

WORK PACKAGE: DATA MANAGEMENT AND DATA SERVICES

SOOP also aims to provide interested parties with access to the research data gathered by the platform. An open and efficient infrastructure will help to facilitate the utilization of data and collaboration between scientists, industry and civil society, thus accelerating progress in marine knowledge and information.

Goals

- Gather and define data flow requirements according to partners' IT infrastructures
- Promote the integration and adoption of existing, operational platforms
- Development of a central command and control system
- Storage and continuous transfer of data and integration of quality assurance and control procedures
- Design of a data platform (including visualization, dashboard and download capabilities)
- Integration into national and international platforms and initiatives

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Let's work together!

SOOP is building an innovation platform for more ocean observation and technologies. New hardware and software will be used to collect oceanographic and climate-related data. Do you wish to contribute to the **SOOP** platform? Are you interested in getting more information about **SOOP**?

Please contact us!

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Shaping an Ocean Of Possibilities



SOOP – Shaping an Ocean Of Possibilities for science-industry collaboration

The ocean affects the earth in many different ways: it determines the global climate and provides food, energy, transport routes, and many substances that are useful for humans. However, large parts of the ocean are poorly known due to lack of observations by standardized instruments to gather reliable and meaningful data.

PROJECT

SOOP - Shaping an Ocean Of Possibilities for science-industry collaboration aims to support the development of new instruments, specifically modular sensors. These sensors can be deployed on non-scientific vessels, such as private sailboats, to collect oceanographic and climate-relevant data. The collected data will be made available on a jointly operated digital platform.

This data can be used to create models of the ocean that simulate, for example, temperature, salinity, currents and other parameters. In this way, the scientists can provide indications of the state of the oceans and devise effective early warning systems.

CONSORTIUM

In **SOOP**, the organizations
- GEOMAR Helmholtz Centre for Ocean Research Kiel,
- Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research and
- Helmholtz-Zentrum Hereon,
are working together with partners from industry, civil society and science.

FUNDING

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WORK PACKAGE: INDUSTRY COOPERATION AND INNOVATION

SOOP facilitates knowledge and technology exchange between research and practice while fostering collaboration between science and industry. To achieve this, **SOOP** will establish an Innovation Hub as a central point for stakeholders to collaborate, enhance competencies, and drive new technologies and innovations for the New Blue Economy.

Goals

- Identify new cooperation partners and integrate them into the platform development
- Validate and communicate the benefits of the platform and the Innovation Hub in order to address potential partners from industry and science and to involve further stakeholders from society
- Develop accelerator and incubator programs to test and realize new technical concepts and business approaches with startups and companies
- Provide necessary infrastructure
- Facilitate technology and knowledge transfer

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WORK PACKAGE: TECHNOLOGY AND STANDARD OPERATIONAL PROCEDURES

Depending on the specific applications and objectives, various instruments and measurement techniques are used to gather oceanographic and climate-related data. These include buoys, underwater vehicles, and acoustic sensors. Here, the project partners tackle the global demand for user-friendly and affordable instruments and technologies that follow, or develop, international standards.

Goals

- Provide an open-source toolkit for the development of relevant measurement instruments to collect ocean and climate data
- Collaborate with industry to develop specific use cases of measurement systems and modules for small and large ships and drift buoys
- Develop standard procedures for the transfer of technologies for prototype measurement instruments based on open and freely available source codes and standards

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WORK PACKAGE: OPERATIONS

SOOP provides demonstrators for measuring equipment. The goal is to install, test and put into operation low-cost measurement systems on different types of vessels and marine structures.

Goals

- Provide operational support for different sensor systems
- Achieve standardization and comparison of measurement systems
- Establish a publicly accessible pool of different measurement systems

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