

A strategy for making the best technology available for the European Ocean Observing System

A discussion paper

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Agenda

Setting the Scene
Grand Challenges
Getting Organised
Proposed Strategy
Recommendations

Setting the Scene

Ostend Declaration 2010

...to

re-establish Europe's global leading role in **marine science and technology**;

respond to societal needs by supporting major policy initiatives such as the Integrated Maritime Policy and the Marine Strategy Framework Directive; and

support European contributions to global observing systems.

Setting the Scene

Observation technology relies on sophisticated though cost-effective methods and tools

Mitigate risks that derive from complexity in the design process and the operation of these technologies

Definition of a thoroughly **systematic approach** in regards to the technical design and implementation of a European network is needed

Develop a **concerted strategy** which draws on the broad knowledge and capabilities that exist in Europe, i.e. research institutes and the private sector

Grand Challenges

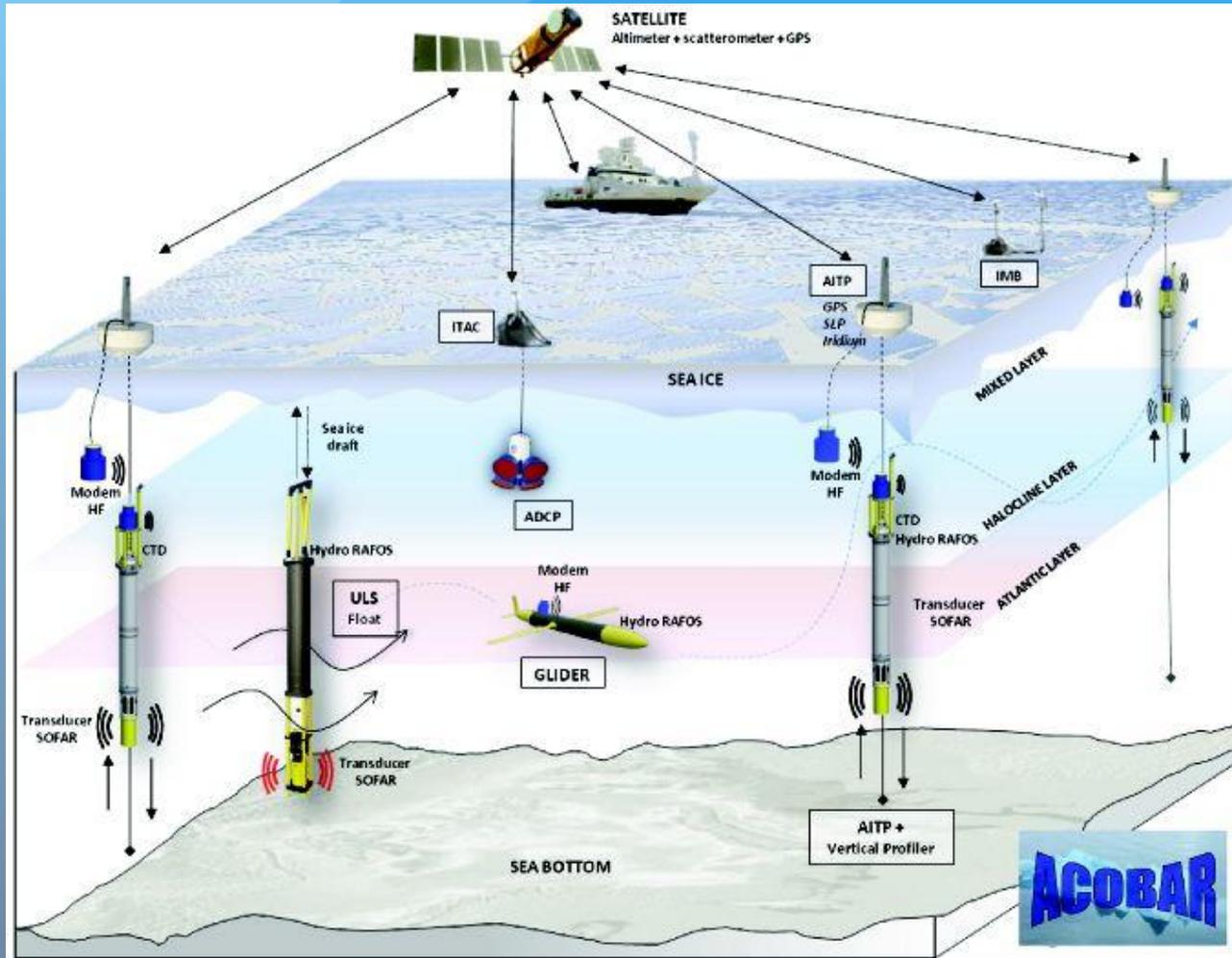
- Setting up a **technical infrastructure** for establishing a permanent observational presence in the **Arctic, Atlantic, and Mediterranean**
- Being able to continuously follow **offshore activities** around Europe, e.g., to closely monitor the impact of **deep sea mining activities** on the environment
- Continuously observing long-term trends of **ocean acidification and deoxygenation**
- Developing the means required to deploy and service **deep water observing systems** with limited human intervention

Grand Challenges

EurOCEAN²⁰¹⁴

Navigation/Positioning

Communication



Sensors

Platforms

Getting Organized

EurOCEAN²⁰¹⁴

The conventional approach

Sequential steps

Scientific
requirements

Technical
realization

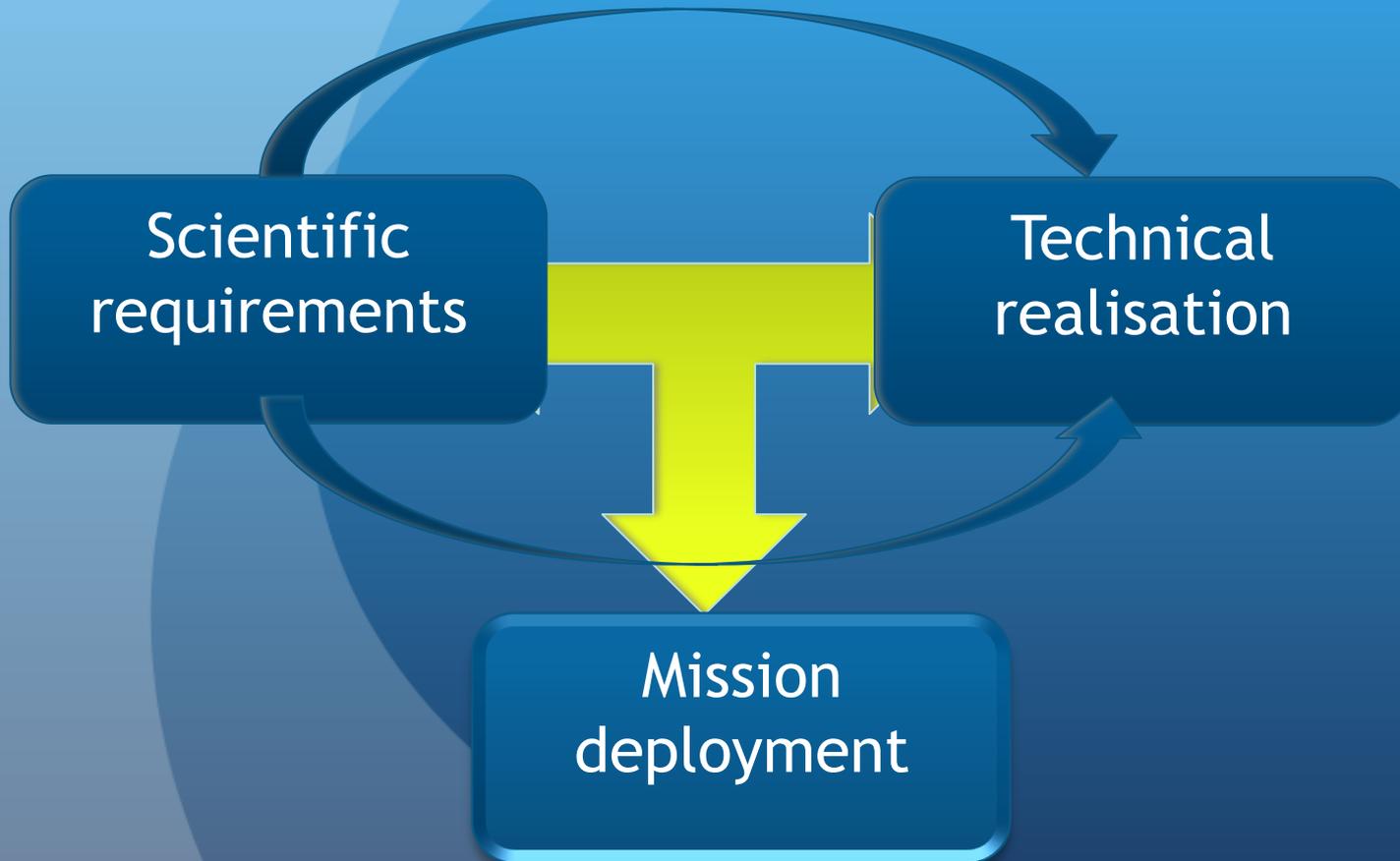
Mission
deployment



Getting Organized

EurOCEAN²⁰¹⁴

Transformative Concept - An iterative approach



Getting Organized

EurOCEAN²⁰¹⁴

GEOSS

EUROGOOS

EUROFLEETS

EMSO

EOOS

EUROARGO

EMODNET

EC

JPI-OCEANS

Member States

Proposed Strategy

EurOCEAN²⁰¹⁴

Raise ocean observation technology to a higher organizational level

Make it part of the planning process



Make it visible on a global scale

Fully acknowledge the strategy of the Galway statement

Support the establishment of an Integrated Atlantic Ocean Observing System as outlined by the AtlantOS proposal

Proposed Strategy

EurOCEAN²⁰¹⁴

E00S Technology Platform

Bring together experts from **industry and public organisations**

Act as a **single point of contact** for technical design considerations for E00S

Facilitate **resource planning** for the E00S implementation phase

Interact with other organisations on a **global scale**

Recommendations

Support the establishment of a E00S Technology Platform (Cost Action)

Support the planning process for the E00S based on a new strategy

Resource targeted calls to assist in implementing the new strategy drawing from existing initiatives across Europe