

## Marine Science Co-ordination Committee

# MSCC plenary meeting minutes: held on 28 September 2020

### Location

Virtual

### Attendees

#### Chair:

Simon Brockington (Co-Chair and Defra)

#### Secretariat:

Abigail Marshall (MSCC/NOC)

#### Other attendees:

- Aisling Lannin (MMO)
- Alan Evans (NOC)
- Alejandro Gallego (Marine Scotland)
- Claire Vincent (DAERA)
- Clive Hughes (FCDO)
- Ed Hill (NOC)
- Emma McKinley (University of Cardiff/SSTG Co-Chair)
- Glenn Watts (EA)
- Icarus Allen (PML)
- Jason Holt (NOC/NPOP Co-Chair)
- Karen Webb (JNCC)
- Katy Hill (NOC)
- Kirsten Ramsey (NRW)
- Lowri Griffiths (FCDO/IWG Chair)
- Mark Charlesworth (NRW/CSSEG Chair)
- Mark James (Non-Executive)
- Matt Frost (MBA/MCCIP Chair)
- Matthew Palmer (NOC/UK-IMON Chair)
- Michael Webb (UKRI-NERC)
- Michel Kaiser (Non-Executive/MIG Chair)
- Mike Dowell (Welsh Government)
- Mike Elliott (Non-Executive)
- Nikhil Banda (Seiche Ltd/CWG Chair)
- Peter Liss (UEA/USF Chair/MEDIN Chair)
- Phil James (Defra)
- Pieter-Jan Schön (AFBI-NI)

- Richard Wood (Met Office)
- Rick Bruintjes (Defra)
- Roger Proudfoot (EA/HBDSEG Chair)
- Selina Steed (MMO)
- Stephanie Ockenden (Defra)
- Stephen de Mora (*Ad Hominem*)
- Stephen Dye (Cefas/PSEG Chair)
- Tarquin Dorrington (Defra)

## Item 1: Welcome and apologies

1.1. Simon Brockington (SB) welcomed the group to the September plenary. SB gave a quick overview of the agenda, highlighting that Gideon Henderson (GH) the Defra CSA would be speaking as the MSCC looks toward a greater marine emphasis across government. SB highlighted that a number of international events, such as COP26 and the G7 presidency, will take place in 2021 therefore the UK needs to strongly position itself on its response to marine issues. The MSCC Statement on Ocean and Climate Change is important for this and approval of this statement will be sought at this meeting.

1.2. SB and Abigail Marshall (AM) gave apologies for: Chris Jenkins (Welsh Government), Chris Parry (UKHO), Colin Moffat (Scottish Government), David Pirie (SEPA), Richard Murphy (BEIS), Tim McDonnell (Scottish Government), Vicki Castro-Spokes (Defra).

1.3. SB informed the MSCC that Tavis Potts had stepped down as Non-Executive and Social Science Task Group (SSTG) Co-Chair to focus on his role as Director at the Centre for Energy Transition. SB thanked Tavis for his hard work and for leaving a social science legacy within the MSCC. SB also informed the MSCC of Dominic Pattinson's departure from the MSCC and MARG to take on the role of Executive Secretary at OSPAR. SB thanked Dominic for his involvement and work for the MSCC and MARG.

1.4. SB reminded members that the MSCC will meet four times a year from January 2021, the format of plenaries is something the Executive Committee is still refining. The full Road Map is also progressing, an update will be available at the next meeting in January.

## Item 2: Previous minutes of March 2020 and action updates

2.1. SB asked if there were any amendments to the minutes from the March 2020 plenary. None were given and so the minutes were agreed to be an accurate and true account of the previous plenary. **ACTION: AM to provide MSCC website with latest approved March 2020 minutes.**

2.2. Due to time constraints, SB asked members to email AM regarding previous actions. SB also suggested the risk register actions to be combined and reviewed. **ACTION: Members to let AM know if actions need to be removed. AM to update table.** The table is as follows:

<b>Action number</b>	<b>Action</b>	<b>Responsibility</b>	<b>Deadline</b>
A19.01	Clarification required on the term 'genetic sequencing' in para. 3.4 in previous meetings	Anne Brazier	Ongoing – move into one 'risk register' action
A19.02	Clarification required on the terms 'risk assessment' and 'risk register' and that the requirement of the Risk Register be clarified	MSCC Executive	Ongoing – move into one 'risk register' action
A19.03	Provide a report from ICG-OA meeting to Members	Colin Moffat	Ongoing
A19.04	Provide Members with update of UK-IMON work plan as soon as available	Matthew Palmer	Completed
A19.05	Ensure Road Map available as pdf on Gov.UK website	MSCC Executive	Completed
A19.06	Discuss production of short, concise summaries from Road Map to use in disseminating the Road map's missions	MSCC Executive	Ongoing
A19.07	Clarify status of Road Map – formal or non-formal ministerial document	Beth Stoker	Combine with S20.02
A19.08	Provide appropriate context for Road Map and accompanying documents for any press interest	MSCC Executive	Ongoing
A19.09	Map sub-group Chairs to specific priorities, where links are clear	MSCC Executive	Ongoing
A19.10	Provide a concrete description of the role, responsibility and reporting lines for a Champion	MSCC Executive	Ongoing
A19.11	Provide Ms Griffiths with ideas as to how to engage Members with international opportunities and to spread the word about UK activities already underway	Members	Ongoing
A19.12	Share information with Professor Kaiser on recent offshore wind farming	BEIS	To be removed
A19.13	Professors Hill, Liss, Elliott and Kaiser and Mr McDonnell to discuss Marine Industries contacts and perspectives	Anne Brazier	Completed
A19.14	Form correspondence group, including either Helena Grey or Michael McLeod, to map in detail the	Matt Frost Colin Moffat Stephen Dye	Ongoing

	complexities of Priority One and subsequently circulate to Members		
A19.15	Make decision as to whether MEDIN should share responsibility for Priority Eight with MARG, RVWG, UK-IMON and MIG	MSCC Executive	Completed – MEDIN to take shared responsibility
A19.16	Ensure update on Defra Systems Mapping Project tabled at next Plenary	MSCC Secretary	Ongoing
A19.17	Risk: immediate action required by Executive	MSCC Executive	Ongoing – move into one ‘risk register’ action
A19.18	Risk: Each Member to respond to, and feed into Risk Register before next Plenary	Members	Ongoing – move into one ‘risk register’ action
A19.19	UKHA Group be invited to give presentation at future meeting and then subsequently link into the MSCC via MARG	MSCC Secretary	Ongoing
A19.20	Revise diagram in light of today’s discussions and take to the International Working Group	Ed Hill	Completed
A19.21	Decide who should table a funding paper at next Plenary	MSCC Executive	Ongoing
A19.22	Work with Non-Executive Members to refine Risk Register	MSCC Executive	Ongoing – move into one ‘risk register’ action
S20.01	Feedback on the use of VC for this and future plenaries	Members	End of April Completed
S20.02	Update on the MSCC Road Map sign off	Colin Moffat	Next plenary Ongoing
S20.03	Feedback on the MIG letter and survey to be sent to Michel Kaiser (MIG Chair)	Members	27 <sup>th</sup> March 2020 Completed
S20.04	Contact WG/PI Chairs for nominations into Comms WG	Abigail Marshall	End of April 2020 Completed
S20.05	Register interest in Comms WG membership or Chair	Members	End of April 2020 Completed
S20.06	Advise AM on potential Comms WG members outside of MSCC	Members	End of April 2020 Completed
S20.07	Organise date for next plenary	Abigail Marshall Co-Chairs Michel Kaiser	May 2020 Completed MK happy to offer the next physical plenary at HWU

S20.08	CERES/MCCIP chat overlap	Mike Elliott Matt Frost	Ongoing Completed
S20.09	Contact Matt Frost/MCCIP if the Report Card 2020 could help in organisation work plan	Members	Ongoing Completed
S20.10	Social Sciences Task Group to host MF for MCCIP talk	Tavis Potts Matt Frost	Remove
S20.11	IMON to work with MCCIP on identifying observing needs to support future report cards	Matthew Palmer Matt Frost	Ongoing Remove
S20.12	IWG to consider nominating a member to sit on the Decade board	International Working Group Lowri Griffiths	TBC Ongoing
S20.13	Initial text for MSCC response to the Decade	Ed Hill Abigail Marshall	1 <sup>st</sup> April 2020 Completed by Alan Evans, EH, AM
S20.14	Group to work on agreeing an MSCC response to the Decade to submit to Co-Chairs	Ed Hill Abigail Marshall David Righton Mark James Lowri Griffiths	7 <sup>th</sup> April 2020 Completed
S20.15	MSCC Decade response submission	Ed Hill Abigail Marshall	17 <sup>th</sup> April 2020 Completed
S20.16	Paper on creating a fit-for-purpose IMON	Katy Hill Matthew Palmer	19 <sup>th</sup> May 2020 Completed
S20.17	Discussions on co-ordinated monitoring activities in the UK and Europe	Katy Hill Mike Elliott	Ongoing Completed
S20.18	Submission of ocean climate information system proposal	Tarquin Dorrington	7 <sup>th</sup> April 2020 Ongoing
S20.19	MSCC statement of actions in response to the ocean & climate emergency	Colin Moffat Simon Brockington Abigail Marshall	June 2020 Completed by Tarquin Dorrington

### Item 3: MSCC Working Group & Partnership Initiative updates

#### **Communications Working Group (CWG)**

3.1. SB extended a warm welcome to Nikhil Banda (NB) who has recently become Chair of this group.

3.2. NB thanked SB and gave a brief overview of his background in marine acoustics at Seiche Ltd as well as being a point of contact between universities and industry with the aim of improving communications between these. NB spoke of the last CWG meeting in July,

the first in four years, and is excited about taking on the Chair. NB has been looking through the outcomes of the past CWG and focussing on answering big questions to difference audience types and how to aid communications in the MSCC and its subgroups.

### ***International Working Group (IWG)***

3.3. Lowri Griffiths (LG) commented on the IWG meeting, held earlier in September, where various international initiatives were discussed. The meeting focus was the role of the IWG as the UK National Decade Committee (NDC) for the UN Decade of Ocean Science for Sustainable Development (hereinafter “UN Ocean Decade”). The meeting outcome was a paper on Government priorities and the role of the NDC, which LG will present to the Royal Society at a workshop on the UN Ocean Decade. The IWG website is now running but updates are still being made, LG will reach out to the CWG for further advice and feedback.

3.4. Peter Liss (PL) added that the UN Ocean Decade Royal Society meeting is to be held virtually in October with individuals from the scientific community and government.

### ***Marine Assessment and Reporting Group (MARG)***

3.5. SB gave a brief overview of MARG in the absence of the MARG Chairs. Defra, on behalf of all of the devolved administrations, have launched a consultation for the UK Marine Strategy Part Two (Monitoring). The state of the environment (Part 1) culminated in the Marine Online Assessment Tool (MOAT) hosted by Cefas, Part Two is in consultation, Part Three will be a programme of measures to achieve the UK Marine Vision.

3.6. Roger Proudfoot (RP) commented that a group has been set up to review existing measures (UK wide), workshops are being planned for ecosystem components and pressures.

3.7. Stephen Dye (SD) highlighted the work will link to OSPAR QSR2023.

### ***Marine Climate Change Impacts Partnership (MCCIP)***

3.8. Matt Frost (MF) highlighted the 2020 report card that had been released earlier this year. A piece of work is ongoing to see where the gaps are and to inform research needs moving forward. MCCIP has a new business plan in place and an implementation working group has formed to oversee this. A review is taking place into the rapid provision of information, rather than a 2 year report, and how this can feed into the Ocean Climate Information System. MCCIP have also formed an Overseas Working Group (OWG) to look at Overseas Territories (OT) and will be meeting in October for the first time. The OWG will look to assess the current baseline of OT waters.

### ***Marine Environmental Data and Information Network (MEDIN)***

3.9. PL gave an overview of recent MEDIN work. A report is due to be published regarding MEDIN objectives, how they've been achieved and what work needs to be done. This can be sent once published. **ACTION: PL/AM to distribute MEDIN publication.** A cost benefit analysis of MEDIN was completed by eftec and ABPmer, with a ratio of over eight. It also

provided information on how to operate better. MEDIN has been used as a pilot for a joint GOOS and OECD project on valuing marine data, which may be done internationally. PL thanked BEIS for the introductions and Defra for funding. PL also stated MEDIN had been in talks in regard to the SMMR project and if there is a need for marine social science data collection and how MEDIN can be involved. **ACTION: Members to get in touch with PL or AM if interested in discussing further social science data within SMMR/MEDIN.** SB thanked PL and supported social science data being included within MEDIN.

3.10. Michael Webb (MW) stated there is a general issue of how to deal with data and how to make that available across the interdisciplinary landscape. More activities within UKRI may also look to consider this further.

### ***Underwater Sound Forum (USF)***

3.11. PL shared that the meeting in May had to be cancelled. However the USF will be going online in November for its first ever virtual meet.

3.12. SB questioned the involvement of JNCC given the regulatory work they do with underwater noise. Karen Webb (KW) offered to make sure the JNCC are involved. PL stated JNCC are regular members.

### ***Marine Industries Group (MIG)***

3.13. Michel Kaiser (MK) noted the change in name to MIG from MILG (Marine Industries Liaison Group). MK sent a survey to MIG members to help focus the direction of MIG in terms of its role, how it interacts with/contributes to the MSCC and its key priorities. Currently 15 organisations have responded, MK would welcome more input. The survey will be central for reviewing the MIG Terms of Reference (ToR) and plan of action. **ACTION: AM to send survey to members, and members to complete survey by end of the week.** MK also brought to attention the potential engagement of MIG in the SMMR bid. MIG members could have an additive role and therefore it was requested that once bids have been announced, for PIs to pitch to MIG to see if additional funds and support can be given. **ACTION: SMMR PIs & MIG to discuss further collaborations.** MK also endorsed PL's move to integrate social sciences into MEDIN.

3.14. SB asked about the involvement of SUDG. AM stated that links had been made to the new SUDG representative on MIG and they are keen to be involved with MIG. MK followed up by saying this link has already opened up other connections.

3.15. Mike Elliott (ME) stated a number of projects under INSIGHT might be of interest given some projects include offshore projects. **ACTION: ME to discuss INSIGHT projects with MK.**

3.16. Matthew Palmer (MP) commented that an OOSIG member was part of IMON and is a good example where commercial partners are looking for discussions around the MSCC. **ACTION: MP and MK to discuss further IMON, MIG and commercial partners.**

### ***Research Vessel Working Group (RVWG)***

3.17. As Chris Jenkins (CJ) passed his apologies AM gave a brief update on CJ's behalf. The RVWG reconvened on the 10th June 2020 for the first time since 2018. Attendance was good with only BAS giving apologies on this occasion. No representation currently from MIG, but this was agreed to be an important area to pursue. **ACTION: MK/CJ to find appropriate MIG rep for RVWG.** At the meeting the group: reviewed and agreed the ToR; discussed Covid-19 preparations and agreed to continue sharing covid best practice intersessionally; considered increased bartering/sharing facilities and resources; NOC showcased their marine planning facilities online system. Since 2018 NOC has become a CLG meaning vessel management and chartering has changed – an important consideration when considering future UK RV fleet configurations. The group spoke of the potential to consider smaller vessels (<50 m) in the form of a subgroup. Considerations would include operational coverage and similar bartering. The MSCC was asked to consider this.

3.18. SB mentioned that the MMO is being considered in the RVWG membership.

3.19. ME suggested links to IFCA if the RVWG are considering smaller vessels, especially as many of these collect data. If harnessed properly, huge amounts of data could be gathered. A discussion between MK, Stephen de Mora and Pieter Jan Schön followed regarding the creation of a list some years ago cataloguing all UK vessels. **ACTION: MK to send AM/CJ vessel list.** RP provided contact details for the Environment Agency coastal survey vessels. Mark James (MJ) suggested Fisheries Innovation Scotland could also be contacted.

3.20. MP supported a group considering small vessels as there is a lot of interest in them. A compendium created by Jackie Pearson (NOCA Secretariat) and the Marine Facilities Advisory Board (MFAB) is of great use and should be used. From the perspective of IMON, it is important that all infrastructure is captured (e.g. laboratories, equipment, vessels etc). MP encouraged the MSCC to further support the RVWG in their endeavours. MF agreed and suggested a single point of access to that information is important.

3.21. Alan Evans (AE) highlighted the Global Ocean Science Reports, which are used to determine progress against the Sustainable Development Goals, try to capture vessels used in research. Anything that can support this, such as the RVWG small vessel ambition, would be helpful.

### ***Social Science Task Group***

3.22. SB extended his welcome to Emma McKinley (EM) who has taken on the Co-Chair role.

3.23. EM thanked SB and spoke of recent activities in the SSTG. These included research on marine science cultural heritage indicators by member Daryl Burdon, key themes for evidence statements and the exploration of funding options for demystifying marine social science. EM spoke of the active engagement with other MSCC groups (e.g. IWG, IMON, CWG) and the current drive to expand SSTG membership. EM also offered support regarding social data being captured by MEDIN.



## **UK Integrated Marine Observing Network (UK-IMON)**

3.24. Matthew Palmer (MP) spoke of the expanded membership of IMON to improve broader the scope of the group. A Roadmap for IMON had now been formed and would be presented later. MP was keen to highlight that IMON is gaining real traction and thanked members for their contributions. However MP did caution significant work was required for IMON to be successfully coordinated.

### **Item 4: Engagement with Defra CSA**

4.1. GH thanked the MSCC for the opportunity to speak and expressed appreciation of all individuals who contribute time and effort to the MSCC subgroups. GH gave a brief overview of the MSCC. While some successes have come out of the MSCC (e.g. Road Map, UK Marine Science Strategy), the 2018 Foresight report led by the Government Office of Science (GOS) still pointed out the lack of join up between marine policy and marine science across government. GH discussed improving engagement across government to better bring together science and policy.

4.2. GH spoke of the international agenda as well as strengthening the union across the four devolved nations citing a big challenge being the EU transition and suggested the MSCC to have more of a role in fisheries. GH also spoke of the 30x30 initiative, hugely ambitious with lots of work to do and important to have international engagement. With the UN Ocean Decade coming up, GH felt the UK should and could lead. The Blue Planet Fund and ODA (marine development in the developing world) are also important. GH expressed a desire to help join marine science together. GH thanked members for listening and invited questions.

4.3. Stephen Dye (SD) asked what the mechanism is to feed up to ministers. GH responded that there needs to be an improvement on that as it depends on the individual. SD also asked what role the MSCC can take to be more inclusive (e.g. Black Lives Matter). GH said there is a lot to do in that space, minority representation is low across environmental science. The UN Ocean Decade could provide an opportunity to change that. The CWG could also work in this space. MF highlighted that the Marine Biological Association (MBA) recently put out a call for members to lead on a new EDI committee to include members globally to enhance diversity in marine sciences.

4.4. ME opened up discussions regarding the coordination of marine policy and pointed out that different messages come from different government departments. LG said the joining of DfID and the FCO to form the FCDO could be a good opportunity for the Blue Planet Fund, but agreed engagement with other departments like BEIS and DfT is needed. MF, EM and Katy Hill (KH) agreed and suggested policy discussions must be central to the MSCC. Richard Wood (RW) commented that marine isn't always visible in government departments and the marine profile needs to be raised in the climate areas in government. GH agreed that better coordination is required across government to ensure this happens. MK suggested, in the endeavour for ocean literacy, that the MSCC could provide a broad introductory course on key marine policy issues for civil servants. RP and NB agreed.

**ACTION: NB to consider further how the CWG can focus on ocean literacy within the marine policy space.**

4.5. Selina Steed (SS) agreed that there needs to be an improved science/policy interface and for this to happen it must be via governance with marine science to align with strategies. SS also questioned how science can feed into ALBs to support shaping of policy. GH commented on the genuine excellence from ALBs that isn't always recognised, and that the science/policy interface to them needs to improve.

4.6. Ed Hill (EH) questioned how funding might support the UK being a "science superpower" in marine science. GH commented that different funding streams are under review.

4.7. GH thanked everyone for the discussion and reiterated his thanks to the subgroups for their work.

## **Item 5: Statement on Ocean and Climate Change – Part 1**

5.1. Tarquin Dorrington (TD) introduced the Statement on Ocean and Climate Change (SOCC) by thanking those who had contributed to the document. The Statement is in response to the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate and the publication of the MCCIP 2020 report card. TD gave a broad outline of the SOCC including climate impacts on UK waters, the importance of ocean science and the MSCC. The Statement will be released on behalf of the MSCC.

5.2. SB stated the aim today is for this statement to be agreed upon. The MSCC Executive Committee would like to see the statement made into an engaging booklet for all audiences.

## **Item 6: Data requirements**

### ***UK-IMON Roadmap***

6.1. MP opened the presentation by thanking everyone for their input so far with regards to the rejuvenation of IMON and presented on the UK-IMON Roadmap, which included:

- The importance of an integrated marine observing network funded long-term to allow a successful sustainable management of the marine environment
- How UK-IMON can meet national and international requirements
- The intelligent co-design (observing and modelling) to meet collective objectives of stakeholders, end-users, communities, services, monitoring
- How IMON should be both at the MSCC and Research & Innovation (R&I) interface, as well as the R&I and policy/funding interface
- Three phases of the IMON implementation strategy (preparation, governance & funding, implementation)

6.2. MP asked the committee for comments as to IMON pursuing this Roadmap approach.

6.3. LG commented on the excellence of the IMON concept and asked to speak further with MP regarding UNCLOS provisions which are being updated. **ACTION: LG and MP to discuss UNCLOS/IMON guidance.**

6.4. EH commented that the IMON Roadmap has advanced significantly and thanked MP for his efforts. EH did caution that the requirements for ocean observations are quite siloed and depending what the IMON focus is could depend where the funding comes from and recommended requirements should be articulated distinctively. MP agreed that further work in regard to what observing projects could be brought together is required, however cautioned this is all voluntary and has been ongoing for 9 years. Without funding, progress will be limited. RW agreed and supported the Roadmap and requirements for funding.

### ***Healthy and Biologically Diverse Seas Evidence Group (HBDSEG) monitoring gap analysis***

6.5. RP presented on the work of HBDSEG, a MARG evidence group, which included:

- Members of HBDSEG and the subgroups
- 2018 Good Environmental Status Assessment, giving examples of various groups (e.g. seals, birds, benthic habitats)
- Questions for the MSCC, including how the MSCC can help develop knowledge of the state of marine ecosystems in UK seas and estuaries, how the MSCC can encourage applied biologist training needed for ecosystem management and the idea of a marine ecosystem thematic research programme to meet future needs

6.6. MP questioned the coordination across academia, commercial etc for data use. RP stated there was engagement, but they didn't have the capacity to make use of all the data.

6.7. ME spoke of projects he was involved in with regards to comparing monitoring and assessments across different countries and offered to send when the project finishes in early 2021. **ACTION: ME to provide RP with monitoring comparison project output.**

6.8. Mark Charlesworth (MC) stated the CSSEG group are also doing a review of research gaps.

### ***National Partnership for Ocean Predictions (NPOP)***

6.9. Jason Holt (JH) gave a presentation on the NPOP, which included:

- An overview of NPOP partners (Cefas, Marine Scotland, Met Office, MCEO, NOC, PML)
- The goal of NPOP to integrate models, observations and scientific understanding to produce actionable, model-based products and services and to provide a common voice to promote their use
- An overview of working groups (coastal modelling and applications, surface waves, future of ocean modelling and marine biogeochemistry modelling)
- International engagement with the UN Ocean Decade, G7 Future of the Seas and Ocean framework, Copernicus

6.10. Icarus Allen (IA), RP, RW, JH, SD discussed future inclusions to NPOP such as MERP models, fisheries, reanalysis and improved temporal coverage (~1 year time lag).

6.11. MP asked how NPOP can best be captured in the MSCC given the value NPOP already bring to IMON. **ACTION: Ensure NPOP are included in future meetings.**

## **Item 7: Practitioner user requirements**

7.1. TD spoke about displaying data online, especially in light of the UN Ocean Decade which calls for a transformative vision in areas such as a predictive ocean and transparent ocean. The UK was the first member state to put the marine strategy online through the Marine Online Assessment Tool (MOAT) hosted at Cefas – something highly commended by MP Pow. TD put forward an idea to create an ocean climate information system (OCIS), a new system using existing components, to provide to up-to-date information for:

- Use in evidence and assessment to understand pressures of change
- Public facing needs e.g. educational, coastal users

7.2. TD handed over to MF to provide an overview of how MCCIP are looking to provide information in the future.

7.3. MF spoke of the desire to move away from a 18-24 monthly MCCIP report card to something more dynamic to ensure information is available quickly. MCCIP are currently in the process of investigating how this might look e.g. bespoke website, dashboard design. MF hoped data could be made available for assessments as soon as available to allow assessments to be continually updated, rather than being done on a 5 – 6 year cycle. Claire Vincent (CV) supported this view but suggested an overall integrated assessment could be done formally every 6 years alongside assessments being updated when data becomes available.

7.4. JH asked if OCIS would include future views of UK seas (and the associated uncertainty) or just the current state. TD stated it was primarily for past and current states but was keen to see an element of potential change incorporated too.

7.5. SB thanked TD and MF for this initiative, especially given how well MOAT has already been received. A number of members also voiced their support.

## **Item 8: Societal impacts and interactions**

8.1. EM presented on marine social science, which included:

- Social sciences trying to reframe society as part of the solution, not to blame
- Social sciences appearing increasingly in a variety of initiatives such as the 25 year government environment plan, UN Ocean Decade, IPCC
- Human dimension is important to deliver effective marine and coastal governance
- Review of work by EM and Daryl Burdon on ocean literacy and climate related behaviours – ocean literacy to ensure real sustainable change
- Models of ocean literacy that include different dimensions, including awareness, attitude, knowledge, communication, behaviour and activism
- Recommendations on appropriate ocean literacy models, developing data collection tools for measuring change in attitudes and future surveys

- Raising awareness of the lack of social science and arts/humanities within wider marine citizen science projects
- An overview of other works recently undertaken by SSTG members
- SSTG improving links with other MSCC groups and looking to further expand SSTG membership

8.2. SB thanked EM for the presentation and was encouraged to see social science complimenting natural and physical sciences.

8.3. MW asked if ESRC were aware of the recommendations. EM confirmed ESRC were at a previous workshop but raised the concern that there is a limited focus of marine in social science research and welcomed further discussions as to how to further engage ESRC. **ACTION: EM to share slides with MW.** SS commented that NERC-ESRC PhD studentships can be a great way to develop interdisciplinary research projects and have previously brought together natural and social scientists.

## **Item 9: Statement on Ocean and Climate Change – Part 2**

9.1. SB asked the MSCC if they all agreed on the SOCC.

9.2. Two comments were put forward. RW supported the document but requested the inclusion of key resources like UKCP18 and MINERVA with regards to up-to-date sea level projections. EM suggested social science should be more explicitly defined within the document, particularly given the human dimensions of climate change around ocean literacy, behaviour change, governance and adaptive capacity. **ACTION: RW and EM to draft additional text for the document.**

9.4. SB thanked RW and EM for their comments and asked if the committee supported the SOCC. SB thanked the committee for their input to the document and for agreeing to it. **ACTION: TD to finalise document and send to MSCC Exec Committee for next step publication.**

## **Item 10: Any Other Business & Next Meeting**

10.1. SB asked if there was AOB. None recorded.

10.2. SB stated the next MSCC plenary would be Monday 18<sup>th</sup> January 2020.

10.3. SB thanked members for joining and closed the meeting.

## Actions

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A19.06	Discuss production of short, concise summaries from Road Map to use in disseminating the Road map's missions	MSCC Executive	Ongoing
A19.07	Clarify status of Road Map – formal or non-formal ministerial document	Beth Stoker	Combine with S20.02
A19.08	Provide appropriate context for Road Map and accompanying documents for any press interest	MSCC Executive	Ongoing
A19.09	Map sub-group Chairs to specific priorities, where links are clear	MSCC Executive	Ongoing
A19.10	Provide a concrete description of the role, responsibility and reporting lines for a Champion	MSCC Executive	Ongoing
A19.11	Provide Ms Griffiths with ideas as to how to engage Members with international opportunities and to spread the word about UK activities already underway	Members	Ongoing
A19.14	Form correspondence group, including either Helena Grey or Michael McLeod, to map in detail the complexities of Priority One and subsequently circulate to Members	Matt Frost Colin Moffat Stephen Dye	Ongoing
A19.16	Ensure update on Defra Systems Mapping Project tabled at next Plenary	MSCC Secretary	Update from SB?
A19.19	UKHA Group be invited to give presentation at future meeting and then subsequently link into the MSCC via MARG	MSCC Secretary	Ongoing
A19.21	Decide who should table a funding paper at next Plenary	MSCC Executive	Ongoing
S20.02	Update on the MSCC Road Map sign off	Colin Moffat	Next plenary
A20.01	Upload minutes to MSCC website	Abigail Marshall	October 2020
A20.02	Members to provide action updates via email to MSCC Secretariat	Abigail Marshall Members	October 2020

A20.03	MEDIN report to be distributed when published	Peter Liss Abigail Marshall	Jan 2021
A20.04	Reach out to Peter Liss in regard to social science data within MEDIN	Peter Liss Members	Ongoing
A20.05	MIG survey to be sent to members to complete	Abigail Marshall Members	September 2020
A20.06	SMMR PIs and MIG to connect once projects confirmed	Michel Kaiser Mark James	Ongoing
A20.07	INSIGHT PIs and MIG to connect	Michel Kaiser Mike Elliott	October 2020
A20.08	MIG and IMON to connect regarding industry representation	Michel Kaiser Matthew Palmer	November 2020
A20.09	RVWG and MIG to connect regarding industry representation on RVWG	Michel Kaiser Chris Jenkins	November 2020
A20.10	RVWG to be provided with list of vessels	Michel Kaiser	September 2020
A20.11	Consideration of ocean literacy for policy makers	Nikhil Banda CWG	November 2020
A20.12	UNCLOS guidance and IMON Roadmap discussions	Lowri Griffiths Matthew Palmer	November 2020
A20.13	Inclusion of NPOP in future MSCC plenaries	Abigail Marshall	Ongoing
A20.14	SSTG to share slides with Mike Webb	Emma McKinley	October 2020
A20.15	Additional text for MSCC Statement on Ocean and Climate Change	Richard Wood Emma McKinley	September 2020
A20.16	Completion of MSCC SOCC for publication	Tarquin Dorrington MSCC Exec Committee	December 2020
A20.17	Review and amend Risk Register and decide how to take forward	MSCC Exec Committee	November 2020