

## “Long-term Observing Systems for Ocean Knowledge”

Permanent call for proposals (no deadline)

### Total budget for 2019: 20k€

Ocean-observation technologies are constantly evolving, as are the way we process and exploit the data. We are currently facing two or three orders of magnitude of increase in data flow coming from AUV missions or satellites (e.g. the Copernicus Sentinel Constellation has delivered 2.5 Petabytes of data in just one year of service) and biological and genetic data are increasing exponentially. To ensure rapid scientific benefits, it is vital to realise the full potential of these capabilities as well as to refine and anticipate new sensors, platforms and processing developments with advanced experimental strategies. From the scale of the global ocean to coastal domains, a major goal is to reduce sampling gaps and better reveal interactions between physical, biological and ecological components. In this context, the theme “Long-term observing systems for ocean knowledge” promotes four specific objectives:

- Develop new monitoring technologies and strategies for under-resolved ocean components through the development of novel integrated sensors (e.g. taxonomics, genomics, acoustics...) and cross-sensor cueing methodologies;
- Design and implement integrated observatories (e.g. water quality; physical, chemical and geological environment; biodiversity; human pressures, risks), focusing on the inference of climate trends and examination of extreme events;
- Extract, reconstruct, forecast and emulate physical, chemical, biological, geological, ecological, legal and socio-economical Essential Ocean Variables (EOVs) from multi-source ocean data streams to uncover local and remote interactions at both short-term and climate time scales, with a focus on data-driven and model-data-coupled strategies, for operational oceanography applications and research purposes;
- Design and implement thematically-relevant data management and dissemination facilities to favour the access and exploitation of multi-source ocean data for the dissemination of knowledge and the creation of novel high added-value services.

The theme “Long-term observing systems for ocean knowledge” will support proposals which will contribute to these specific objectives. Submitted proposals shall also contribute to the international attractiveness and visibility of ISBlue. Proposals with actual leveraging effects will be particularly expected. Proposals of interest include, but are not limited to, the following:

- Support to stays of visiting scientists in ISblue teams;
- Support to stays of ISblue scientists abroad;
- Support to the participation of young ISblue scientists to international conferences;
- Support to emerging activities;
- Support to the organisation of international workshops or conferences.

**Proposal submission:** There is no submission deadline. Proposals may be submitted at any time. Proposals shall include a one-page summary, clearly stating the motivation of the application w.r.t. other calls (including ISblue ones). This summary will be posted on ISblue Theme 5 webpage. Proposals may also include annexes if relevant (e.g., research plan, a short CV of the applicants). We typically expect to support from 10 to 20 actions each year.

**Proposal evaluation:** Submitted proposals will be evaluated by the animation committee of the theme 5 of ISblue. The evaluation of the proposal shall be received within four weeks. This evaluation will be posted on the intranet, including the proposed support if the proposal is positively evaluated.

**Additional information:** Feel free to email [proposals-theme5-isblue@imt-atlantique.fr](mailto:proposals-theme5-isblue@imt-atlantique.fr) for any additional information.