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1. Background

The purpose of the Joint Strategic Cooperation Board (SCB) is to help to steer COOPEUS in its strategic work and support the development of a sustainable framework for a future cooperation and coordination of activities.

From the Description of Work, the related task is Task 8.2:

Task 8.2 Meetings of the Joint Strategic Cooperation Board (SCB)

COOPEUS will set up a Joint Strategic Cooperation Board (SCB). SCB will help COOPEUS to steer its strategic work. Representatives of relevant US partner RIs, ESFRI panel, environmental ESFRIs, and EC RI related projects and initiatives together with representatives from e-infrastructure projects and global Earth Observation initiatives will be invited to the SCB. The task 8.2 will coordinate and facilitate the thematic work of the SCB (establishment and management of the SCB is the task of WP1). The activities of the task are the preparation of the strategic discussion topics, background materials and provision of optional future development pathways for future cooperation. SCB will meet annually and will provide wider perspectives on RI development issues in the form of recommendations and guidelines. SCB will also advise COOPEUS on discussion topics that can be promoted at international events like AGU, EGU.

Participants: FMI, MI, UniHB/MARUM, EISCAT_3D

2. Participants

The work of the Strategic Cooperation board was initiated at the COOPEUS Kick-off meeting in Bremen, Germany, in September 2012. The makeup of the Strategic Cooperation Board has changed slightly with the expansion from 4 to 6 members during the first year of the project and had a small impact on the delivery of the first set of recommendations. As of October 2013, the SCB consists of 6 members from the US and Europe: Greg Anderson (US/NSF), Tim Ahern (US/IRIS), Pierre- Philippe Mathieu (EU/ESA), Beatrix Vierkorn-Rudolph (EU/ESFRI), Geoffrey O’Sullivan (EU/Marine Institute, Ireland), Diana Wall (US/Colorado state University). The latter two members joined the SCB in May and October 2013, respectively. The EU-Project coordinator Dr. Christoph Waldmann (MARUM, UNI-HB) and US-project coordinator Dr. Hank Loescher (NEON) operate as ex-officio members of the SCB.

The second operational meeting of the SCB took place during the COOPEUS Annual Meeting in Boulder, Colorado in September 2013. A summary of the meeting and the SCB recommendations was prepared by the SCB and circulated to COOPEUS partners following their review of the project and initiatives underway relevant to the project.

3. COOPEUS Strategic Cooperation Board Meeting Summary

Location: Boulder, CO Date: 27 September 2013

Attending: **Greg Anderson (US/NSF, Meeting lead)**, *Tim Ahern (US/IRIS)*, *Pierre- Philippe Mathieu (EU/ESA)*, *Geoffrey O'Sullivan (EU/Marine Institute, Ireland)*, Hank Loescher (US/NEON), Christoph Waldmann (EU/University of Bremen)

Not attending: **Beatrix Vierkorn-Rudolph (EU/ESFRI)**

Note: **bold indicates SCB member**; *italics indicate remote participation*

Topics for discussion

- Introductions and review of the agenda
- Discussion of 3rd US SCB member (Ahern)
- Review of COOPEUS progress to date (Waldmann/Loescher provide summary)
- Opportunities and threats perceived by the SCB
- How should COOPEUS further develop linkages with other similar efforts (e.g., GEOSS, EarthCube, Belmont Forum, etc.)?
- What sources of funding can be sought to further support trans-Atlantic cooperation via COOPEUS?
- Should COOPEUS focus its work on existing members of the collaboration, or should it be extended to other domains or geographic regions?
- How can COOPEUS demonstrate progress and disseminate results effectively in a constrained environment?
- Plan for further SCB meetings

- Any other business

SCB Membership

- The European COOPEUS partners have expressed their desire to have a US member of the SCB serve as SCB Chair. The SCB, led by Tim Ahern, has been searching for a third US member, who would take on the role of Chair.
- Two candidates have been approached, both of whom declined, and a list of three more potential candidates has been assembled.

SCB Feedback

- Overall, the SCB is pleased with progress to date in most areas.
- The SCB members are slightly concerned about status of WP2 and WP4, which have made less progress than other WPs
- Prior to the planned meeting at AGU Fall Meeting, the SCB requests a brief written status update for all WPs. During the meeting, the SCB would like to also receive an oral update on WP2 and WP4, of about 10 to 15 minutes' duration each.
- The SCB recognizes the potential of opportunities to create links with other similar groups worldwide, and to seek support from additional sources. However, there is also a danger of losing momentum and distinctiveness for COOPEUS by expanding too rapidly.
- The SCB recommends that the COOPEUS partners focus their efforts on first demonstrating success in trans-Atlantic partnerships, and then using such success as a basis for wider expansion.
- The SCB recommends the COOPEUS partners play an active role in discussions, planning, and future calls for proposals related to the Belmont Forum, EarthCube, and Horizon2020 programs. The SCB believes these three efforts are particularly well aligned with COOPEUS goals, and would like advance the current and envisioned cooperative efforts.
- The SCB recommends the COOPEUS partners devote some time to defining specifically what makes COOPEUS distinct from other similar efforts, and then use this distinctiveness when engaging with other groups, in order to minimize the risk of loss of identity

Short-term recommendations

- The SCB recommends that the COOPEUS partners should develop short (up to about 4 pages) written documents from each of the COOPEUS work packages, that describe the short- and medium-term scientific goals, what is missing from current efforts, and what is necessary to meet the scientific goals. These should be based on the gap analyses already undertaken in the COOPEUS work packages. These documents should be written for an audience of those involved with the Horizon 2020 planning efforts, and should start with WP4 with a goal of completion and release in December 2013; the other work packages should follow in early 2014.
- These same documents can then be converted into articles in venues such as EOS, to be accessible to the wider scientific community and organizations on both sides of the Atlantic.
- Mathieu and O'Sullivan can provide examples of similar documents.

Next SCB meeting will be during the AGU Fall Meeting in December, with email as necessary between now and then. The SCB requests the kind support of the COOPEUS Coordinator in arranging discussion as necessary, until such time as a final SCB Chair is appointed.

4. Follow up Initiatives

A number of initiatives have been followed up since the issue of the first set of recommendations from the SCB. Each of the WPs presented an update at the AGU meeting in San Francisco, December 2013.

Importantly, a number of key calls were issued on December 11th which are highly relevant to the consortium.

- a. Call BG8-2014 Developing in-situ Atlantic Ocean Observations for a better management and exploitation of the maritime resources*

Specific challenge: The challenge is to conduct the Research and Innovation activities necessary to the deployment of an Integrated Atlantic Ocean Observing System (IAOOS), building on existing capacities on both side of the Atlantic. The Atlantic Ocean is the most prominent maritime domain situated at the doorstep of Europe. However, the sustainable exploration, exploitation and protection of this maritime domain require a knowledge base and predictive capabilities which are currently fragmented or not yet available. The creation of this knowledge base and predictive capability requires systematic collection of ocean observations recorded both remotely using Earth

observation satellites and in-situ. Central to the development of the IAOOS should be the acquisition and use of in-situ observations and their integration with remote sensed data across the whole Atlantic Ocean in order to fill out the existing observational gaps. Applications based on the Copernicus Marine Monitoring service and the European Marine Observation and Data Network (EMODnet) may enable addressing this challenge.

Scope: The Integrated Atlantic Ocean Observing System initiative should cover the whole Atlantic with the objective to deliver the knowledge base supporting the understanding of the Ocean Process at the level of the entire basin. Another focus of proposals should be to fill the observational gaps regarding the in-situ part of the Integrated Atlantic Ocean Observing System including through the optimisation of existing systems and the use of new ocean observation technologies enabling reducing the costs of in-situ ocean observation and integration of the biological dimension into observing systems. The research and innovation necessary to underpin the full and open discovery and access to the ocean observations and facilitating the interoperable exchange of ocean observation as promoted through GEO (Group on Earth Observation) at the scale of the Atlantic Ocean should require the participation of international partners from both sides of the Atlantic. In line with the objectives of the EU strategy for international cooperation in research and innovation (COM (2012) 497), proposals should contribute to implementing the Transatlantic Research Alliance, launched by the Galway Statement on Atlantic Ocean Cooperation in May 2013, and should benefit from the inclusion of partners from the US and Canada.

Expected impact:

- Enhance societal and economic role of the Atlantic Ocean in Europe.
- Provide leadership for Europe in implementing GEOSS.
- Increase temporal and geographic coverage of observational data in the Atlantic Ocean.
- Integrate standardised in-situ key marine observations including biological, (meta)genomic data into process models and forecast systems.
- Improve modelling outputs and reduce cost of data collection in support of ocean-related industrial and societal activities.
- Increase competitiveness of European industry and particularly SMEs within the marine industrial sector.
- Increase safety for offshore activities and coastal communities
- Contribute to make better informed decisions and documented processes within key sectors (manufacturing, ICT, maritime industry, environment technology, marine science and fisheries).
- Improve the implementation of European maritime and environmental policies (e.g. Marine Strategy Framework Directive, Common Fisheries Policy, EU Integrated Maritime Policy)

- Enhance documentation necessary to cope with global challenges such as climate change, scarceness of natural resources and global scale hazards

b. *Call BG-14-2014: Supporting international cooperation initiatives: Atlantic Ocean Cooperation Research Alliance*

Specific Challenge: Marine and Maritime scientific and technological cooperation is instrumental in building dialogue, sharing knowledge and mutual understanding between different scientific communities, cultures and societies. It is a key component to tackle major societal challenges, underpin policies, and stimulate innovation. The EU has adopted various initiatives including the 'Blue Growth', the EU Atlantic Strategy and its Action Plan (2014 – 2020) to increase such cooperation. Furthermore the Galway Statement and the recently endorsed Atlantic Ocean Research Alliance provides a unique framework for stimulating strategic cooperation between education, research, technology and industrial communities in order to jointly address challenges related to the sustainable exploitation of the Atlantic resources and thus promote economic growth and jobs for citizens and societies of both sides of the Atlantic.

However, further efforts are needed to create appropriate operational conditions among the relevant marine research and innovation activities and programmes related to the Atlantic ocean with a view to enhance their effectiveness and impact and facilitate synergies and allow for new collaboration initiatives.

Scope: In line with the objectives of the EU strategy for international cooperation in research and innovation (COM (2012) 497), proposals should contribute to implementing the Transatlantic Research Alliance, launched by the Galway Statement on Atlantic Ocean Cooperation in May 2013, and should benefit from the inclusion of partners from the US and Canada. Proposals should underpin the establishment and implementation of the Atlantic Ocean Cooperation between the EU, its Member States and partner countries joining transatlantic research alliance as well as building on existing initiatives and programmes to increase coherence and coordination of ocean research cooperation programmes.

Proposals should address the following priority areas in an integrated way, identified in the Galway Statement:

- (i) Marine ecosystem-approach, (ii) Observing systems, (ii) Marine biotechnology , (iii) Aquaculture
- (iv) Ocean literacy – engaging with society, (v) seabed and benthic habitat mapping.

Within these priority areas, proposals should facilitate the mapping and connectivity of relevant on-going research activities and programmes in the Atlantic and the identification of research gaps.

Proposals should also consider ongoing work to create a European Marine Observation and Data Network (EMODnet). Proposals should contribute to aligning the planning and programming of research activities, in view of launching joint Research & Innovation initiatives, while building on existing ones (e.g. Joint programming Initiative "Healthy and Productive Seas and Oceans", marine ERA-NETs (e.g. Seas-Era) and also national and multilateral initiatives). Proposals should facilitate a shared use of infrastructures, as well as dissemination and knowledge transfer activities leading to an optimal exploitation of projects results, fostering mobility and networking of researchers.

Proposals should also establish a long-term knowledge sharing platform (existing knowledge or to be generated), in the areas mentioned above, to allow for long-term usability of the data, information and knowledge thereby ensuring tangible value creation from invested resources. This platform should comprise a classification system, which allows for an easy, focused, quick and reliable use and analysis of the information collected and stored. The principle of open access would need to govern such a platform. To enhance the exploitability of the platform for policy making and stakeholder consultation purposes, representatives from funding agencies and these communities should be consulted in their design. Options to secure the long-term viability of this platform should be included in the proposal. Cooperation is as well encouraged with partners established in other third countries (e.g. Brazil).

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 3.5 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact:

- Support the implementation of the Galway Statement on an Atlantic Ocean Research Alliance.
- Improve the international cooperation framework of marine research programmes thus creating the basis for the development of future large-scale joint international marine research programmes.
- Establish a long term knowledge sharing platform for easy access to available information and data holding significant commercial potential relevant to the EU Blue Growth Agenda.

5. Conclusions

The recommendations from the SCB are being implemented over the course of the next twelve months and will feed into D8.3) Draft COOPEUS strategic plan and roadmap and D8.4) COOPEUS strategic plan.