



## **Towards a European, Multidisciplinary Research Strategy in Polar, Deep-Sea, Environmental sciences**

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The current year is a key milestone for the European Science Foundation with the culmination of several initiatives which have particular relevance to the Deep Sea Frontier initiative:

Among these, are several EUROCORES and Research Networking Programmes (EuroDIVERSITY, EuroMARC, EuroDEEP, EuroTRACES, EuroMARGINS and Magellan), run under the auspices of the Standing Committee for Life, Earth and Environmental Sciences (LESC), as well as the projects being carried out under the Polar Climate Call sponsored by the European Polar Board.

Based on the experience acquired and the results achieved in the framework of these initiatives, it is of paramount importance to encourage coordination of policy, strategy and governance of new opportunities for interdisciplinary scientific research in frontier areas related to polar, deep-sea and environmental sciences. Such an effort could focus on the scientific priorities already identified by LESC, the European Polar Board, and the Marine Board-ESF with the objective of promoting coordinated research activities using a common framework, focused on understanding and predicting the biological, ecological and environmental response to changes at the global scale. The large spectrum of topics and the wide scale of processes falling under this domain necessarily opens up the perspective of integrating the scientific priorities of other global-scale international projects in biology, ecology, climate science, oceanography and polar science, such as the projects sponsored by SCAR, SCOR, IASC, ICDP, IODP and ICSU.

In this regard, it is appropriate to recall the European Polar Board's strategic position paper "The European Research in Polar Regions", which provides a thorough analysis of marine and polar science priorities, the Marine Board's "Navigating the Future" series, and the LESC Strategic Science Position "The View Ahead", which provides a broader overview.

Strategy, policy and governance actions related to the Deep Sea Frontier initiative and associated marine initiatives, including those dealing with research infrastructure, will require a broad European approach, bringing together many existing and new programmes and initiatives in a coherent, integrated way. In particular, it will be critical for deep sea frontier research priorities to be strongly supported under FP8 and relevant developing Joint Programming Initiatives.