

Feedback from European Marine Board to European Commission's [Roadmap for the European Research Agenda](#) (17 July 2020)

In its Position Paper 11 (marineboard.eu/publication/responses-ec-consultations-maritime-policy-and-era), the European Marine Board voiced strong support for an ERA, with calls for a Marine ERA. **Today, EMB strongly supports the continued strengthening of the ERA, but calls for a unified implementation and collaboration across all research sectors.** Challenges in the ocean, e.g. biodiversity loss, overfishing and pollution, do not confine themselves to national boundaries, so European- and wider-level cooperation is critical for marine research.

Since ERA adoption, marine research has made significant progress in cross-border collaboration including through research alliances, infrastructures, knowledge and data sharing, and access for researchers. Strong regional research alliances have been developed, involving not only EU Member States but also reaching out to non-EU nations. The field has also benefitted from overarching marine vision and regulation, most significantly the Integrated Maritime Policy. The ocean is a fundamental element in understanding and addressing major societal challenges, including climate change and food security, as well as being at risk from the impacts of these challenges.

However, in order to properly understand these complex linkages, we need to move towards truly transdisciplinary research and holistic solutions. This brings significant challenges when trying to collaborate between different sectors that are regulated at national-level, with limited European-level integration, such as health. It leads to mis-matches in funding mechanisms, policy mandates and visions, limiting the ability to think holistically. We cannot truly move towards a sustainable future without full European-level collaboration across all research disciplines. This aligns with the ERA 2015-2020 roadmap vision of “jointly addressing grand challenges”.

Considering other priorities of the ERA 2015-2020 roadmap, EMB feels that: Transnational cooperation for research infrastructures should continue to be developed. Marine monitoring, sampling and observation infrastructures such as research vessels, observatories and floats are critical not only for marine research, but also for e.g. weather forecasting, tracking climate change and in food provisioning. The resulting data is of critical importance to society and hence cooperation will have benefits at all levels. National availability of resources should not be a limiting factor for research. An open labour market for researchers should take into consideration training opportunities for students and ECRs. To enable the fulfilment of visions for a sustainable blue economy, and as we move towards transdisciplinary and inclusive research, researchers will need to have opportunities to receive relevant training and experience, again not limited by national capacity. Gender equality and gender mainstreaming in research should be expanded to push for diversity equality and mainstreaming in research. Equality should not just be about gender but also about race, sexual orientation, etc. Optimal circulation of, access to and transfer of scientific knowledge, including ‘knowledge circulation’ and ‘open access’ should continue to be developed, including the sharing of interoperable data within the framework of the EOSC and the pilot Blue Cloud. This is a critical step to realize the potential of big data applications and the use of artificial intelligence in understanding the ocean and the impact of human activities. Traceability of openly available knowledge and data, and

incentivization e.g. via DOI's for data, should continue to be supported. Consideration should be given to how this can be taken beyond sectoral silos, so that researchers from any discipline can find and use relevant data.

Finally, examples of success should be shared to highlight and raise awareness of the benefits of cooperation within a European Research Agenda, with anyone who stands to benefit.