

WORKSHOP ON STAKEHOLDER ENGAGEMENT STRATEGY (WKSHOES)

VOLUME 3 | ISSUE 75

ICES SCIENTIFIC REPORTS

RAPPORTS
SCIENTIFIQUES DU CIEM



International Council for the Exploration of the Sea Conseil International pour l'Exploration de la Mer

H.C. Andersens Boulevard 44-46
DK-1553 Copenhagen V
Denmark
Telephone (+45) 33 38 67 00
Telefax (+45) 33 93 42 15
www.ices.dk
info@ices.dk

ISSN number: 2618-1371

This document has been produced under the auspices of an ICES Expert Group or Committee. The contents therein do not necessarily represent the view of the Council.

© 2021 International Council for the Exploration of the Sea.

This work is licensed under the [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/) (CC BY 4.0). For citation of datasets or conditions for use of data to be included in other databases, please refer to [ICES data policy](#).



ICES Scientific Reports

Volume 3 | Issue 75

WORKSHOP ON STAKEHOLDER ENGAGEMENT STRATEGY (WKSHOES)

Recommended format for purpose of citation:

ICES. 2021. Workshop on Stakeholder Engagement Strategy (WKSHOES).
ICES Scientific Reports. 3:75. 49 pp. <https://doi.org/10.17895/ices.pub.8233>

Editors

Alan Haynie • Vera Köpsel

Authors

Marta Ballesteros • Katie Brigden • Julia Calderwood • Gabriel de Moura Kiipper • Mark Dickey-Collas
David Goldsborough • Sílvia Gómez • Julie Krogh Hallin • Alan Haynie • Julie Kellner • Vera Köpsel
Sebastian Linke • Claire Macher • Steven Mackinson • Maria Cristina Mangano • Debbi Pedreschi
Jörn Schmidt • Lea Schönen • Lisa Settrington • Olivier Thébaud • Christian Wagner-Ahlts



ICES
CIEM

International Council for
the Exploration of the Sea
Conseil International pour
l'Exploration de la Mer

Contents

i	Executive summary	ii
ii	Expert group information	iii
1	Introduction.....	1
	1.1 Terms of References	2
	1.2 Workshop background and details	3
2	Brief history of stakeholder engagement in ICES	4
3	Stakeholder interaction goals, principles, and roles	6
	3.1 Goals of stakeholder engagement in ICES	6
	3.2 ICES principles of stakeholder engagement.....	6
	3.3 Definition and roles of ICES stakeholders	8
	3.3.1 Who is a stakeholder	8
	3.3.2 Roles of stakeholders.....	9
4	Elements of a stakeholder engagement strategy.....	14
	4.1 Key elements of the ICES Stakeholder Engagement Strategy.....	14
	4.2 Related literature of stakeholder engagement strategy in ICES and beyond.....	16
	4.3 Stakeholder engagement strategies of similar science organizations.....	18
5	Gaps, risks and opportunities.....	21
	5.1 Gaps	21
	5.2 Risks	21
	5.3 Opportunities.....	22
6	Communicating with the ICES community about stakeholder engagement	24
7	Stakeholder interaction activities within ICES.....	25
	7.1 Survey of ICES Expert Group Chairs	25
	7.1.1 Survey process summary	25
	7.1.2 Key results.....	25
	7.2 Monitoring, stakeholder engagement processes and activities	29
	7.2.1 Current stakeholder monitoring processes	29
	7.2.2 Suggestions for monitoring of stakeholder engagement	29
	7.3 Future social science training needs related to stakeholder engagement	31
8	Alternative approaches to improve inclusion and engagement	32
9	Discussion	34
	9.1 Summary of topics addressed.....	34
	9.2 Co-developing this strategy together with stakeholders.....	34
	9.3 Additional questions and topics that arose during WKSHOES.....	35
10	WKSHOES recommendations going forwards.....	36
11	References	37
Annex 1:	List of participants.....	39
Annex 2:	Resolution	40
Annex 3:	Final workshop agenda	42
Annex 4:	ICES Expert Group Chairs survey – questionnaire.....	45

i Executive summary

The ICES Workshop on Stakeholder Engagement Strategy (WKSHOES) met online 22-24 June 2021 with the objective to organize the background information needed for SCICOM and ACOM to develop a formal ICES Stakeholder Engagement Strategy.

Stakeholder engagement has taken an increasingly important role in ICES. There was a strong consensus in the workshop that stakeholder engagement is essential to ICES' work, as has been captured by the most recent ICES Strategic, Science, and Advisory Plans. The question is how to do it best. While WKSHOES recognized the essential nature of stakeholder engagement for addressing environmental challenges, understanding human impacts and values, the group discussed the valid concern that if stakeholder engagement is done incorrectly, it could compromise the perceived objectivity of ICES science and its independence. Workshop participants challenged the idea of objective or "pure" science, but also recognized the practical need to have ICES advice be transparent and science-based. Participants also understand that when providing advice, tradeoffs have to be made that are informed by the different weights that stakeholders place on various management objectives.

A key question related to a potential stakeholder engagement strategy is "Who is a stakeholder?" This report discusses several definitions and roles. A central challenge for ICES is recognizing that the network of stakeholders is a subset of the people impacted by ICES science and advice. The Stakeholder Engagement Strategy should therefore primarily focus on ensuring that people who are part of the ICES network have clear roles and responsibilities and that ICES performs its work fairly and transparently. However, participants also recognize the need to increase opportunities for diverse resource users and citizens to have clear avenues to engage with the different aspects of the ICES network. Considering and promoting diversity and inclusion and avoiding implicit bias are crucial in this process.

It is also essential to define clear goals for stakeholder engagement in general, and tangible objectives for each engagement activity in particular. Engagement objectives already formulated in various ICES documents are outlined in this report, as well as recommendations for guiding principles that provide the overarching frame of reference for engagement.

This Report serves as the primary output from WKSHOES, and represents the knowledge and opinions of workshop participants. WKSHOES recommends that in order to both complete the development of the strategy and conduct successful stakeholder engagement about it, a suite of communication activities is needed that should best be coordinated from a central contact point within ICES. WKSHOES recommends that after ACOM and SCICOM draft the strategy and obtain input from the ICES Council, a diversity of stakeholders should be invited to provide input on the WKSHOES report and the development of the Engagement Strategy. ICES should solicit input from stakeholders by early 2022 to agree on the contents of the Strategy and how it will be implemented. WKSHOES also recommends that a future Expert Group address the ongoing need to develop and communicate effective stakeholder engagement methods within the ICES network.

ii Expert group information

Expert group name	Workshop on Stakeholder Engagement Strategy (WKSHOES)
Expert group cycle	Annual
Year cycle started	2021
Reporting year in cycle	1/1
Chair(s)	Alan Haynie, US Vera Köpsel, Germany
Meeting venue(s) and dates	Online, 22-24 June 2021, 20 Participants



WKSHOES Participants. From the top left: Vera Köpsel (WKSHOES Chair), Sebastian Linke, Alan Haynie (WKSHOES Chair), Mark Dickey-Collas (ICES ACOM Chair), Gabriel de Moura Kiipper, Marta Ballesteros, Christian Wagner-Ahlf, David Goldsborough, Jörn Schmidt (ICES SCICOM Chair), Julia Calderwood, Katie Brigden, Lisa Settrington, Olivier Thébaud, Sílvia Gómez Mestres, Steven Mackinson. Missing from photo: Julie Krogh Hallin and Julie Kellner.

1 Introduction

The Workshop on Stakeholder Engagement Strategy (WKSHOES) met to address ICES' need to formalize its stakeholder engagement activities and develop a related strategy. As stakeholder interactions have become more a part of the ICES system, there are a number of processes that have evolved to support and monitor the involvement of stakeholders, with special attention given to the role of observers in the advisory process.

ICES values the disciplines, perspectives and expertise brought to the network by member country institutions, partners, clients, and other stakeholders^{1, 2}. Thus it is committed to working with stakeholders to achieve its mission and implement its plans.

The concept of working with stakeholders is explored in the ICES Advisory Plan³, where some of the challenges and goals of stakeholder engagement are described. When considering the legitimacy of advice, ICES notes that *“potential tensions may arise as the transparency and the interaction with stakeholders increase, in particular regarding the independence of the advice given”*. Hence ICES commits itself to *“work with stakeholders, and social scientists, to ensure a wider range of relevant scientific knowledge is incorporated into our advice consistent with the ecosystem approach”* and to *“[e]ngage stakeholders and advice recipients to develop current and future advice products”*.

Today the interactions between ICES and its stakeholders are many fold. As they have developed in an organic manner rather than in a planned process, however, there is a lack of a clear overview of the diversity, foci, stakeholder groups, and scientists involved in the current engagement processes. Moreover, these processes - taking place both in the knowledge production (= science) and the advice process - reflect no clear objectives, and methods, procedures, rules or boundaries are unclear for some of the activities (e.g. engagement in Expert Groups). The Terms of Reference for WKSHOES aimed to request that the workshop provide an overview of current stakeholder engagement activities as well as lay the foundation for developing a formalised ICES Stakeholder Engagement Strategy. This report gives a brief overview of the history of stakeholder engagement in ICES (Section 2); outlines envisioned stakeholder interaction goals, principles and roles (Section 3); proposes a table of contents for the Stakeholder Engagement Strategy (Section 4); highlights risks, gaps and opportunities in the stakeholder engagement process (Section 5); suggests how to communicate stakeholder engagement within the ICES system (Section 6); and presents WKSHOES' overview of ongoing engagement activities in ICES (Section 7). Section 8 discusses additional approaches to improve inclusion and engagement with stakeholders and in Section 9 the workshop experience is reflected upon. Section 10 summarizes WKSHOES' recommendations forward. As a whole, this report serves as a basis for ACOM and SCICOM to further develop the ICES Stakeholder Engagement Strategy.

1 This report draws liberally and at times directly upon the ICES Position Paper, Ballesteros and Dickey-Collas 2020.

2 ICES. 2019. Science Plan. <http://doi.org/10.17895/ices.pub.5469>

3 ICES. 2019. Advisory Plan. <http://doi.org/10.17895/ices.pub.5468>

1.1 Terms of References

The WKSHOES Terms of Reference (TOR, Annex 3) describe the tasks for this workshop. WKSHOES examined stakeholder interactions across ICES expert groups, assessed the needs and opportunities, and developed elements for a strategy to formalize stakeholder involvement in ICES groups. Specifically, WKSHOES addressed the following elements of the TOR.

a) Characterize potential ICES stakeholder interaction goals as well as the key elements of a stakeholder engagement strategy to achieve these goals, to be developed by ACOM/SCICOM following WKSHOES (Section 4.1).

b) Further describe these key elements of the strategy, e.g. objectives, roles, principles, boundaries, monitoring, evaluation, etc.

1. Consider relevant stakeholder interaction documents including the framing document developed by Ballesteros and Dickey-Collas (Section 4.2). Building on the Ballesteros and Dickey-Collas framing document, summarize the approaches taken by other similar and relevant international organisations (Section 4.3).

2. Develop and propose a table of contents for a Stakeholder Engagement Strategy to be developed by ACOM/SCICOM (Section 4.1) that clearly links the potential objectives with guiding principles (Section 3).

3. Discuss gaps, identify risks and opportunities that arise from the challenges identified (Section 5).

4. Consider the best means to effectively and transparently communicate with the ICES community about stakeholder engagement to ensure trust in the process (Section 6).

c) Research and report current stakeholder activities taking place *within* ICES, to inform the deliberations of ACOM/SCICOM, especially with regards to monitoring and evaluating the impact of stakeholder engagement against the goals of a strategy (Section 7).

1. Prior to the workshop, survey ICES expert group chairs to characterize current stakeholder involvement, perceived barriers and challenges, and goals for improving stakeholder engagement (Section 7.1).

2. Summarize current stakeholder monitoring / tracking⁴ processes and consider alternatives (Sections 7.2 - 7.4).

3. Discuss future social science training needs related to different stakeholder strategies (Section 7.5).

d) Propose alternative approaches (with associated risks) to improve and secure further inclusion and engagement by ICES with stakeholders (Section 8), such as future hybrid meetings.

In addition to these ToR, this report sets the background for the Engagement Strategy by outlining a brief history of stakeholder engagement in ICES (Section 2), discussing who is a stakeholder in the ICES context, and current processes of engagement in the organisation.

⁴ Some participants felt like this term was problematic, so we have tried to avoid it in the WKSHOES report and its recommendations.

1.2 Workshop background and details

Section 2 summarizes the history of stakeholder engagement in ICES. WKSHOES was conceived in 2020 and the terms of reference, scope of the workshop, and participant needs were discussed by the workshop Chairs, the ACOM and SCICOM Chairs, and a diversity of stakeholder engagement experts active in the ICES community. Below is a timeline of activities from recent months.

- February 2021 - WKSHOES Resolution submitted to ACOM / SCICOM Forum for comments; comments addressed; resolution accepted.
- March - May 2021: preparations of workshop by Chairs in dialogue with ACOM and SCICOM Chairs
- May 28 - June 11, 2021: ICES Expert Group Chairs online survey carried out (Survey questionnaire see Annex 4; survey result summary see Section 7.1)
- June 22-24, 2021: WKSHOES takes place virtually (Final agenda see Annex 2)
- June 25 - July 22, 2021: joint compilation of workshop report
- July 31, 2021: final editing and submission of report by WKSHOES Chairs.

ACOM and SCICOM will write the Stakeholder Engagement Strategy for approval by the ICES Council.

2 Brief history of stakeholder engagement in ICES

The Process of Opening Up to Stakeholder Engagement

Dickey-Collas & Ballesteros (2021) analyze the process in ICES of opening up to increased stakeholder engagement from 1980 to 2020. The history of stakeholder engagement in ICES is, like the history of the organisation per se, characterised by institutional reforms and organisational learning. These reforms are further described in Dickey-Collas & Ballesteros (2021). The authors found that the opening-up of ICES for the involvement of stakeholders began in 1980 with the first Dialogue Meeting with fisheries management representatives. In 1982, the scope was broadened by engaging with fishing industry representatives. The meetings were considered useful as they increased mutual understanding and widened participation in discussions about ICES. In 1996, as a result of a crisis funding the advice system, ICES initiated the Working Group on Cooperative Procedures (WGCOOP) with requesters of advice (clients). The funding issues were settled, but the working group persisted and morphed into the annual Meeting with ICES Client Commissions (MICC) in 2004. MICC included both requesters and also representatives of governments of ICES member countries. In 2012, MICC became known as the Meeting between ICES and Recipients of ICES Advice (MIRIA) and is now seen as a major tool in maintaining the relevance and salience of ICES advice.

By 2000, ICES was still relatively closed to stakeholder engagement but their involvement in science activities was gaining momentum. This was catalysed by concepts like post-normal science. In 2002, the reform of the EU Common Fisheries Policy (CFP) formed the Regional Advisory Councils (RACs), which were increased in number under the new name of Advisory Councils (ACs) in the CFP reform of 2014. The ACs are stakeholder platforms with representatives of the harvesting, processing and marketing industries, NGOs, consumer associations and other civil society organizations. They provide for institutionalised, inter-stakeholder dialogue as well as formal interaction directly with the European Commission. ICES initiated annual meetings with the RACs in 2006, and broadened these meetings to include representatives from non-EU member countries and official observers in 2015 (called MIACO). Relevant advice is also presented to each of the ACs by ICES scientists throughout the year and discussed with its members.

In recent decades, ICES has worked with requesters, stakeholders and observers (see Section 3.3) to increase the number of opportunities for dialogue. It also used the serendipitous creation of the ACs as an opportunity to broaden such dialogue. Today, stakeholders are welcome in advancing knowledge where the merits of engagement are clear, when stakes are high, scientific knowledge uncertain, and interdisciplinary or transdisciplinary approaches are viewed as necessary. ICES also has a tradition of cooperation between science and industry in areas including data collection, considering insights relevant for assessment groups, participatory modelling, qualitative research, and scoping exercises. Many perceived this opening as non-threatening to the integrity of ICES advice. In addition, a red line was set excluding stakeholders from the advisory process: NGOs and industry were presumed as partly lobbyists, which could risk how clients and interested parties might consider the credibility of ICES because of concerns over its independence. In ICES, there is a tradition for scientists and managers to define themselves as non-stakeholders (universal and disinterested), with the goal of ensuring the neutrality of an advisory process based on facts and free of values and interest (Wilson, 2009: 129).

A Separation between Science and Advice

Since at least the 1950s, ICES has separated its science activities from its advisory activities. After a critique of the advice system as a “black box advice machine” and a number of internal reforms (see Dickey-Collas & Ballesteros (2021) for details), the ICES advisory process opened to

observers in 2008. An Observer Policy was created to regulate stakeholder engagement in the advice process⁵. According to this policy, the role of observers is a specific stakeholder role in the ICES system, as outlined in section 3.3.2 of this Report. Despite this opening, credibility is a core attribute for ICES. Hence, a last restriction currently remains with part of the advice process being closed to stakeholders (but open to requesters and academic observers). Certain working groups are classified as predominantly contributing to the provision of advice (ICES CM 2013 Del-11.3) and only scientists nominated by member countries are allowed to participate in these groups.

The current ICES mission and vision frame stakeholder engagement within the context of continuous improvement of the scientific basis for decision-making, while ensuring the coherence and reliability of policy-relevant science.

⁵ ICES Observer Policy (2013) - https://www.ices.dk/community/Documents/Observers/CM_2013_Del-11%203_Observer_rules.pdf

3 Stakeholder interaction goals, principles, and roles

Despite the set of rules designed for stakeholder participation in the science and advisory processes and the emphasis placed on working with stakeholders in the ICES Advisory Plan, ICES lacks a defined overall stakeholder engagement strategy. The concept of stakeholder has never been formally defined by ICES, the goals of engagement have not been described or monitored, and the roles and responsibilities of all different stakeholders have not been systematically considered (Dickey-Collas and Ballesteros, 2021). WKSHOES Terms of Reference a) calls on the workshop to ‘Characterize potential ICES stakeholder interaction goals as well as the key elements of a stakeholder engagement strategy to achieve these goals, to be developed by ACOM/SCICOM following WKSHOES.’ Here we discuss these goals in further detail.

3.1 Goals of stakeholder engagement in ICES

As noted in Ballesteros and Dickey-Collas (2020), the primary ICES goals of stakeholder engagement are described in the Advisory Plan, namely *to ensure the credibility, legitimacy and relevance of the ICES science and scientific advice.*

Goals for ensuring incorporation of a wider range of knowledge so that it is suited to future needs can also be drawn from the Advisory Plan: *“ICES will work with stakeholders, and social scientists, to ensure a wider range of relevant scientific knowledge is incorporated into our advice consistent with the ecosystem approach”* (p. 8) and *“[e]ngage stakeholders and advice recipients to develop current and future advice products”* (p. 13). This engagement occurs with the goal of being *“guided by their [the stakeholders’] feedback as [ICES] assimilate[s] new and a wider range of relevant scientific knowledge, especially on natural resource management, biodiversity and climate change”* (ICES Advisory Plan 2020: 13). Another goal is for ICES to do its best to assure the independence of its advice, as also stated in the Advisory Plan: *“Develop a stronger base in scoping and stakeholder engagement”* and to *‘investigate mechanisms and examples of assuring independence of advice in systems with increasing stakeholder participation’* (p. 17).

Moreover, a number of other activities in relation to stakeholder engagement are mentioned in the Advisory Plan without specifying concrete implementation:

- “[A]lert managers and stakeholders to changes in the marine ecosystem and human activities.” (p. 17)
- “Develop a stronger base in scoping and stakeholder engagement.” (p. 17)
- “Investigate mechanisms and examples of assuring independence of advice in systems with increasing stakeholder participation [...]” (p. 17)
- The inclusion of “relevant social, cultural, economic and stakeholder information” into ICES’ science and advice (p. 13).

3.2 ICES principles of stakeholder engagement

The principles listed below, formulated here in a general manner, apply differently in different contexts. Two such key contexts are the knowledge production process (= science) within ICES on the one hand, and the advisory process on the other. The Principles are vehicles for achieving ICES’ mission and vision, and shape the foundation for the behaviours and reasoning used to

define major goals and objectives⁶, and the methods required to reach them. The principles should be sufficiently general that they remain unchanged even if goals and objectives are updated; if conflicts among objectives arise, principles may support prioritizing and balancing them. The following principles are suggested by WKSHOES based on Ballesteros & Dickey-Collas (2020):

1. Opportunities for stakeholder involvement are inclusive and proportional to the relevant issue.

WKSHOES Statement: Stakeholder involvement can facilitate inclusivity and opportunity, but should not be assumed to automatically do so. Rather, inclusivity and opportunity are prerequisites for stakeholder engagement. There need to be guarantees that the engagement process is open to all appropriate stakeholders and that there are mechanisms to encourage their involvement, and inclusivity should be carefully monitored. The Strategy should address how ICES engages with stakeholders, how engagement is maintained, and if all relevant stakeholder groups are included. A regular assessment should ensure that inclusivity is consistently practised. Inclusivity encompasses fairness and equity in participation processes, with the aim to overcome social cleavages of gender, age, occupation, and other stakeholder characteristics that may lead - or appear to lead - to a lack of openness, transparency, and inclusivity.

2. Active stakeholder participation is consistent with the impartiality, independence and integrity of ICES.

WKSHOES Statement: There is consensus among WKSHOES members that stakeholder engagement is an essential element of ICES' work. In their position paper, Ballesteros & Dickey-Collas (2020: 7) state that "[t]he discussion is no longer framed in terms of *whether* stakeholders should be engaged, but *how, what for, and the benefits and threats* that their involvement entails". The members of WKSHOES agree that this is the case and note that all ICES activities require participatory work to varying degrees.

However, the point was raised that we tend to speak of stakeholder engagement as an inherently positive phenomenon, which is not necessarily the case if it occurs in an unfair, biased, or agenda-driven manner. It is therefore crucial to scrutinise where, how, and when engagement adds to a process and when it does not, and how to ensure fairness and openness for all stakeholder groups. Conflicts of interest may exist and it will be important for ICES to recognize and acknowledge these potential conflicts.

3. The roles, responsibilities and expectations of participation are transparent, and participants understand and respect their roles and that of others.

WKSHOES Statement: The roles of participants must be transparent, and participants should understand and respect their roles and those of others. All stakeholders should share their expectations for the process and its outcomes as part of their commitment to establishing ways of working that are relevant to the issues, and that are mutually understood. Co-construction and co-responsibility of knowledge should be adopted as the default mode-of operation among groups. The engagement process strives to empower all stakeholders to share responsibility and

⁶ While goals and objectives are synonyms in common language, in strategic planning and organizational management they are used to refer to a different hierarchy and time-frame. Strategy is the determination of long-term goals and objectives (see Chandler, A.D., Jr. (1962)). In the context of this report goals are the long-term high-level results that an organization aims to achieve and objectives are the near-term, concrete, measured steps towards these goals.

accountability for mutually agreed actions. A set of roles and related responsibilities of different stakeholder types in ICES are proposed by Ballesteros & Dickey-Collas (2020) and further discussion in Section 3.3 of this report.

4. ICES communication strategy is aligned with the engagement strategy.

WKSHOES Statement: The ICES Stakeholder Engagement Policy will only be effective if it is effectively communicated to the ICES community and its diverse current and potential stakeholders. As the Stakeholder Engagement Strategy is evaluated and revised by ICES over time, it will be essential to use the ICES communication team to communicate changes in emphasis in the Strategy and to focus outreach on groups that are not well represented in the ICES network.

5. Stakeholders' participation is assessed, the engagement process is monitored, and constant organizational learning occurs.

Regular monitoring, evaluation and adaptation of the engagement processes within ICES should ensure institutional learning and the continued improvement of ICES stakeholder engagement process. The utility of stakeholder engagement processes should be monitored by ICES to aid continuous improvement (see Principle 4). In this context it needs to be clarified who would do such monitoring and if new institutional arrangements are needed (see also Section 7 of this report).

3.3 Definition and roles of ICES stakeholders

Whereas the overall need for engaging with stakeholders is acknowledged, however, several important questions arise when it comes to defining who is a stakeholder in the ICES system and what their roles and responsibilities are.

3.3.1 Who is a stakeholder

Within ICES, the term 'stakeholder' is widely used. According to WGMARS, they are seen as providing guidance on areas of research or a source of data for scientific research (Clay & Ferretti 2020). In other contexts, stakeholders were referred to as 'knowledge holders'. In general, the term is used without further explanation. For example, the Science Plan notes that ICES should: "Identify, design and make use of opportunities for public participation in observation and exploration through citizen-science; and identify and make use of opportunities for marine industries and other stakeholders to contribute to research design, data gathering and interpretation".

By analysing the use of the term 'stakeholder' both on the ICES website and in Expert Group documents over recent decades, it can be concluded that the term 'stakeholder' experienced a very positive trend. Over time they have taken on more responsibilities and gained trust and increased involvement. An example of reference is the ICES Science Plan (2019) in which the importance of allowing stakeholders to contribute to a research design, data gathering, and interpretation is stated.

WK members agree that there needs to be a distinction between ICES as an institutional entity (i.e. an Intergovernmental organisation with a Bureau/Council) and the community of scientists who work within the ICES system. Whilst the institution is the initiator and owner of the Engagement Strategy proposed here, and not in itself considered to be a stakeholder, the broader science community should be viewed as stakeholders, albeit internal to the system governed by ICES. This differentiation is an important one as the misunderstanding might arise that scientists are not stakeholders. WKSHOES thus makes the following distinctions: i) ICES as the body that

has ownership and accountability for its stakeholder engagement strategy; ii) the community of scientists that may work independently, or under the umbrella of, the ICES system to collectively help deliver its overarching goals for marine science; iii) stakeholders who are not scientists but participate in the ICES system because its work is of direct relevance to their work or interests. Hence the operational definition suggested for the strategy is to consider stakeholders as *those who affect or are affected by ICES, including the scientists operating within the ICES network*. Stakeholder groups currently engaged in ICES can be summarised in the following categories: the fishing and aquaculture industry/sector; environmental NGOs and associations; other NGOs and associations (including consumers associations); scientific organizations; international agencies, government bodies, decision-makers, as well as fisheries and ecosystem managers (based on the Expert Group Chair survey results, see section 7.1).

3.3.2 Roles of stakeholders

Understanding the role stakeholders play at the science-policy interface is a critical element in designing the Strategy. Ballesteros and Dickey-Collas (2020) develop a conceptual typology that captures the dynamics of stakeholder interaction in ICES⁷. Whenever an individual or organization engages with ICES, it plays one of the following four roles: Expert, Observer, Participant or Partner. An individual/organization may interact in multiple processes and play different roles. For example, a fisher can be an expert as a member of an expert group based on his/her knowledge and know-how, be an observer to the advisory process, be a participant in a workshop for a scoping exercise, and be a partner participating in the annual meeting of ICES, Advisory Councils and other observers. Likewise, a scientist may take part in a scoping exercise or be a member of an expert group, or observe the advisory process on behalf of an NGO or industry organization.

Stakeholder roles are defined by two attributes: the *aim* and the *focus* of the participatory process. Figure 1 represents the two-dimensional matrix and Figure 2 applies the conceptual typology to ICES.

		Aim	
		To advance knowledge Science	To support policy Scientific Advice
Focus	Content What is produced Means to an end	Expert	Observer
	Process How is produced Means in itself	Participant	Partner

Figure 1. Typology of stakeholder roles at the science-policy interface in ICES.

⁷ This is a summary of the approach developed. For details, please see Ballesteros and Dickey-Collas (2020).

		Aim	
		To advance knowledge Science	To support policy Scientific Advice
Focus	Content	Expert Group (Working Groups and Workshops)	Advice Drafting Groups
	Process	Ad hoc meetings with stakeholders (feedback, brainstorming, participatory approaches) linked to Expert Groups or research projects	MIRIA MIACO ¹ Contracts & agreements Ad hoc meetings with stakeholders to advance engagement strategy.

Figure 2. Examples of current ICES' participatory processes.

The ICES system interacts with stakeholders with a focus on both **content** delivery and on **process**.

Content

A focus on content delivery understands participation as a means to achieve an end. Hence, participation focuses on *what* result is obtained -- a knowledge product or an advice output.

Focusing on delivering results has clear rules to govern stakeholders' participation. Stakeholders contribute to generating scientific evidence. If the interaction is to advance knowledge (science), the stakeholders involved, other than the Chair(s), are formally equal to other members in the group. If the interaction is to support policy (advice), the stakeholders' role is to represent their own or their organization's interests and is limited to the status of observer. In the former (science), participation criteria are discretionary and based on expertise; in the latter (advice) participation is based on democratic principles of equal access to those with a stake in the decisions being made⁸.

The operational rules are designed to ensure the accuracy and reliability of inputs and outputs. The dialogue enabled by stakeholder participation aims to be framed on facts and findings, placing the integrity of the process as a core value for the credibility of science and advice.

Process

A focus on process understands participation as a means in itself, with substantive benefits coming from *how* participation occurs. In contrast to the formalized rules described above, the operational rules are designed to promote a free-flowing dialogue, albeit the flexibility is higher in the science than in the advice realm. In advice, there is a formal setting in terms of periodicity (multi-annual/annual basis) and participant profiles (e.g. advice requesters and observers). Flexible stakeholder interaction has allowed ICES to push forward the explicit recognition of the importance of non-scientist input to the advice-development process (Wilson, 2009: 265).

⁸ Governmental, intergovernmental and non-governmental organizations, and individuals are eligible to be observers.

Description of Roles

Participatory processes are used for advancing knowledge and for delivering scientific advice. Considering the use (the aim of science or advice) and focus (what or how) described above, four stakeholder roles have been defined. These are the four roles described in Ballesteros and Dickey-Collas (2020), with some very minor modifications and elaborations by WKSHOES.

Expert: a formal role that is part of a process that integrates experience-based and scientific knowledge to produce robust evidence. The process has clear rules for experts, who are selected on an individual basis according to their know-how and expertise at the discretion of the Chair or ICES member country.

Knowledge is co-produced by scientists and stakeholders, both held accountable for the output. Ideally, this type of interaction deals with structured issues, where there is at least a partial agreement about the relevant knowledge required to address the issue. The trust required for the interaction is based on personal competence usually on an individual scale (interpersonal trust between the Chair and stakeholder). That trust enables effective knowledge production and favours knowledge exchange, collaboration, and learning. Scientists have a responsibility to respect and consider the input of all expert group members, including those from non-traditional scientific backgrounds.

Observer: a formal role allowing stakeholders to gain access to the advice process before it is delivered to decision-makers. It is designed to provide the best understanding of the facts and the associated uncertainty, giving stakeholders the chance to provide input and to observe how the advice is produced. Observers can be organizations or individuals that are invited based on democratic and transparency principles.

In ICES, Observation has extensive rules in terms of who can observe, how information is shared, how they deliberate, and how the input is integrated. This is the only role where ICES already has an explicit process to exclude those individuals that do not comply with the rules. Following accuracy and integrity criteria, observers may contribute to producing the scientific evidence that underpins scientific advice. Beyond the observance of the rules, stakeholders' accountability is linked to their respective organizations and to the acceptance of equality among observers. In particular, the commitment of not using the insights gained by participating in the advisory drafting process to obtain commercial gains or advantages.

Complete trust in the ICES outcomes does not have to be an entry barrier for stakeholders to be involved in this type of interaction; even in the absence of trust, they might be willing to do so for the sake of monitoring the system. Observation contributes to build competence-based and process-based trust in the outputs delivered. If successfully implemented, this participatory process fosters credibility in science and advice, increasing the relevance of the output for the stakeholders.

Participant: a flexible role where stakeholder involvement is designed to address a given research question or policy issue. Participants may be invited on an individual or representative basis. This process is inherently flexible: it can be process and/or content based, used to gather insights, set preferences, explore communication tools or data formats, facilitate dialogue, or raise awareness, consensus building, or exchange knowledge. The interaction creates the space to apply participatory research or incipient transdisciplinary efforts to deal with wicked problems and fill policy gaps (e.g. Arkema et al., 2006). The operational rules for participants entail open access and rather limited stakeholder accountability. These interactions may be related to gaining understanding (e.g. why

does this happen), to cope with a policy issue (e.g. a scoping exercise) or closely linked to decision-making (e.g. what are the implications of a policy choice). The closer to decision-making the stronger the stakeholders' interests, but the scientific aim would make the interest lower than when delivering advice. Participant involvement may be based on interpersonal and/or organizational trust and triggered by interest, but it is essential that the doors to the ICES stakeholder engagement processes are wide open to all stakeholders and the path to involvement is clear.. If successfully implemented, provides credibility and legitimacy of knowledge production while promoting learning.

Partner: semi-structured or formal contractual role where interaction with stakeholders is designed to engage them in committed and continued relationships with the ICES system. The operational rules allow narrowing the scope of the engagers to a given profile (e.g. advice requesters or observers). Unlike "Participants", the interaction is recurrent and integrated into ICES planning. Engagement with partners facilitates deliberative dialogue for contested science and policy issues, ranging from corrections to advice after errors have occurred, quality control and quality assurance, to understanding and informing stakeholders' strategies or policy objectives.

Although there are different types of partners (e.g. a country signing a bilateral agreement or a stakeholder organization receiving advice), partners are equal in terms of the right to be involved and the capabilities to be considered (see also power dynamics below).

Stakeholders need to trust ICES to fairly engage in these partnership roles. By doing so, process-based trust is built for stakeholders to continue engaging and they will be willing to collaborate on common goals even in the face of specific disagreements. Engagement creates a sense of belonging and partnership that the participant role does not. If successfully implemented, it fosters legitimacy and relevance of the advice provision as well as willingness to invest in the improvement of the system.

Power dynamics

Ideally, ICES stakeholder involvement is based on mutually beneficial cooperation. Power dynamics, however, are inherent to any participatory process and discussed openly. Understanding how power dynamics shape the four stakeholder roles can increase inclusive engagement spaces.

ICES uses stakeholders' engagement to develop its operational activities (to produce knowledge and to deliver scientific advice) as well as to anticipate and define future actions and advance its own priorities. ICES priorities include gaining credibility, legitimacy, and relevance for the scientific advice, providing a safe space for discussing socially controversial issues, and exploring choices or advocating for given topics (e.g. non-requested advice).

ICES is in a dominant position of power for all stakeholder types except with some Partners. This power arises from controlling the agenda-setting, the resources, the acceptance and exclusion of participants, and the capacity to influence. Within this context, the level of influence stakeholders have in the process varies greatly, as we describe for each stakeholder role.

Expert: the Chair of the working group holds a strong power position (and responsibility) supported by the ICES organizational structure. They control which stakeholders can be involved and are accountable for the implementation of the rules. Additionally, the scientists of the group have some control in favouring preconceived notions, and are able to exclude some voices or knowledge types. Stakeholders do participate, but they

are a small minority and their insights may be more likely to be questioned or suspected of bias due to potential (actual or perceived) conflicts of interest.

Observers: have limited power to influence the process. ICES -namely the Council- sets the rules, controls the process and defines the observers' policy. ACOM has the power to overrule the contributions from specific stakeholders, linked to the decision-making process of member country consensus required for the delivery of scientific advice. Among observers, the availability of resources enables their participation; it takes time, money and expertise to provide input to be considered for inclusion in the advice. In addition, highly specialized organizations representing sectors with consistent interests may have an advantage over those defending broader or less concentrated interests (both for industry and NGOs).

Participants: the Chair(s), ACOM, and SCICOM have the power to define the research questions being addressed and the engagement mode with stakeholders (from consultation to co-production). They also control the method for selection of participants and means of interaction (from the location to the time allocated to each intervention). Stakeholders' capability to influence the process is contingent on those factors; however, power asymmetries among different stakeholders may be aggravated by implicit bias in the process design.

Partners: power distribution is more balanced between ICES and its partners, in general. Through contracts and agreements, ICES enters into a bilateral relationship to define interactions, notwithstanding the inter-institutional power dynamics across ICES' clients. The other interactions where stakeholders are partners (MIACO, MIRIA, and ad hoc events) explore how to improve the knowledge and scientific advice provision without being linked to an actual decision-making process. This implies openness and soft power mechanisms attributed to stakeholders (e.g. agenda setting or specific requests). We discussed in WKSHOES how ICES may have more financial reliance on certain partners, although we did not reach any conclusions about the implications of this reliance.

Stakeholders' interest and willingness to influence the process is the common ground among them. Power asymmetries in the participatory processes place some stakeholders in an advantageous position. Acknowledging the power dynamics that take place is critical for designing operational rules to counterbalance them so it is important that power dynamics are mentioned in all ICES stakeholder documentation.

4 Elements of a stakeholder engagement strategy

4.1 Key elements of the ICES Stakeholder Engagement Strategy

Based on the information summarized above, the short table of contents proposed by Ballesteros & Dickey-Collas (2020), and the discussions about the table of contents on Day 2 of WKSHOES, the following draft content for the Strategy is suggested. Many details of these elements are discussed in this report and in Ballesteros & Dickey-Collas (2020).

1. **Purpose of the Stakeholder Engagement Strategy**
 - 1.1. Context
 - 1.1.1 Key activities of ICES that suggest the need for stakeholder engagement
 - 1.1.2 Independence and credibility with greater stakeholder engagement
 - *How do structures and processes within the organization help balancing credibility, legitimacy and saliency?*
 - 1.2. Who this document is intended for
 - 1.3 Definitions
 - *Scientific integrity, etc.*
2. **Principles of stakeholder engagement in ICES (see Section 3.2 of this report)**
3. **Goals of Engagement**
 - 3.1. Knowledge production
 - 3.2. Data gathering
 - 3.3. Participatory research
 - 3.4. Co-production
 - 3.5. Citizen science
 - 3.6. Innovative knowledge frameworks
 - 3.7. Policy Support (Developing advice products, Contribute with expert knowledge, Organisation performance)
 - 3.8 Build trust and shared understanding
4. **Risks / Challenges (see Section 5 of this report)**
5. **Stakeholder Roles in ICES**
 - 5.1. Who holds a stake and how do they demonstrate it?
 - 5.2. Identification and Affiliation of Stakeholders
 - *Who within ICES identifies stakeholders, and how?*
 - *How do we provide the opportunity to join and contribute?*
 - *Procedures for actively reaching out and fostering engagement*
 - *Identification of who is missing in the process and steps to improve inclusion.*
 - 5.3 The 4 ICES Stakeholder Roles (Described above)
6. **Stakeholder Responsibilities**
 6. 1 Duties and responsibilities of the different stakeholder types

- 6.2 Role of stakeholder groups in the process (it is context dependent)
 - 6.3. "Stakeholder Agreement" for various stakeholder roles
 - *Formal description of the process(es)*
 - *Decision-making procedures and Participation guidelines*
 - *Outputs to be delivered*
 - *Commitment to the process.*
 - 6.4. Code of Conduct for participation
- 7. The Practicalities of Engagement**
- 7.1. Specific meeting formats in ICES (in science & advice) and their objectives
 - 7.2. Avenues of participation in each format
 - 7.3. The participation process (from access to the system to final product)
 - 7.4. Research ethics, data protection, informed consent
 - 7.5. Managing potential and perceived Conflicts of Interest
 - 7.6 Transparency and how it is ensured.
- 8. Monitoring & Evaluation**
- 8.1. Maintaining and encouraging engagement
 - 8.2. Procedures for feedback loops to stakeholders
 - 8.3. Monitoring processes and criteria
 - *Who monitors? Against which criteria?*
 - *Procedures for adaptation of the engagement process (--> organisational learning)*
 - 8.4. Evaluation of engagement against the objectives
 - *Were objectives of WG/WK met, and what role did stakeholders play in that?*
 - *Evaluation of the process by stakeholders.*
- 9. Link to communication strategy about stakeholder engagement**
- 9.1. New communication needs and documents (internal and external)
 - *Who needs to know about the Strategy, and why?*
 - 9.2 Specific actions for target audiences linked to engagement objectives
 - 9.2. Training needs for ICES related to Stakeholder Engagement
- 10. Monitoring, reporting, and review of the Stakeholder Engagement Strategy**
- 10.1. Annual reporting to SCICOM / ACOM on Stakeholder Engagement
 - 10.2. Revisit the ICES Stakeholder Engagement Strategy 3 years after implementation.

4.2 Related literature of stakeholder engagement strategy in ICES and beyond

This section provides an overview of relevant literature relevant to this project.

Literature and documents discussing stakeholder engagement within and beyond ICES.

General Topic of Reference	Citation	Content of Reference
Directly concerning ICES	Ballesteros and Dickey-Collas, 2020	Position paper on ICES stakeholders engagement
	Dickey-Collas and Ballesteros, 2020	ICES history of stakeholder engagement
	Dickey-Collas and Ballesteros, 2019	Editorial that provides an earlier discussion on the needs for ICES Stakeholder Engagement
	Dankel et al., 2016	Multiple roles of fishery scientists in the ICES community
	Stange et al., 2012	ICES reform processes
	Wilson 2009 (link)	Evaluation of providing natural science advice on fisheries management (book with chapter summaries)
	WKDSG 2021	Standard and Guidelines for fisheries dependent data
	WKSCINDI 2019	Workshop on science with industry initiatives
EAFM and engagement of stakeholders in fisheries science and advice	Mackinson et al., 2011	Engaging of stakeholders in fisheries and marine research added value of stakeholders engagement in knowledge production
	Mackinson and Middleton, 2018	Transferable lessons on stakeholder engagement in EAFM
	Ramirez-Monsalve et al., 2021	Advisory processes have not yet been adapted to substantially support EAFM
	Macher et al., 2021	Recommendations towards transdisciplinary decision support processes in fisheries (reflective approach)
	Macher et al., 2018 (a number of other references available to this topic including Malvarosa et al., 2020 or Sampedro et al 2019)	Participatory modelling for fisheries decision support
	Ballesteros et al., 2018	How stakeholders perceive fisheries advice framed within the EA as well as

		how they understand their role in the process.
	Holm et al., 2020	Collaborative Research in fisheries: Co-creating knowledge for fisheries governance in Europe.
Other connected areas of research (sustainable science, transdisciplinary research, sociology of science, etc.)	Cvitanovic et al., 2019	Strategies to manage the challenges and risks of participatory adaptation research- application to climate research
	Barreteau et al., 2010	Clarifying “Participation” in Participatory Research to Prevent its Rejection for the Wrong Reasons- includes typology for participation
	Lang et al., 2011	Transdisciplinary research in sustainability science: practice, principles, and challenges- includes a figure presenting the link between transdisciplinary research, societal and scientific practices
	Hazard et al., 2019	A tool for reflecting on research stances to support sustainability transitions- including epistemological stances positivism vs interpretative
	Gómez and Maynou, 2021	Participatory Action Research (PAR) to bring together stakeholders and researchers in the co-creation of knowledge, identification of research problems, data collection, evaluation and co-design of management actions.
Regarding benchmarking	Smith et al., 1999	The Australian experience with SH in fisheries management may provide some useful ideas on the requirements for stakeholder engagement.

4.3 Stakeholder engagement strategies of similar science organizations

A number of other science and natural resource policy organizations have stakeholder engagement strategies that may be informative for the development of the ICES Stakeholder Engagement Strategy. This section provides links to stakeholder engagement strategies of other science-based organizations, which are intended as a reference for the elements of the ICES Stakeholder Engagement Strategy detailed at the start of this section.

*UNEP Handbook for Stakeholder Engagement at UNEP (2015)*⁹

UNEP's Handbook on Stakeholder Engagement outlines applied rules, mechanisms and practices for stakeholder engagement in UNEP's work. It is divided in ten sections and could potentially serve as a basis for structuring the ICES Stakeholder Engagement Strategy:

1. The UN General Assembly and its organs
 - *Introduction of the organisation*
 - *Governing structure*
 - *Committees*
2. The UN's engagement approach
 - *Statement of inclusivity*
 - *6 guiding principles*
 - *Stakeholder categories and major groups*
3. Accreditation
 - *Process for stakeholders to be accredited as participants*
4. Participation in Agenda-Setting and Decision-Making Processes
 - *Two levels of participation: Agenda-setting and Decision-making*
5. Access to Information
 - *Access to information policy*
 - *Use of modern technology to enhance engagement*
6. Major Groups and Stakeholders Body – Spaces and Roles
 - *Stakeholder Engagement Facilitation Committee + membership and election*
 - *Stakeholder Engagement Code of Conduct*
 - *Stakeholder Forum*
 - *Regional Consultative Meetings*
 - *Roles and selection of stakeholders*
 - *Transparency and Accountability Policy*
7. Expert Input and Advice, and Partnerships for Implementation
 - *The ways of engagement for partnerships + indigenous peoples*
8. Funding for Stakeholder Engagement at UNEP
9. Code of Conduct at Meetings Hosted by the UN
 - *Code of Conduct to prevent harassment, including sexual harassment*
 - *Examples of harassment*
10. UNEP's Civil Society Unit

⁹ This summary is based on the 2015 document, but the updated version of this document is now available here: <https://wedocs.unep.org/20.500.11822/32831>.

UNESCO Comprehensive Partnership strategy

<https://unesdoc.unesco.org/ark:/48223/pf0000370506/PDF/370506eng.pdf.multi>. The comprehensive partnership strategy is UNESCO's overarching partnership strategy with its main partners, networks and other key stakeholders. The 2019 version updates the 2013 version.

UN Sustainable Development Goals. Stakeholders Strategy for the 2030 Agenda

UN Institutional support for engagement was stated in the *Brisbane Declaration on Community Engagement* (2005). Stakeholder engagement is considered central for the implementation of the 2030 Agenda: "Connecting and integrating diverse perspectives through effective engagement is the foundation of inclusive and sustainable policies and plans" (UN, 2020). In fact, Sustainable Development Goals 16 (responsive, inclusive, participatory and representative decision-making at all levels) and 17 (strengthen the means of implementation and revitalize the global partnership for sustainable development) explicitly address participation¹⁰.

Two elements of the UN Stakeholder Strategy are of particular interest for the ICES strategy: the identification of "best practices" (linked to principles) and the Framework for Planning and Assessing qualitative engagement. Best practices include: long-term, regular and continuous; open, transparent and clear; systematic, well planned and structured; high quality and aiming for higher levels of engagement; well organized and with equitable access to needed resources; empowering stakeholders, especially vulnerable groups, for effective participation; encouraging contributions to implementation and stakeholders accountability; mindful of the need to follow up; inclusive of and strengthening the voice of the most vulnerable groups; having a clear link to the 2030 agenda national review process.

The Framework for Planning and Assessing qualitative engagement comprises four dimensions and a set of indicators. Engagement must be purposeful (clearly articulated objectives, methodologies, dedicated resources and feedback); inclusive (promoting stakeholders mapping, analysis and the use of methods that enable integrating multiple perspectives and create safe spaces for participation); transformative (using methodologies that enable collaborate across groups and economic, social and environmental dimensions); proactive (assimilating engagement planning into processes of implementation and delivery, making timely and accessible information available and by prioritising stakeholders preferences with respect to mediums of participation (UN, 2020).

Below are other links to other prominent Stakeholder Engagement Strategies that WKSHOES identified but did not summarize or discuss in detail.

- IPBES Stakeholders strategy (n/d). https://ipbes.net/sites/default/files/downloads/Decision_IPBES_3_4_EN_0.pdf

IPBES views stakeholder engagement as an important element for its relevance, effectiveness, credibility and success. A participatory process started in 2013 including stakeholders' input (314 submissions received in response to 1,500 invitations), a physical workshop, facilitating organizations (IUCN and ICSU), online public consultation and several drafts. The design of the strategy faced contentious issues: the operational structure, eligibility criteria and whether governments should be considered stakeholders. The Strategy was finally approved in 2015.

The IPBES stakeholder strategy is implemented by the IPBES Secretariat, working under the supervision of the Bureau and the Plenary and in collaboration with the Multidisciplinary Expert

¹⁰ Goals 5.5, 6b and 11.3 also address participation.

Panel. Stakeholders are defined as individual scientists and knowledge holders as well as institutions, organizations and groups working in the field of biodiversity and ecosystems services that can: (a) Contribute to the activities of the work programme through their experience, expertise, knowledge, data, information and capacity-building experience; (b) Use or benefit from the outcomes of the work programme; (c) Encourage and support the participation of scientists and knowledge holders in the work of the Platform.

Two categories of stakeholders have been identified: contributors (scientists, knowledge holders, practitioners and others) and end users (policymakers and others). It should be noted that stakeholders are not entitled to observer status unless they are admitted as such according to the rules of procedure.

The strategy explores the incentives and disincentives for engagement, as well as the associated risks (conflict of interest or dissent among stakeholders, inability to engage owing to lack of funding, participation fatigue, unmet expectations, unequal levels of engagement among stakeholders). Several authors have analysed the development of the IPBES strategy and its outcomes (see e.g. Oubenal et al., 2017; Esguerra et al., 2017).

- IPCC Communications Handbook (January 2018) <https://www.ipcc.ch/site/assets/uploads/2017/08/Climate-Outreach-IPCC-communications-handbook.pdf>
- FAO Strategy for Partnerships with the Private Sector <http://www.fao.org/3/mg311e/mg311e.pdf>
- Various NOAA engagement documents
 - Social Science Tools for Coastal Programs Introduction to Stakeholder Participation (2015). <https://coast.noaa.gov/data/digitalcoast/pdf/stakeholder-participation.pdf>
 - Developing the capacity to assess policy priorities - engagement with stakeholders and managers (Lovewell et al., 2012). <https://www.integratedecosystemassessment.noaa.gov/sites/default/files/2018-12/2.Engagement%20CCIEA%202012.pdf>

5 Gaps, risks and opportunities

This section focuses on the gaps, risks, and opportunities related to the proposed content of the ICES Stakeholder Engagement Strategy.

5.1 Gaps

ICES is an ever-evolving organization so most or all aspects of its stakeholder engagement process will continue to improve. See sections 7.2 - 7.4 on engagement monitoring, which will be critical to ensuring that the engagement process evolves.. Several important gaps were recognized:

- There are stakeholders and stakeholder groups that are currently not sufficiently engaged in ICES, although they are affected by or affect the core areas of ICES' activities. Finding, contacting and engaging these stakeholders is a challenge that should be approached strategically and with greater emphasis in the near future.
- A strategy is needed not only on how to identify, contact and engage stakeholders, but also on how to maintain this engagement. Stakeholders need to receive feedback that their input is valued and considered when given.
- A reflection process among scientists involved in specific engagements is needed to consider the roles they occupy in the engagement process, the power dynamics at play, and the value that is given to scientific (scientists') versus experiential (stakeholders') knowledge. For example, a fisher might provide input on why they are moving their vessel into a different area, that could have implications for interpretation on the health of a stock and potentially quota setting. It will be important that scientists examine available data where possible to ensure that the fisher's experience is supported by available data.
- During WKSHOES, there was discussion about the value of an organisational entity concerned with issues around stakeholder engagement (e.g. contact point for participation requests, process questions from ICES scientists engaging with stakeholders). Currently most of such activities occur in a decentralised manner. Stakeholder engagement in ICES overall could benefit from a central "one-stop shop" that caters to questions from both stakeholders and 'engagers' on the side of ICES so that identifying opportunities for stakeholders to engage in diverse ICES groups is as straightforward as possible.

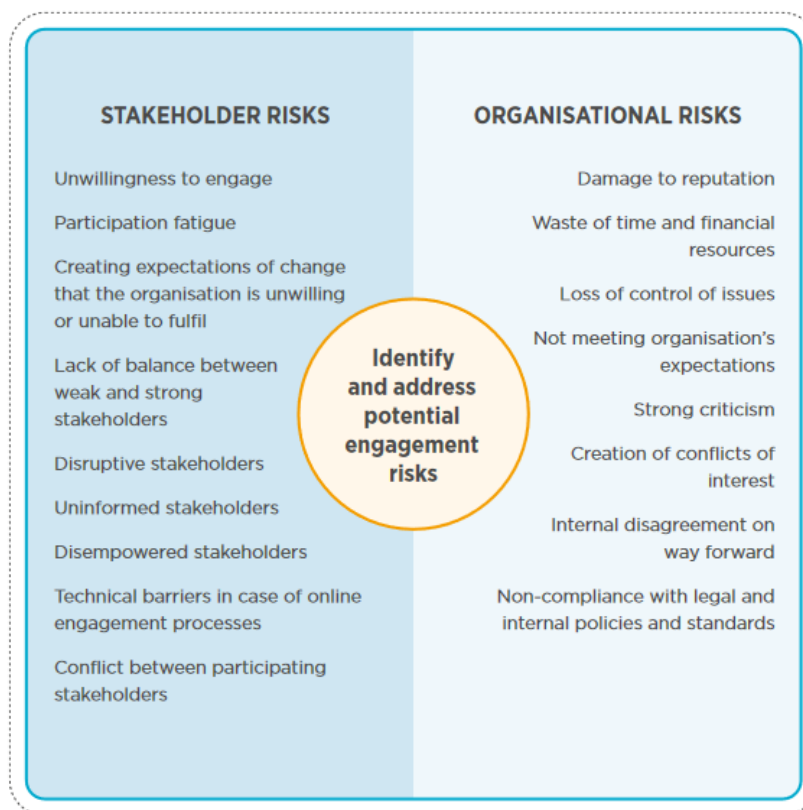
5.2 Risks

The risks of not engaging with stakeholders are seen by WKSHOES participants as being greater than the risks of engagement. However, an effective stakeholder engagement process is essential to minimizing several types of risks. Type of risks of stakeholder engagement that were discussed in WKSHOES include:

- Unfair access to the process.
- Use of the process to advance some stakeholders' own interests in a manner that could compromise other stakeholders.
- Failure to make it attractive for stakeholders to engage in the ICES process in cases where they would add significant value to the network.
- Failure to maintain engagement over time, even though engagement was initiated successfully.

- Tokenistic engagement.
- More transparency in relation to stakeholder engagement also bears the risk of more tensions around the independence of ICES advice (see also ICES Advisory Plan 2020: 8).
- Stakeholder engagement takes time; it will be important to consider resource allocation to other Secretariat activities when considering how much and where to pursue additional stakeholder engagement.

The strategy should include a robust framework for risk assessment, building on the ones already tested at international level. Figure 3 below is one portrayal of the risks faced by both stakeholders and organizations from engagement. This comes from Figure 9 from the AA1000 AccountAbility Stakeholder Engagement Standard (AccountAbility 2015).



AA1000 STAKEHOLDER ENGAGEMENT STANDARD (2015) © ACCOUNTABILITY 2015

Figure 3: Identification of Potential Engagement Risks (Accountability 2015).

5.3 Opportunities

Marine science has embraced stakeholder engagement because there is an awareness of the value of diverse types of knowledge that can be integrated into the scientific process, despite possible challenges in doing so (Raymond et al., 2010; Röckmann et al., 2012; Said & Trouillet 2020; Sampedro et al., 2016; Strange et al., 2015). There remains, however, the need to reinforce and diversify interactions between knowledge production and use in decision making. The importance of engaging managers and end users as stakeholders also needs to be recognised.

ICES has been traditionally most focused on science and advice related to fisheries management. The creation of Ecosystem Overviews, the great expansion of aquaculture-related activities, and

the expansion of science related to Ecosystem Based Fisheries Management and Ecosystem Based Management have made ICES work relevant to a much larger group of Stakeholders. Similarly, ICES new activities in the Arctic have created many new stakeholders, including the residents of remote and diverse indigenous communities. If ICES can effectively continue to engage with these “new” Stakeholder groups, its scientific and policy contributions will expand greatly.

6 Communicating with the ICES community about stakeholder engagement

As important as developing transparent and effective rules of ICES Stakeholder Engagement is clearly communicating the key messages related to Engagement within and beyond the ICES Network. WKSHOES recommends the development of a suite of communication materials that are freely available for both ICES scientists who seek to engage with stakeholders and for stakeholders who would like to get involved with ICES. The workshop members suggest the following focus topics for communication activities and materials:

Coordination of Communications messages with the Strategy

- Close cooperation between the ICES Communications Team and those responsible for the Stakeholder Strategy is needed in order to tailor consistent, targeted and clear messaging around the Strategy and the various facets of stakeholder engagement in ICES.
- Training to disseminate and enable appropriation of Code of Conduct of all partners and to teach methods for engagement. The code of conduct exists but some WKSHOES participants felt that they are not disseminated enough.

Clear entry to the ICES system

- A manual or website that clarifies who can gain access to which parts of the ICES system, how and whom to contact to do so, and what the process of participation then looks like (e.g. as website and/or PDF manual).
- It is important that the system is not so formal that it is too onerous to informally engage.

Feedback

- Mechanisms should be developed that make it easy for stakeholders to provide feedback about their experiences of engaging with ICES. These will add to the current ones (e.g. dialogues at MIRIA and MIACO) and would avoid overlapping or additional formal efforts..
- Moreover, those leading the participatory processes (in the following: ‘engagers’) should be aware of how (and to whom) to give feedback about the engagement process in their Expert Group, to find answers for their questions, and resources for improving their skills of engaging with stakeholders.
- Examples for feedback forms for ‘engagers’ are proposed in Section 7.2.2 of this report.

Easy understanding of stakeholder roles

- Communication documents with figures for both ICES scientists and stakeholders to explain the different roles one can take as a stakeholder as well as the rights and responsibilities that go with them (e.g. as a website and/or PDF manual).

Engagement Guidelines for ‘Engagers’

- In order to equip ICES engagers with a set of useful resources and guidelines, WKSHOES suggests to develop a Stakeholder Engagement Toolbox/Manual that assists them’ in all steps of the way from identifying relevant stakeholders and contacting them to planning the engagement process, finding suitable methods for workshops and analysis, and for integrating of different kinds of knowledge (scientific/experiential).
- One good example for such a toolkit is the Stakeholder Engagement Toolkit by the Victoria State Government (2018). It includes worksheets for engagers to fill out prior and post an engagement activity, consider risks and challenges, and evaluate the process. It is for download here: <https://www.dhhs.vic.gov.au/publications/stakeholder-engagement-and-public-participation-framework-and-toolkit>

7 Stakeholder interaction activities within ICES

7.1 Survey of ICES Expert Group Chairs

7.1.1 Survey process summary

From 31 May 2021 to 14 June 2021, a survey was conducted to help understand the experience of ICES expert groups chairs with stakeholders. The survey focused on how representatives of external organizations contribute to the ICES network, particularly the involvement of parties who are not scientific researchers. (i.e., representatives of NGOs, government or international agencies, Fishing or Aquaculture Associations, or companies or industry groups). Respondents were asked to provide their view on the participants of the work group / workshop they lead and if they chaired multiple expert groups to describe the experience with the one group with the most significant amount of stakeholder interaction.

The survey had 21 total questions divided in two possible paths depending on the respondents' experience with stakeholder engagement. The questions were a combination of open response, yes/no responses, and multiple-choice responses. In total, 35 chairs provided full responses. Another 17 provided incomplete responses and thus were not considered in the final results except for the free text questions.

7.1.2 Key results

Below is a summary of the key results of the Expert Groups survey. The results point out to current practices, perceived risks and potential challenges that have been used to inform the recommendations of the WKSHOES. For more details and the full range of statistics and graphs, please contact Vera Köpsel (vera.koepsel@uni-hamburg.de).

- Of the survey participants giving complete responses, 33 described workshops and 2 working groups.
- Eight respondents had no experience with any stakeholders within their EG (path 2) and 27 had limited to extensive experience (path 1).

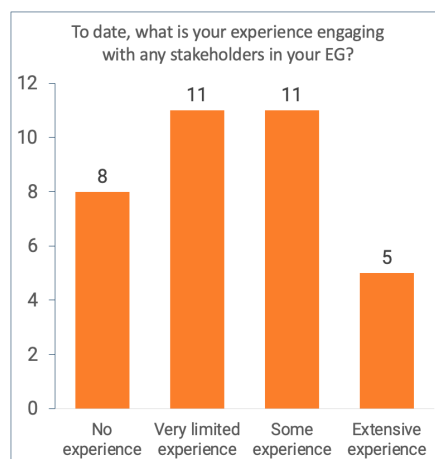


Figure 4: Survey participants' level of experience with stakeholder engagement. Source: survey data.

Expert Groups with Experience with SE (Path 1; 27 respondents)

- The more frequently engaged stakeholders were government representatives followed by eNGOs, industry, policy makers, environmental managers and lastly fishers/aquaculture farmers.
- Nine respondents said they invite stakeholders to every EG meeting, 7 for the majority of occasions, 7 only for some meetings, and 4 never invite them.
- The most common method of engagement is joint in-person workshops (21), followed by informal conversations outside EG (10). All other methods scored less than 3 responses.

The main purpose expressed for Stakeholder Engagement was to gather insight and experiential knowledge to complement scientific data, followed by (in order) identify research needs for EG, address research questions raised by stakeholders, inform SH about EG results and research, co-develop the research project, discuss EG results and receive approval for EG research results (see Figure 5).

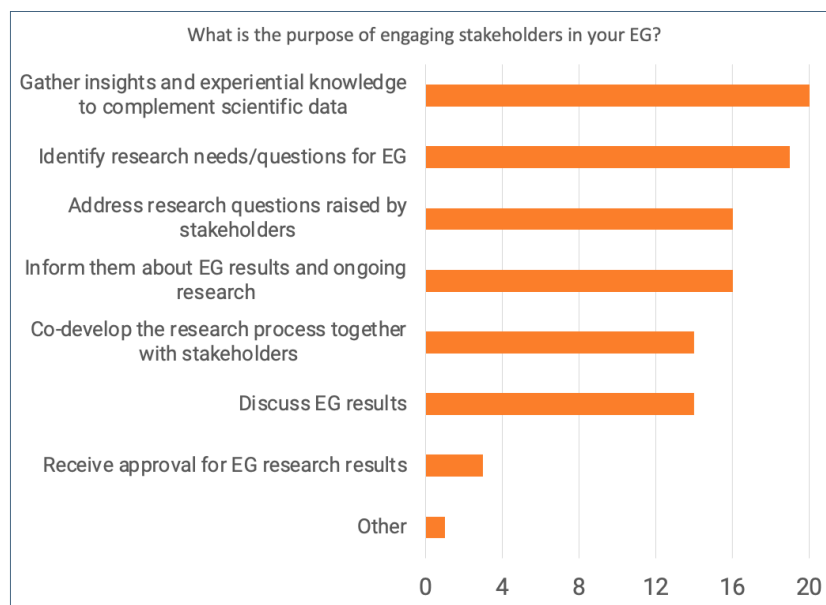


Figure 5: Purposes of engaging with stakeholders in ICES EGs. Source: survey data.

- Twelve EG Chairs rate the level of SH engagement as good, 14 think stakeholders should participate more (amount or diversity) and no one thinks stakeholders should participate less (in amount or diversity).
- No EG chair considers that SHs make the EGs scientific work more difficult, but 11 consider that it is nice to have but not necessary. Fourteen consider it important and 10 essential to the EGs goals (see Figure 6).

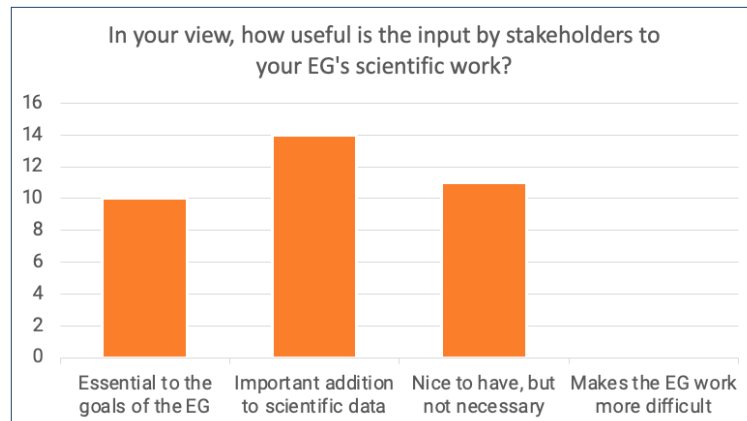


Figure 6: Perceived usefulness of stakeholder engagement for EG work. Source: survey data.

Expert Groups with no Stakeholder Engagement Experience (Path 2; 8 respondents)

- The main reason to not engage stakeholders was that they do not have formal access to the EG (4), no need for stakeholders input (1) or stakeholders are not interested in the EG (1). No one answered that there were concerns about a conflict of interest. Other (3) answers (open field) where that “opportunity had not arisen”, “SH not identified”, “not yet a chance to contact stakeholders”.
- One respondent presented the following obstacle when considering whether to engage stakeholders: Sensitive data in which stakeholders would “complicate that and stifle discussion” and “missing guidelines for how to define who is the “stakeholder” and how to engage” with them.

Open questions to all respondents (35)

- Respondents provided several methods that, in their experience, work well or stakeholder engagement within their EG. Some of the most common ones were: openness, understanding of the stakeholders needs and difficulties, in-person communication, long-term relationships.
- Respondents also provided practices that, in their experience, do not work well for stakeholder engagement within their EG. Some of the most common ones were: technical discussions, lack of respect, blast emails, lack of personal communication, EG setting itself as authority, unclear structure/objectives during meetings.
- A variety of challenges were mentioned when it came to engaging with different stakeholder groups. Figure 7 shows what challenges were mentioned in relation to which stakeholder group.

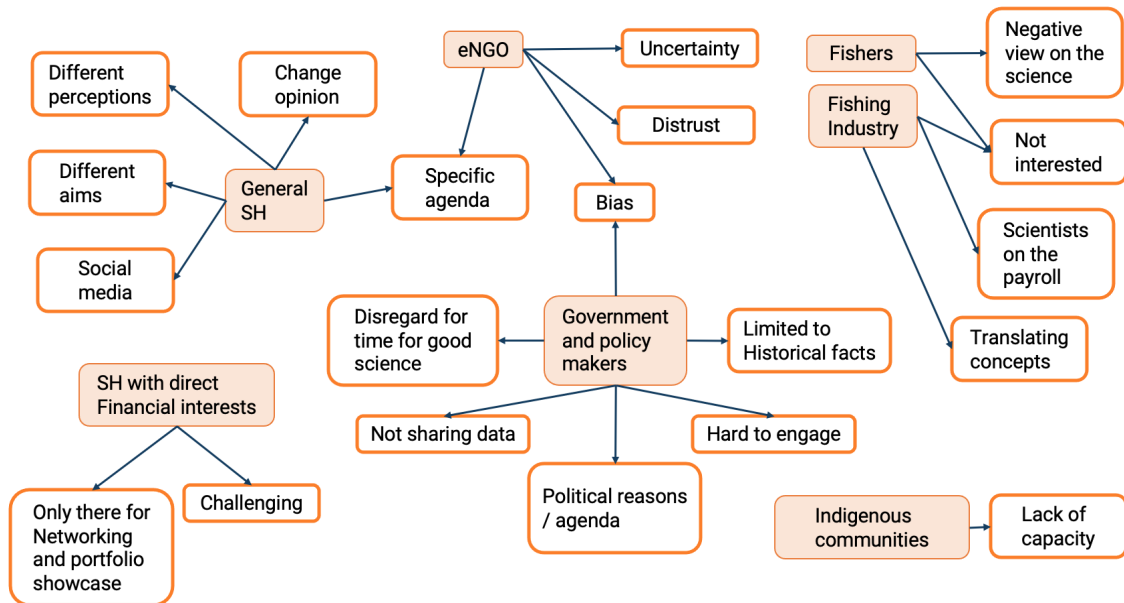


Figure 7: Challenges mentioned in relation to different stakeholders. Source: survey results.

- EGs provided interesting insight on what they “think are ‘musts’ to include [in the ICES Stakeholder Engagement Strategy]” and are replicated in a resuméd form here:
 - Assessment expert group meeting participation should be restricted so there is no doubt about scientific integrity.
 - Must have equal support and space for all groups (large or small, rich or poor)
 - Stakeholder engagement information must be published in the end product
 - Respect is key to success.
 - Guidelines on how to scope for stakeholders (WG on stakeholder engagement methods)
 - What they have to gain/offer from participating
 - Specify where they can engage and where they cannot
 - Ways to address Stakeholder fatigue
 - Language for engagement
 - Specify expected outcomes
 - Clarity on how/why particular groups are being engaged
 - Open communication even for difficult subjects
 - Rules about where can/should contribute
 - Clear definition of what and who
 - Early engagement
 - Feedback loop and continuous development
 - Openness with conditions (i.e. contribute to reports and meetings)
 - Identify who within ICES identifies and contact stakeholders
 - Identify within ICES which areas are too close to “lobbyists”
 - Best practices for stakeholder engagement for different meetings
 - ICES credibility will be influenced by how groups perceive its impartiality and how it truly engages stakeholders.
 - Those funded by stakeholders could be allowed to participate in closed “science meetings”.

7.2 Monitoring, stakeholder engagement processes and activities

7.2.1 Current stakeholder monitoring processes

Current stakeholder engagement practices in ICES do not allow for monitoring and evaluation of its performance. While basic information may be available (who participates and when) even that is not gathered in a systematic way, precluding the assessment and improvement of participatory processes.

Nowadays, the 4 Types of Stakeholders are monitored as followed:

- **Experts.** Expert group members are tracked by the Secretariat and published on the ICES website associated with the expert group. The website notes the member's country and whether the members are of three types: 'Chair', 'Chair invited' or 'Member.' No organizational affiliation is noted on the website, although this is often reported in the expert group report.
- **Observers.** Due to the formalised nature of the observer role, ICES tracks and publishes a list on its website of all [ICES observers](#). There is also an Observer communication forum and a central observer contract at the ICES Secretariat.
- **Participants.** Tracking of participants is the least systematic. This is not entirely surprising, given the flexible nature of the stakeholder role.
- **Partners.** The cooperative agreements with partners are published on the ICES website ([link](#)).

To ensure organisational learning, however, ICES should regularly monitor and evaluate the roles and procedures around stakeholder engagement and consider reforms to the system in light of developing international best practice. As part of the drive for a quality assured process, ICES will have to report where engagement occurs in the system.

7.2.2 Suggestions for monitoring of stakeholder engagement

Ongoing input from ICES groups and scientists will be required to reflect on the evolving stakeholder engagement across ICES. This input, to track the extent of stakeholder involvement in addition to the utility of their involvement, is important but should be made as simple as possible to reduce the burden on Expert Groups and their Chairs. As such, a part of this suggested reporting would involve as simple and concise a form as possible with checkboxes and easy input. During the monitoring and of engagement and participation, distinctions among the categories of actors/stakeholders engaged should be made:

- in each of the 4 roles identified in Ballesteros and Dickey Collas 2020 and described above (expert, participant, observer, partner);
- in the different areas of activities covered by ICES as part of the process of production and dissemination of knowledge and advice (e.g., method development, data collection, data analysis, results interpretation and limits, advice, communication, research strategy).

Categorisation of actors should rely on an appropriate typology of actors concerned or potentially impacted by the activities of ICES. This could rely on the following categorization developed from the list of ICES Observers (to be reviewed and adapted):

- Fishing Industry/ Fishing Sector and other businesses and their representatives
- Environmental NGOs and associations

- Other NGOs and associations (including consumer associations and trade groups)
- Scientific Organizations
- International Agencies, decision-makers, managers.

The proportion of each category could thus be analysed in each of the 4 Stakeholder roles.

A synthesis table to be filled in by stakeholders attending meetings and expert groups could be developed to help tracking engagement along the different processes in ICES. Below is a table with draft content:

	Fishing Industry/ Fishing Sector	Environmental NGOs and associations	Other NGOs and associations and trade groups	Scientific Organizations	International Agencies, Decision-makers, managers
Who participated?					
Role (one choice)					
Expert					
Observer					
Participant					
Partner					
Types of contribution (several choices)					
Attendance to be informed or to observe					
Question co-construction					
Provide data, knowledge					
Analyses of data					
Development of method					
Interpretation of results and limits					
Contribution to Advice					
Position note					
Dissemination, communication					
Contribution to define research strategy					
other					

Satisfaction with participation (low, medium, high)

Any other comment

Where it is possible, it is also important to identify and monitor stakeholders that did not or could not participate. Who is missing from the process and how they could potentially be engaged in the future should be addressed. This can be a process that takes place during the planning stage of working groups as well as a reflection after working groups have taken place.

In addition to the form for group participants above, a mechanism should also be in place to allow stakeholders to provide reflection on their involvement within ICES. This may help to provide insight on how they feel participation went and if they got their desired benefits from participating, as well as again addressing issues that might cause barriers to participation.

Beyond descriptive monitoring, criteria of performance and achievement should be defined in the Strategy. Monitoring and evaluation of outputs and outcomes entails systematic data gathering. An analytical framework needs to be developed, linking ICES principles for engagement with goals, criteria and performance indicators. Similar frameworks have been designed by the UN and other international organizations (see for instance UNDP-UNDESA, 2021).

7.3 Future social science training needs related to stakeholder engagement

As mentioned in the Executive Summary and elaborated in the TOR, WKSHOES did not address how we should train members of the ICES community on stakeholder engagement. Participants discussed this topic briefly, however, and we agreed this is an ongoing need. In the development of the WKSHOES TOR, there was discussion as to whether to also discuss Training Needs for the ICES community related to the Stakeholder Engagement Strategy. The Chairs agreed with the ACOM Chair that this was beyond the scope of WKSHOES, but this will be an important need to address as the ICES Stakeholder Engagement Strategy is implemented.

In addition to the communications needs for ICES discussed in this report, there is a need to help all participants in the system understand the needs for input from different groups. Outreach such as the U.S. “Council 101” documents¹¹ provide stakeholders with confidence that they understand the system and their importance in it, which improves quality, quantity, and diversity of stakeholder participation. Providing opportunities for stakeholders to improve their presentation and participation skills for different types of groups and meetings can also be effective.

¹¹ The U.S. Fishery Management Councils have customized websites and handouts that summarize the Council bodies and processes. See for example <https://www.pcouncil.org/fact-sheet-council-meetings-101/>.

8 Alternative approaches to improve inclusion and engagement

WKSHOES TOR d) asks the workshop participants to “Propose alternative approaches (with associated risks) to improve and secure further inclusion and engagement by ICES with stakeholders, such as future hybrid meetings.”

WKSHOES did not extensively discuss the impact of hybrid meetings, other than to note that it reduced the cost of engaging. We did not draw any conclusions about whether the hybrid format would make certain types of stakeholders less likely to verbally express their needs or preferences.

Potential activities to improve stakeholder inclusion and engagement include:

- Communicate about how the strategy will be developed together with stakeholders.
 - When and with whom? Will there be co-development of the Strategy?
 - How will it be agreed? Will there be consultation on draft(s) prior to final publication?
 - What options are there and the pro’s and cons of them.
- Develop targeted outreach designed to make specific user groups more aware of potential stakeholder interaction opportunities.
- Evaluate current stakeholder engagement and outreach to various user groups and explicitly address diversity and inclusion. This engagement could be a workshop, but if so ICES should ensure that those unable to attend workshops have an opportunity to add their voice.
- Develop training for facilitators of engagement and for stakeholders.
- Create settings to share lessons learnt and stances regarding knowledge co-production - research stances regarding knowledge production should be defined and we should disseminate/discuss a “thinking” framework (epistemological) and not only analytical framework to foster transdisciplinary research.
- Consider whether a Stakeholder Committee or similar body within ICES would be useful and feasible for fostering and maintaining successful stakeholder engagement.

A Stakeholder Engagement Toolkit for ‘Engagers’

More tools for supporting Stakeholder Engagement will improve the engagement process. One useful document to support engagement activities can be found in the Stakeholder Engagement Toolkit by the Victoria State Government (2018)¹². This toolkit is directed at ‘engagers’, i.e. scientists who initiate engagement with stakeholders, to support them throughout the process from identifying relevant stakeholders to planning concrete engagement activities and evaluating those afterwards. It contains worksheets to fill out prior to starting an engagement process and divides this process into tangible steps. As the survey conducted by WKSHOES among Expert Groups indicates that many scientists feel inadequately informed and/or trained when it comes to best practice of engaging with stakeholders, a toolkit for engagers could provide useful guidance.

¹² The Victoria State Government’s toolkit is available here: <https://www.dhhs.vic.gov.au/publications/stakeholder-engagement-and-public-participation-framework-and-toolkit>

Another set of stakeholder engagement tools comes from the GAP project, which worked to connect “Science, stakeholders, and policy”. The project produced a ‘Methodological Toolbox’ which is described by the project as: “Our ‘methodological toolbox’ is a kit of useful tools, tips and hints to help researchers design a truly collaborative research project. The toolbox has been built to be as accessible as possible and can be used by anyone, from scientists to policy-makers to fishermen, interested in finding out more about participatory research processes.”¹³

¹³ The website for the Methodological Toolbox can be found here: <http://gap2.eu/methodological-toolbox/>.

9 Discussion

9.1 Summary of topics addressed

From the perspective of the WKSHOES participants, WKSHOES was an effective discussion of the TOR and the issues needed. The workshop was conducted over three days online for 3-4 hours each day. The discussions were reflective and constructive, and the workshop was characterised by an open and ambitious undertone. In addition to being experts in the subject matter, many of the participants are experienced in the scope of ICES workshops, so were able to touch on large overarching issues but then return in a timely and effective manner to addressing the details of the TOR. That said, the workshop would have certainly benefited greatly from informal in-person conversations and more time to discuss various topics.

A variety of topics around stakeholder engagement in ICES was addressed during WKSHOES. Participants discussed broader issues such as the overall benefits and challenges of opening science up for non-academic actors and the question of what is scientific integrity, but also got into the details of engagement such as different specific stakeholder roles and the communications needs related to each role. This report represents the essence of these discussions, leading to Section 4.1 with the suggested Table of Contents for the Strategy.

Although discussions were constructive and touched upon many topics, much more time would have been effectively spent discussing the larger questions underlying stakeholder engagement in ICES. In order to address questions like these, and also to deepen the discussion about the practicalities of stakeholder engagement in ICES, WKSHOES proposes to form an Expert Group (either one or more additional workshops or a working group) around these topics as well as taking the several additional concrete next steps outlined below.

9.2 Co-developing this strategy together with stakeholders

As expressed throughout this report in regards to ICES actions in general, WKSHOES participants believe that Stakeholders should be consulted in areas that impact them, and the development of this Strategy is no different.

How will Stakeholders provide input? – Consultation on draft(s) prior to final publication?

WKSHOES did not include stakeholders except scientists who have extensive experience with stakeholder interaction and/or ICES stakeholder engagement. We received significant interest from several stakeholder groups who asked to be involved. After input from ACOM/SCICOM and the ICES Council it will be essential to seek feedback from a diversity of stakeholders with the ability to significantly edit, change, and improve the proposed elements for an ICES Stakeholder Engagement Strategy.

Part of the process for developing the Stakeholder Engagement Strategy should be to communicate this clearly: what, when, who, and how stakeholders can provide input.

When and with whom? Co-development

Before the Stakeholder Engagement Strategy is finalised, a feedback event with key ICES stakeholders should be held. The aim of this event will be to discuss the contents of the Strategy with stakeholders and collect their views on gaps and needed edits. Considering the envisioned timeline of Strategy development, WKSHOES recommends that ICES hold such an event in early

2022. Diverse stakeholders should be specifically invited and the meeting should be announced across the ICES Community. Other means for providing input should be offered to stakeholders who are not able to attend.

9.3 Additional questions and topics that arose during WKSHOES

A number of questions came up during WKSHOES. With additional time some of these questions could have been addressed within the scope of the workshop, but we did not extensively discuss them or reach any conclusions. We offer them here for consideration during the development of the Strategy and beyond.

- What precisely is the role of Council members with clear ties to specific countries? (the answer to this question might require institutional analysis)
- How can we identify stakeholders? Who is the legitimate entity to identify them? There could be two purposes to identify and engage stakeholders. An epistemological purpose and a political one – the legitimacy purpose.
- How can we minimize implicit bias that may lead us to disproportionately involve stakeholders who are similar to us as experts?
- What is scientific integrity and how can/should it be protected?
- How to best integrate the knowledge contributed by stakeholders with the scientific data produced in ICES? How to recognise and reconcile divergent viewpoints, interests and agendas?
- How do we handle stakeholder involvement by parties with commercial interests?
- One area of discussion in WKSHOES was how stakeholders with commercial interests should manage their interests. The current message conveyed to industry stakeholders is that they should not use any knowledge to their commercial advantage. Concerns about this approach were raised in the workshop, namely that 1) this is not verifiable, and 2) it asks the participants to act counter to their specific interests. An alternative is to have a more transparent process.
- In the TOR for WKSHOES, we discussed ‘goals and objectives’, although they are actually synonyms in daily communication. We aimed to treat them here as synonyms, but because we talk about different timeframes and actions related to our broader principles and goals, we at times used ‘objectives’ to refer to tangible steps related to broader goals.

10 WKSHOES recommendations going forwards

Throughout this WKSHOES report and in the Executive Summary are a number of recommendations from the workshop participants to ICES. Here we summarize the recommendations.

The participants of WKSHOES recommend that:

- In order to both complete the development of the ICES Stakeholder Engagement Strategy and conduct successful stakeholder engagement about the Strategy, a suite of communication activities is needed that should best be coordinated from a central contact point within ICES.
- After ACOM/SCICOM draft the Strategy and obtain input from the ICES Council, a diversity of stakeholders should be invited to comment on the WKSHOES report and subsequently ICES should hold an event with stakeholders in early 2022 to agree on the contents of the strategy and how it will be implemented.
- A future Expert Group should address the ongoing need to teach stakeholder engagement methods within the ICES network.
-
- ICES takes a number of Communications actions to effectively implement the Strategy.
 - Create an easily accessible Stakeholder Contact Point for all types of stakeholders to call, email, or ask questions. There is currently an Observer Forum and a supporting officer in place who is a central point of contact for observers and this could be a basis for other interactions.
 - Produce and maintain a manual for how different groups can enter into the ICES system as a stakeholder, with specific information on different formats of meetings/forums, and how to join them (if possible).
 - One-page summary document for potential stakeholders that describes different types of Stakeholder roles.
 - Feedback forms / web links for stakeholders to give feedback about all ICES experiences.
 - Feedback/monitoring form for scientists and other ICES network engagers.
 - Engagement Guidelines for ICES scientists.
 - Illustrative examples of the output/outcome from stakeholder interactions.

11 References

- AccountAbility. (2015). AA1000 AccountAbility Stakeholder Engagement Standard.
- Arkema, K. K., Abramson, S. C., & Dewsbury, B. M. (2006). From characterization to implementation Marine ecosystem-based management. *Frontiers in Ecology and the Environment*, Dec., 2006, Vol. 4(10), 525–532.
- Ballesteros, M., Chapela, R., Ramírez-Monsalve, P., Raakjaer, J., Hegland, T. J., Nielsen, K. N., Laksá, U., & Degnbol, P. (2018). Do not shoot the messenger: ICES advice for an ecosystem approach to fisheries management in the European Union. *ICES Journal of Marine Science*, 75(2), 519–530. <https://doi.org/10.1093/icesjms/fsx181>
- Ballesteros, M. & M. Dickey-Collas 2020. Position Paper on ICES Stakeholder Engagement Strategy, ICES Draft: 14 August 2020.
- Chandler, A.D., Jr. 1962. *Strategy and structure: chapters in the history of the industrial enterprise*. M.I.T. Press.
- Cvitanovic, C., Howden, M., Colvin, R. M., Norström, A., Meadow, A. M., & Addison, P. F. E. (2019). Maximising the benefits of participatory climate adaptation research by understanding and managing the associated challenges and risks. *Environmental Science and Policy*, 94(September 2018), 20–31. <https://doi.org/10.1016/j.envsci.2018.12.028>
- Dankel, D. J., Stange, K., and Nielsen, K. N.(2016). What hat are you wearing? On the multiple roles of fishery scientists in the ICES community. *ICES Journal of Marine Science*, 73: 209–216.
- Dickey-Collas, M. & M. Ballesteros. (2019). Swinging back? Science ethos and stakeholders' engagement in ICES advisory processes. (Fishing industry as authors of ICES expert group reports). *ICES News* [Link](#).
- Dickey-Collas, M. & M. Ballesteros. (2021). The process in ICES of opening up to increased stakeholder engagement (1980 to 2020). ICES Cooperative Research Report.
- Esguerra, A., Beck, S., & Lidskog, R. (2017). Stakeholder engagement in the making: IPBES legitimization politics. *Global Environmental Politics*, 17(1), 59-76.)
- Gómez, S., & Maynou, F. (2021). Balancing ecology, economy and culture in fisheries policy: Participatory research in the Western Mediterranean demersal fisheries management plan. *Journal of Environmental Management*, 291. <https://doi.org/10.1016/j.jenvman.2021.112728>
- Hazard, L., Cerf, M., Lamine, C., Magda, D., & Steyaert, P. (2020). A tool for reflecting on research stances to support sustainability transitions. *Nature Sustainability*, 3(2), 89–95. <https://doi.org/10.1038/s41893-019-0440-x>
- Holm, Petter, Maria Hadjimichael, Sebastian Linke, Steven Mackinson (Editors). (2020). *Collaborative Research in fisheries: Co-creating knowledge for fisheries governance in Europe*. Springer International Publishing. 320p. DOI: 10.1007/978-3-030-26784-1
- ICES. (2019). Workshop on Science with Industry Initiatives (WKSCINDI). *ICES Scientific Reports*. 1:68. 67 pp. <http://doi.org/10.17895/ices.pub.5610>
- ICES. (2021). ICES Workshop on Standards and Guidelines for fisheries dependent data (WKDSG; Outputs from 2020 meeting). *ICES Scientific Reports*. 3:38. 90 pp. <https://doi.org/10.17895/ices.pub.8038>Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., Swilling, M., & Thomas, C. J. (2012). Transdisciplinary research in sustainability science: Practice, principles, and challenges. *Sustainability Science*, 7(SUPPL. 1), 25–43. <https://doi.org/10.1007/s11625-011-0149-x>
- Lovell, M. A., Kaplan, I. C., Sheer, M. B., Howell, R., Coast, W., Alliance, G., & Grant, S. (2012). DEVELOPING THE CAPACITY TO ASSESS POLICY PRIORITIES - ENGAGEMENT WITH STAKEHOLDERS AND MANAGERS. <https://www.integratedecosystemassessment.noaa.gov/sites/default/files/2018-12/2.Engagement%20CCIEA%202012.pdf>

- Macher, C., Bertignac, M., Guyader, O., Frangoudes, K., Frésard, M., Le Grand, C., Merzéréraud, M., & Thébaud, O. (2018). The role of technical protocols and partnership engagement in developing a decision support framework for fisheries management. *Journal of Environmental Management*, 223(June), 503–516. <https://doi.org/10.1016/j.jenvman.2018.06.063>
- Macher, C., Steins, N. A., Ballesteros, M., Kraan, M., Frangoudes, K., Bailly, D., Bertignac, M., Colloca, F., Fitzpatrick, M., Garcia, D., Little, R., Mardle, S., Murillas, A., Pawlowski, L., Philippe, M., Prellezo, R., Sabatella, E., Thébaud, O., Ulrich, C., & Dankel, D. (2021). Towards transdisciplinary decision-support processes in fisheries: Experiences and recommendations from a multidisciplinary collective of researchers. *Aquatic Living Resources*, 34. <https://doi.org/10.1051/alr/2021010>
- Mackinson, S., Wilson, D. C., Galiay, P., & Deas, B. (2011). Engaging stakeholders in fisheries and marine research. *Marine Policy*, 35(1), 18–24. <https://doi.org/10.1016/j.marpol.2010.07.003>
- Mackinson, S., & Middleton, D. A. J. (2018). Evolving the ecosystem approach in European fisheries: Transferable lessons from New Zealand’s experience in strengthening stakeholder involvement. *Marine Policy*, 90(November 2017), 194–202. <https://doi.org/10.1016/j.marpol.2017.12.001>
- Oubenal, M., Hrabanski, M., and Pesche, D. (2017). IPBES, an inclusive institution? Challenging the integration of stakeholders in a science-policy interface. *Ecology and Society*, 22(1)
- Ramírez-Monsalve, P., Nielsen, K. N., Ballesteros, M., Kirkfeldt, T. S., Dickey-Collas, M., Delaney, A., Hegland, T. J., Raakjær, J., & Degnbol, P. (2021). Pulling mechanisms and pushing strategies: How to improve Ecosystem Advice Fisheries Management advice within the European Union’s Common Fisheries Policy. *Fisheries Research*, 233(July 2020), 105751. <https://doi.org/10.1016/j.fishres.2020.105751>
- Raymond, C. M., Fazey, I., Reed, M. S., Stringer, L. C., Robinson, G. M., Evely, A. C. (2010). Integrating local and scientific knowledge for environmental management, *Journal of Environmental Management*, 91, 8, 1766-1777, <https://doi.org/10.1016/j.jenvman.2010.03.023>.
- Röckmann, C., Ulrich, C., Dreyer, M., Bell, E., Borodzicz, E., Haapasaari, P., Kjellrun Hiis Hauge, K. H., Howell, D., Mäntyniemi, S., Miller, D., Tserpes, G., Pastoors, M. (2012). The added value of participatory modelling in fisheries management – what has been learnt? *Marine Policy*, 36, 5, 1072-1085. <https://doi.org/10.1016/j.marpol.2012.02.027>
- Said, A., Trouillet, B. (2020). Bringing ‘Deep Knowledge’ of Fisheries into Marine Spatial Planning. *Maritime Studies* 19, 347–357. <https://doi.org/10.1007/s40152-020-00178-y>
- Sampedro, Paz, Prellezo, Raúl, García, Dorleta et al. (6 more authors). (2016). To shape or to be shaped : engaging stakeholders in fishery management advice. *ICES Journal of Marine Science*. <https://doi.org/10.1093/icesjms/fsw160>
- Smith, A. D. M., Sainsbury, K. J., & Stevens, R. A. (1999). Implementing effective fisheries-management systems - Management strategy evaluation and the Australian partnership approach. *ICES Journal of Marine Science*, 56(6), 967–979. <https://doi.org/10.1006/jmsc.1999.0540>
- Stange, K., Olsson, P., and Österblom, H. (2012). Managing organizational change in an international scientific network: A study of ICES reform processes. *Marine Policy*, 36: 681–688. <https://doi.org/10.1016/j.marpol.2011.10.013>
- Stange, K., van Tatenhove, J., van Leeuwen, J., (2015), Stakeholder-led knowledge production: Development of a long-term management plan for North Sea Nephrops fisheries, *Science and Public Policy*, 42, 4, 501–513, <https://doi.org/10.1093/scipol/scu068>
- UNDP-UNDESA.(2021). WHAT IS A ‘GOOD PRACTICE’? A framework to analyse the Quality of Stakeholder Engagement in implementation and follow-up of the 2030 Agenda. <https://sdgs.un.org/sites/default/files/2021-01/UNDP-UNDESA%20Stakeholder%20Engagement%20Report%20FINAL.pdf>
- Wilson. (2009). The paradoxes of transparency. *Science and the ecosystem approach to fisheries management in Europe*.

Annex 1: List of participants

Name	Institute	Country (of institute)	Email
Alan Haynie	NOAA	United States of America	alan.haynie@noaa.gov
Vera Köpsel	University of Hamburg, IMF	Germany	vera.koepsel@uni-hamburg.de
Gabriel de Moura Kiipper	University of Hamburg, IMF	Germany	gkiipper@gmail.com
Christian Wagner-Ahlts	Christian-Albrechts Universität Kiel	Germany	cwagnerahfs@kms.uni-kiel.de
Claire Macher	Ifremer	France	Claire.Macher@ifremer.fr
David Goldsborough	Van Hall Larenstein, University of Applied Sciences	The Netherlands	david.goldsborough@hvhl.nl
Debbi Pedreschi	Marine Institute	Ireland	debbi.pedreschi@marine.ie
Julia Calderwood	Marine Institute	Ireland	Julia.Calderwood@marine.ie
Julie Kellner	ICES	Denmark	julie.kellner@ices.dk
Katie Brigden	UHI - NAFC Marine Center	Scotland	katie.brigden@uhi.ac.uk
Lea Schönen	Van Hall Larenstein - University of Applied Science	The Netherlands	lea.schonen@hvhl.nl
Lisa Settington	DFO	Canada	lisa.settington@dfo-mpo.gc.ca
Maria Cristina Mangano			mariacristina.mangano@gmail.com
Marta Ballesteros	CETMAR	Spain	mballesteros@cetmar.org
Olivier Thébaud	Ifremer	France	olivier.thebaud@ifremer.fr
Sebastian Linke	University of Gothenburg	Sweden	sebastian.linke@gu.se
Sílvia Gómez	Autonomous University of Barcelona	Spain	Silvia.Gomez@uab.cat
Steven Mackinson	SPFA	Scotland	steve.mackinson@scottishpelagic.co.uk
Jörn Schmidt	ICES	Denmark	joern.schmidt@ices.dk
Mark Dickey-Collas	ICES	Denmark	Mark.dickey-collas@ices.dk
Julie Krogh Hallin	ICES	Denmark	Julie.Krogh.Hallin@ices.dk

Annex 2: Resolution

WKSHOES - Workshop on Stakeholder Engagement Strategy

2020/WK/IEASG04 **Workshop on Stakeholder Engagement Strategy (WKSHOES)**, chaired by Alan Haynie, USA, and Vera Köpsel, Germany, will meet online **22-24 June 2021**. WKSHOES will examine stakeholder interactions across ICES expert groups, assess needs and opportunities, and develop elements for a strategy to formalize stakeholder involvement in ICES groups. Specifically, WKSHOES will:

- a) Characterize potential ICES stakeholder interaction goals as well as the key elements of a stakeholder engagement strategy to achieve these goals, to be developed by ACOM/SCICOM following WKSHOES. ([Science Plan codes](#): 3.6)
- b) Further describe these key elements of the strategy, e.g. objectives, roles, principles, boundaries, monitoring, evaluation, etc. ([Science Plan codes](#): 3.6)
 1. Consider relevant stakeholder interaction documents including the framing document developed by Ballesteros and Dickey-Collas. Building on the Ballesteros and Dickey-Collas framing document, summarize the approaches taken by other similar and relevant international organisations.
 2. Develop and propose a table of contents for a Stakeholder Engagement Strategy to be developed by ACOM/SCICOM that clearly links the potential objectives with guiding principles.
 3. Discuss gaps, identify risks and opportunities that arise from the challenges identified.
 4. Consider the best means to effectively and transparently communicate with the ICES community about stakeholder engagement to ensure trust in the process.
- c) Research and report current stakeholder activities taking place *within* ICES, to inform the deliberations of ACOM/SCICOM, especially with regards to monitoring and evaluating the impact of stakeholder engagement against the goals of a strategy. ([Science Plan codes](#): 3.6)
 1. Prior to the workshop, survey ICES expert group chairs to characterize current stakeholder involvement, perceived barriers and challenges, and goals for improving stakeholder engagement.
 2. Summarize current stakeholder monitoring / tracking processes and consider alternatives.
 3. Discuss future social science training needs related to different stakeholder strategies.
- d) Propose alternative approaches (with associated risks) to improve and secure further inclusion and engagement by ICES with stakeholders, such as future hybrid meetings. ([Science Plan codes](#): 3.6)

ICES WKSHOES will report to the attention of ACOM / SCICOM by **31 July 2021**.

Supporting information

Priority	High; this WK is essential for clarifying the role of stakeholders in ICES. The WK will produce the context for ACOM/SCICOM to create a stakeholder engagement policy that will guide stakeholder interaction in diverse ICES expert groups and workshops.
Resource requirements	Assistance of the Secretariat in maintaining and exchanging information and requirements and data to potential participants. Technical assistance scheduling and running an online workshop.
Participants	Various experts across ICES groups with knowledge and expertise of stakeholder participation in ICES and beyond.
Secretariat facilities	SharePoint site, secretariat support for reporting. Assistance with online workshop functioning and online meetings prior to the workshop and operation of the online workshop.
Financial	No financial implications.
Linkages to ACOM and groups under ACOM	All ACOM/SCICOM groups will be impacted by this workshop.
Linkages to other committees or groups	ACOM, SCICOM, WGSOCIAL, WGMARS, WGECON, WGBESEO, Others.
Linkages to other organizations	All current and potential future stakeholders.

Annex 3: Final workshop agenda

ICES Workshop on Stakeholder Engagement Strategy (WKSHOES) - Agenda

22-24 June 2021, starting at 15:00 CET, 9:00 EDT, 6:00 Pacific time

Chairs: Alan Haynie (USA) and Vera Köpsel (Germany)

Goals

- See [TOR](#) for detailed Goals
- Write report based on discussion to inform SCICOM/ACOM Strategy to inform SCICOM/ACOM Strategy

Rules of workshop participation

- Please read background material (will be emailed late week before workshop and included in Sharepoint Background Documents).
- Understand the scope of the workshop - it's about the Strategy, not planning all future stakeholder-related activities.
- We appreciate that you may not be available during the entire workshop. However, every absence reduces the efficiency of the workshop. Therefore, participants should please be available throughout the workshop as much as possible.
- Please complete the limited "homework" and contribute to prepare for the following day and enable Report completion by 25 June.

Relevant links

- WKSHOES Website [link](#)
- WKSHOES [Sharepoint site](#)
- Resolution / TOR [link](#)
- Stakeholder Engagement Survey. Survey is closed but available here: [link](#)

Agenda

Day 1: Goals of Meeting, Background and Introductions

Tuesday 22 June 15:00 - 19:00 Central European Time

15:00-15:45

Workshop introduction by Chairs

- Purpose of workshop
 - Why do we need stakeholder engagement? Challenges and benefits.
 - Desired output - an effective report that allows ACOM and SCICOM to develop a formal strategy.
 - At the end, we will summarize consensus points but we will also note non-consensus issues / feelings if there are any.
- What would an effective stakeholder engagement strategy look like? What are the main elements?
- Planned workshop process
- Post-WKSHOES actions

Introduction of participants + name 1-2 key expertise(s) everyone brings to WKSHOES

Interactive Session - 3 questions to break the ice + group photo

15:45 - 16:45

Background of stakeholders in ICES (Overview of Paper by Marta Ballesteros / Mark Dickey-Collas)

16:45 - 17:05

Other ICES - Specific input

- Survey Presentation + Discussion (Vera)
- Participants: Other experiences with engagement in ICES and beyond

BREAK (10min)

17:15 - 17:30

Breakout groups: Split into small groups

- Get to know each other and process info
- Discussion: What bias(es) and resources do each of us bring to the virtual table / to this workshop? What stake do I hold when it comes to stakeholder engagement in ICES?

17:30-17:45

Discussion of "bias" breakout group results

17:45-18:30

- Mark/Marta introduce the "boxes" or recommended elements that they suggest for the Strategy
- Homework explained by Alan & Vera:
 - Which "boxes" should the strategy cover?

18:30-19:00 +

- *Happy Hour Around the World!*

Day 2: Identifying and Clarifying Issues

Wednesday, Online 23 June 15:00 - 18:00 Central European Time

15:00 - 15:15

- Summarize Day 1

15:15 - 16:15

- Discuss Principles for Stakeholder Engagement
- Discuss the boxes and people's ideas about them
- Finalize Boxes

5 minute break

16:20 - 17:00

Breakout groups: Bullets to boxes (--> using Padlet/MURAL?)

- Take proposed/agreed-upon boxes (maybe 2 per group even) and fill them with life

- Each group to determine a “leader” who presents in plenary and later leads the work on these boxes for the Report

BREAK (10min)

17:10 - 17:50

- Plenary to present/discuss outcomes of Breakout Groups
- Identify Challenges/Gaps/Opportunities in the Bullets (interactive method?)

17:50 - 18:00

- Brief discussion of the past day
- Homework: add any missing bullets to boxes

Day 3: Completing the Strategy Background Document,

Online 24 June 15:00 - 19:00 Central European Time

15:00 - 15:30

- Summarize Day 2 progress and current status
- Revise outline of Planned strategy

15:30-17:00

- Divide work into sections and work on those sections, lead by the “Boxes” leaders
- Take breaks as needed

17:00-18:00

- Combine into Draft Strategy Support Document
 - Discuss key points and determine if there is a consensus or not
 - Write draft report during week
 - Start with Template pre-populated ahead of meeting

Day 4 - As necessary, complete the workshop report.

Participants complete report assignments and Chairs edit report.

Annex 4: ICES Expert Group Chairs survey – questionnaire



Section A: Introductory questions

A1. What type of Expert Group (EG) are you describing?

If you (have) chair(ed) multiple expert groups, please describe your experience with the one group with the most significant amount of stakeholder interaction. (Note: the term expert group applies to both working groups and workshops.)

Working Group	<input type="checkbox"/>
Workshop	<input type="checkbox"/>

A2. What is the topic area of your EG/WK?

Choose all that apply.

Aquaculture	<input type="checkbox"/>
IEAs	<input type="checkbox"/>
Data Science and Technology	<input type="checkbox"/>
Stock Assessment / Fisheries Resources	<input type="checkbox"/>
Ecosystem Observation	<input type="checkbox"/>
Ecosystem Processes and Dynamics	<input type="checkbox"/>
Climate Change	<input type="checkbox"/>
Human Dimensions	<input type="checkbox"/>
Renewable Energy	<input type="checkbox"/>
Other	<input type="checkbox"/>

Other

<input type="text"/>

Section B: Main Questions

B1. To date, what is your experience engaging with any stakeholders in your EG?

No experience	<input type="checkbox"/>
Very limited experience	<input type="checkbox"/>
Some experience	<input type="checkbox"/>
Extensive experience	<input type="checkbox"/>

B2. What types of stakeholder groups and how frequently have you engaged with in your EG?

	Never	Occasionally	Often	Always
Industry representatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government representatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental managers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
eNGOs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fishers/aquaculture farmers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Policy makers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B3. In addition to the points listed in the previous question, are there any other stakeholder groups that you engage with in your EG?

Please describe briefly.

<input type="text"/>



B4. Are there any types of stakeholder groups that you find particularly challenging to engage with? If so, why? Please give a short description below.

Please describe briefly.

B5. What are your reasons not to engage with stakeholders?

Choose all that apply.

- No need for stakeholder input
- Stakeholders do not have formal access to EG/Workshop
- Stakeholders are not interested in participating in EG/Workshop
- Concern about conflicts of interest
- Other

Other

B6. Does/did your EG face any obstacles when engaging with stakeholders? If so, which?

Please describe briefly.

B7. As Chair, do/did you face any obstacles when considering to engage with stakeholders? If so, which?

B8. What is the purpose of engaging stakeholders in your EG?

(Choose all that apply)

- Inform them about EG results and ongoing research
- Receive approval for EG research results
- Discuss EG results
- Identify research needs/questions for EG
- Gather insights and experiential knowledge to complement scientific data
- Co-develop the research process together with stakeholders
- Address research questions raised by stakeholders
- Other

Other

B9. How do you usually integrate the results from engagement with stakeholders into the work of your EG?

(Choose all that apply)

- We share our research results with stakeholders and collect feedback
- We use the input from stakeholders as background/contextual information for our research
- Stakeholders provide quantitative data that we integrate into our work



I think more stakeholders should participate (amount or diversity)

I think fewer stakeholders should participate (amount or diversity)

B16. In your view, what are the largest benefits and most significant challenges of engaging stakeholders in the work of your EG?

Please describe briefly.

Benefits:

Challenges/Disadvantages:

B17. In your experience, are there any methods of engaging stakeholders that work particularly well/inadequately? If so, why?

Please provide a brief explanation.

Methods that work well:

Methods that work inadequately:

B18. Has your view of stakeholder engagement changed during your ICES experience? If so, how?

Please describe briefly.

B19. When it comes to an ICES Stakeholder Engagement Strategy, are there any points that you think are 'musts' to include?

Please describe briefly.

Section C: Closing Questions

C1. How long have you been involved in the ICES system?

- Less than 1 year
- 1-3 years
- 4-6 years
- 7-9 years
- 10 years or longer

C2. How long have you been chairing your EG?

- Less than 1 year
- 1-3 years
- 4-6 years

C3. What is your disciplinary background?

- Natural Scientist
- Social Scientist
- Mult/trans/cross-disciplinary
- Other

Other



C4. Do you have any ideas or closing remarks that you would like to share with us? If so, feel free to use the space below. In either case, please hit the “submit” button to complete the survey.

Thank you very much for completing this survey!

Your answers will form an important part of assessing current stakeholder engagement activities in the ICES Expert Groups. This survey will contribute to the work of WKSHOES and to building the foundation of the ICES Stakeholder Engagement Strategy that is currently under development.

In case you have any further questions or comments, do not hesitate to get in touch with:

Dr. Vera Köpsel

Institute of Marine Ecosystem and Fishery Science (IMF)

University of Hamburg, Germany

vera.koepsel@uni-hamburg.de