Resolution for Strategic Initiative on Climate Change Impacts on Marine Ecosystems (SICCME)

2020/2/ACOMSCICOM01 The ICES-PICES Strategic Initiative on Climate Change Impacts on Marine Ecosystems (SICCME), chaired by Jacquelynne R. King (Canada, PICES), Xiujuan Shan (China, PICES), Christian Möllman (Germany, ICES) and Mark Payne (Denmark, ICES) will work on ToRs and generate deliverables as listed in the Table below.

	Meeting dates	Venue	Reporting details	Comments (change in Chair, etc.)
2020	March	-	Update to SCICOM March meeting	Change in chairs
	Sept	Copenhagen, Denmark	Update to SCICOM Sept. meeting	Side meeting in conjunction with ICES ASC
2021	March	-	Update to SCICOM March meeting	
	Sept	ICES ASC	Update to SCICOM Sept. meeting	Side meeting in conjunction with ICES ASC
2022	March	-	Update to SCICOM March meeting	
	Sept	ICES ASC	Update to SCICOM Sept. meeting	Side meeting in conjunction with ICES ASC

ToR descriptors

ToR	Description	Background	Science plan codes	Duration	Expected Deliverables
a	Foster collaborative research between ICES and PICES to investigate the impacts of climate change on marine ecosystems, under the ICES-PICES strategic framework for cooperation	Strategic collaboration between ICES and PICES	1.1, 2.5, 6.1	3 years	Strong and ongoing interactions between ICES and PICES
b	Communicate and advance our understanding of climate change and its impacts on marine ecosystems by organizing workshops, theme sessions and conferences over the next 3 years	Help coordinate climate-change science within ICES and PICES	2.5, 5.2, 6.1	3 years	Initiation of at least one explicitly SICCME-related theme session per ICES ASC and PICES Annual Meeting. Contribution to organisation of ECCWO conferences.
c	Define and foster research activities needed to understand, assess, predict and project climate change impacts on marine ecosystems for sustaining the delivery of ecosystem goods and services;	Support to achieving Science plan goals	2.5, 6.1, 7.6	3 years	Provision of ongoing support for expert groups in delivering Science Plan tasks

d	Define and quantify the vulnerability of marine ecosystems and key living marine resources to climate change, including the cumulative impacts and synergetic effects of climate and marine resource use;	Support to achieving Science plan goals	2.2, 2.5, 6.6	3 years	Provision of ongoing support for expert groups in delivering Science Plan tasks
e	Combine and compare available projections of climate impacts stemming from national and/or regional programmes examining marine habitats, living marine resources fish and the human communities that depend on them across the ICES, PICES and other areas	Provide basis for intercomparisons and collaborations between work in ICES and PICES	2.5, 6.1, 7.6	3 years	Organisation of an intercomparison workshop
f	Synthesize and share among expert groups and the wider ICES and PICES community the knowledge developed through achieved through working experts groups, workshops and symposia in reports, publications and other high level communications	Help coordinate climate-change science within ICES and PICES	2.5, 5.2, 7.6	3 years	Provision of ongoing support for expert groups in delivering Science Plan tasks
g	Provide knowledge to the scientific community (including ICES advisory products), national and global advisory bodies such as the IPCC and IPBES, on the impacts of climate change on marine ecosystems	Support Science Plan goals and activities of advisory bodies	6.1, 7.6	3 years	Inputs of knowledge and exchange of knowledge among science and advisory bodies
h	Identify scientific priorities relating to the study of the impacts of climate change on marine ecosystems and report on these at least annually to the ICES Science Committee and the PICES Science Board so the priorities can be considered for development within relevant groups or programs	Support to Science Plan goals and SCICOM	2.5, 6.1, 7.6	3 years	Annual update to Sept. SCICOM meeting on scientific priorities and relevant developments

Summary of the Work Plan

The work plan is centered around the delivery of regular outputs (e.g. contributions to conferences, ToR b, identifying science priorities (ToR h)). In addition, the initiative will also contribute to new initiatives as appropriate and as they become available. Annual meetings are key to these new initiatives and are planned as part of the 2020, 2021 and 2022 ICES ASC. Additional meetings will be held opportunistically in associated with (as side events) ICES-PICES sponsored symposia. A key event is the 5th Effects of Climate Change on the World's Oceans Symposium (tentatively scheduled for June 2023 in Bergen, Norway). Additional, intersessional communication will occur via email, online meetings, etc.

Supporting information

Priority	High. ICES has several strategic research plans and documents related to understanding and investigating the impacts of climate change on marine ecosystems, and wants to strengthen collaborative ties with PICES. This initiative will address both issues. It will also contribute to ICES capacity to provide a joint ICES-PICES goal of becoming the leading international organization providing science and advice related to the effects of climate change and variability on marine resources and ecosystems. It will also contribute to PICES capacity to provide joint ICES-PICES monitoring programs, international collaborations and research which relating to projecting climate change impacts on marine ecosystems and developing strategies for sustaining the delivery of ecosystem goods and services.
Resource requirements	Secretariat support for running theme sessions, workshops, and conferences
Participants	8–10 core members . Up to 75 participants at SICCME events.
Secretariat facilities	Assistance with organising workshops and with website (increased functionality)
Financial	The budget request of SICCME is 60,000 DK. These funds will be used over a 3-year period from 2020-2022: 1) 36 000 DK to cover rental costs (rooms and food) associated with 4 regional comparison (PI) workshops (9000 x 4). The remaining 24 000 DK will be used to cover travel costs of early career researchers (6000 x 4) to workshops and training courses.
Linkages to ACOM and group under ACOM	ACOM
Linkages to other committees or groups	Ecosystem Processes and Dynamics Steering Group (EPDSG) Human Activities, Pressures and Impacts Steering Group (HAPISG) Strategic Initiative on Human Dimensions (SIHD) Working Group on Seasonal-to-Decadal Prediction of Marine Ecosystems (WGS2D) Working Group on Integrative, Physical-biological and Ecosystem Modelling (WGIPEM) Working Group on Impacts of Warming on Growth Rates and Fisheries Yields (WGGRAFY)
Linkages to other organizations	EC, EEA, Regional Seas Conventions, IPCC, IPBES, FAO, IOC, World Bank, large marine science programs (e. g., IMBER, Future Earth)