	While the need for CEAs is widely accepted, their actual implementation in marine planning and management processes is yet to be seen. A common framework requires a review of the differences in the factors (data, knowledge, decision-process) being considered regarding cumulative effects assessment (CEA) in relation to environmental policies, an ecosystem approach to marine spatial planning (MSP) and regulatory processes. The framework should clearly outline: a) Science Requirements b) Advisory Requirements c) Requirements from other EGs	6.1, 6.2, 6.6,	Year 1	CEA framework suited to guide science advice on the development and implementation of ecosystem-based management.
b	Demonstrate the application of the CEA framework in one or more regional case studies	To advance the development of a generic CEA methodology and identify real research gaps one or more case studies will be used as a proof of concept. The initial focus should be on the North Sea and a Canadian bioregion where the CEA is conducted with the available knowledge base..	6.1,6.2	Years 2	Scientific paper describing the application of the CEA framework in one or more regional case studies.
c	Produce generic guidance on data and knowledge needs for CEA's including: using qualitative and quantitative data, accommodating uncertainty, identifying information gaps based on the application of the framework in the above case studies	The application of the framework in case studies allows to i) indicate useful tool(s) for each step, ii) show the indicative datasets and types of data required in carrying out a CEA, iii) develop straight forward visualization tools for pressures, and iv) demonstrate end products and engage with potential clients. The latter point is essential to scope the potential	6.1, 6.2,	Year 3	Generic guidance on data and knowledge needs for CEA's.

		usefulness of CEAs as part of ecosystem advice provided by ICES			
d	Liaise with other fora or expert groups both within ICES (i.e. Secretariat, Data Centre or expert groups) as well as outside ICES (e.g. OSPAR, EEA, HELCOM, JPI Oceans, CEAF, DFO, TC, ECCC) to work towards and consolidate a common CEA framework	The consolidation of a common CEA framework requires a continuous collaboration and exchange of expertise with other groups and fora working on CEAs	6.2, 6.4, 6.5	Year1-Year 3 (ongoing)	Consolidated common CEA framework.

### Summary of the Work Plan

Year 1	During the first year the linkages to other groups working on CEAs have to be identified and established. The main goal is the development of a common and consolidated CEA framework allowing to implement CEA in different settings regarding data, knowledge, and decision-processes.
Year 2	In the second year the work will focus on the application of the CEA framework in case study areas. The North Sea and a Canadian bioregion will be the first case studies since data availability and relevant scientific knowledge is most advanced.
Year 3	Emphasis will be on the provision of guidance on data and knowledge needs when applying the common framework. This guidance will lead into a final recommendation on the usefulness of CEAs as part of ecosystem advice provided by ICES.

### Supporting information

Priority	The current activities of this Group will lead ICES into issues related to the ecosystem effects of all marine human activities including fisheries, especially with regard to the application of the Precautionary Approach. Consequently, these activities are considered to have a very high priority.
Resource requirements	The research programmes which provide the main input to this group are already underway, and resources are already committed. The additional resource required to undertake additional activities in the framework of this group is negligible.
Participants	The Group is normally attended by some 20–25 members and guests.
Secretariat facilities	None.
Financial	No financial implications.
Linkages to ACOM and group under ACOM	There are no obvious direct linkages.
Linkages to other committees or groups	There is a very close working relationship with all the groups under HAPISG. It is also very relevant to WGINOSE.
Linkages to other organizations	There are strong linkages to the OSPAR and HELCOM work on CEAs.