

Strategic Initiative Resolutions

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Strategic Initiative on the Human Dimension (SIHD)

2020/2/ACOMSCICOM01 The ICES Strategic Initiative on the Human Dimension (SIHD), chaired by Alan Haynie (US) and Johanna Ferretti (Germany), will conduct activities from 2020 to 2022. SIHD will promote consideration of human dimensions to strengthen ICES progress towards achieving its vision “to be a world-leading marine science organization, meeting societal needs for impartial evidence on the state and sustainable use of our seas and oceans.” SIHD will strive to expand the role and consideration of social science in ICES. This involves recognition of seas and oceans as socio-ecological systems and the interdisciplinary nature of scientific challenges. It also involves enhanced communication and engagement of both natural and social scientists with maritime stakeholders - resource users, policy makers, and other interest groups.

SIHD will pursue activities to support implementation of ICES Advisory Plan priorities of “Incorporating innovation” and “Evolving advice” and to support delivering all aspects of the ICES Science Plan, especially tasks under “Conservation and management science” and “Sea and Society”. SIHD will centre its works around three areas of activity (detailed in the ToRs) which are complementary and interdependent:

1. **Coordination.** Lead the integration of social science throughout ICES.
2. **Social Science Research.** SIHD will develop and synthesize research methods and procedures within and across ICES-related social sciences research (disciplinary), across ICES expert groups (social and natural sciences, interdisciplinary), and through stakeholder participatory processes, especially in IEAs, ecosystem overviews, and fisheries overviews.
3. **Communication and outreach:** this field of activity addresses outreach activities (conferences, workshops), networking, and knowledge (communicating SIHD work).

Year	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	Copenhagen, Denmark	Update to SCICOM March meeting	New Chair will begin
	Sept	ICES ASC	Update to SCICOM Sept. meeting	Side meeting in conjunction with ICES ASC
2022	March	Copenhagen, Denmark	Update to SCICOM March meeting	
	Sept	ICES ASC	Update to SCICOM Sept. meeting	Side meeting in conjunction with ICES ASC

Terms of Reference (ToR) Descriptors 2020–2022

TOR	DESCRIPTION	BACKGROUND	DURATION	SCIENCE PLAN CODES	POTENTIAL DELIVERABLES AND ACTIVITIES
a	Coordinate social science activities across ICES; represent social science in the Science Committee and other ICES bodies	Supporting SIHD-related expert groups and support delivering Science Plan tasks	3 years	6.1-6.6, 7.1-7.7	Attend EG meetings; organize workshops with SIHD expert groups; quarterly communication with expert group chairs; summarize social science activities to diverse ICES groups
b	Further develop interdisciplinary discourse and methods across ICES	Support of effective communication between ICES social and natural sciences	3 years	1.9, 2.1, 2.7, 3.1, 4.1, 5.7, 6.5, 6.6, 7.1, 7.2	Develop and communicate best practices for interdisciplinary research and integrated advice; SIHD annual meeting at the ASC
c	Expand social science research, methods, and data in the ICES advisory process and products and wider marine decision-making venues	Support and highlight the needs of the advisory process and requestors of advice and support coherent and evidence-based policy	3 years	1.9, 2.1, 2.7, 3.1, 4.1, 5.7, 6.2, 6.3, 6.5, 6.6, 7.2, 7.4, 7.6	Specify key components of ICES IEAs, ecosystem, aquaculture, and fisheries overviews which can benefit from the involvement of social scientists; WKCONSERVE2
d	Support implementation of the ICES Strategic Plan, Science Plan and Advisory Plan through the SIHD Roadmap	Reflect and share the evolving priorities and work of the ICES SIHD community and support implementation of ICES priorities	3 years	2.1, 2.7, 3.1, 3.2, 3.5, 4.1, 4.3, 4.4, 5.1, 5.3, 5.4, 5.8, 6.1-6.6, 7.1-7.7	Revised and ongoing development of SIHD Roadmap; SIHD Expert Group chairs workshop
e	Develop methods and procedures to integrate social scientific knowledge, evidence, and research	Objective of including more economic, social, and cultural information in its advisory products; support description, assessment, and valuation of state of and changes in the human dimension of EBM	3 years	2.1, 2.7, 3.1, 3.2, 3.5, 4.1, 4.3, 4.4, 5.1, 5.3, 5.4, 5.8, 6.2, 6.5, 6.6, 7.1, 7.2, 7.5	Develop and use social, governance-related, cultural and economic indicators; expert group papers (e.g. on best practices for social sciences inclusion in interdisciplinary work; comparative research)
f	Explore means and approaches to enhance participatory and informatory processes to consult stakeholders and	Seek opportunities to enhance legitimacy of ICES science and advice	3 years	3.6, 6.3, 7.4, 7.5	Stakeholder interaction workshop

involve wider civil society

g	Strengthen and develop links with existing organizations and initiatives outside ICES dealing with social science in the marine realm.	Expand the ICES human dimensions network Strengthening social sciences partnerships, including with PICES	3 years	6.1, 6.2, 6.3, 6.6, 7.7	Present research in conferences and workshops (e.g. MSEAS 2020, 2024); provide a point of entry for social scientists to participate in ICES work; engage in dialogue with human dimensions networks outside the ICES community
h	Extend SIHD outreach through academic papers, presentations and other communication channels	Structuring and synthesizing SIHD knowledge and evidence for outreach	3 years	3.6, 6.1, 6.2, 6.3, 6.6, 7.7	Present research in conferences (e.g. MSEAS 2020, 2024); initiation of a SIHD-related theme session at ASCs

Summary of the Work Plan

The work plan is centered around the delivery of regular outputs as listed in the ToRs, in the three areas outlined above. In addition, the initiative will also contribute to new workshops, expert groups, and other outputs as appropriate. Annual meetings are planned as part of the 2020, 2021 and 2022 ICES ASC. Additional, intersessional communication will occur via email, expert group gatherings, online meetings, etc. While the ToRs note a number of specific Science Plan codes, it should be recognized that there are human dimensions elements to most of the Science Plan and the codes listed in the ToRs are not all-inclusive.

Human Dimensions includes all social sciences and humanities research that is focused on the role of humans in the marine environment. Throughout these ToR, we use 'human dimensions' and 'social science' interchangeably, recognizing that some researchers may consider their field to be part of the humanities or may identify primarily with a particular social science discipline such as economics.

Supporting Information

Priority	High. ICES has placed human dimensions activities, research, and advice at the core of its Strategic, Advisory, and Science Plans.
Scientific justification	The ICES Mission is "to advance and share scientific understanding of marine ecosystems and the services they provide and to use this knowledge to generate state-of-the-art advice for meeting conservation, management, and sustainability goals." Clearly, people, institutions, and markets are central to this Mission. The Science Plan similarly places understanding human behavior, impacts, management, and experience as central to ICES scientific priorities. The Advisory Plan also recognizes the importance of social scientific understanding, data, and analysis and its focus on incorporating innovation and evolving advice beckons more human dimensions contributions.

	<p>The SIHD was created in 2015 with reference to a number of questions that defined human activities and outlined the needs for human dimensions work in ICES with a strong focus on IEAs. The Strategic, Advisory, and Science Plans and the SIHD Roadmap have laid out a range of goals and priorities for SIHD in coming years. Over recent years, three new SIHD related experts groups have been created, WGECON, WGSOCIAL, and WGBESEO. These groups complement a number of human dimensions expert groups, including WGMARS and WGSEDA. A large number of expert groups have some level of human dimensions involvement, and a significant challenge for ICES in coming years is how to effectively expand and coordinate participation across groups, which reinforces the need for SIHD leadership and coordination.</p> <p>The SIHD Roadmap developed in 2018 by SIHD Co-chairs with input from ICES scientific leaders and SIHD members provided concrete steps and aspirational goals for SIHD. The Roadmap is being revised and will be presented to SCICOM at the ICES 2020 ASC. Over the coming years, the Roadmap will be revised as priorities, needs, and activities for human dimensions in ICES change.</p> <p>An ongoing challenge for human dimensions work in ICES is how to effectively communicate with stakeholders to meet research and policy analysis priorities. Working with SCICOM and ACOM, SIHD will improve stakeholder involvement in ICES to help ensure that ICES human dimensions activities are as responsive to stakeholder needs as possible.</p>
Resource requirements	Secretariat support for running theme sessions, workshops, and conferences
Participants	20–25 core members help to lead human dimensions activities in ICES, embedded in a large network of researchers active in SIHD workgroups, workshops, and ICES ASC theme and network sessions.
Secretariat facilities	Assistance with organising workshops and symposia (the latter being dependent on successful symposia resolutions)
Financial	<p>Funding will be provided by Council for the period 2020–2022 to support key activities of the SIHD. Specific planned activities for coming years include:</p> <ul style="list-style-type: none"> ● 2020/2021 ACOM/SCICOM Workshop on the future of the HD within ICES Travel money for SIHD co-chairs + invited experts (20'000 DKK); This WK will synthesise the work done in SIHD and develop a strategy for further work on social, cultural and economic issues within ICES for 2021 - 2024. ● 2021 ICES Ecosystem Advice meeting - Support Attendance of one SIHD Co-chair at (15'000 DKK) ● 2021 WKCONSERVE2 workshop - Support Attendance of one SIHD Co-chair (15'000 DKK).
Linkages to advisory committees	ACOM
Linkages to other committees or groups	IEASG, EPDSG, EPISG, WGMARS, WGIMM, WGSEDA, WGRMES, WGMPCZM, WGECON, WGSOCIAL, WGBESEO.
Linkages to other organizations	PICES, EC, EEA, Regional Seas Conventions, FAO, World Bank, IMBER, International Institute of Fisheries Economics and Trade (IIFET), EAFE, IPBES, STECF, JRC, IASC (International Association of the Study of the Commons), MARE

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

TO R	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 groups under ACOM	ACOM
Linkages to other committee: 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)