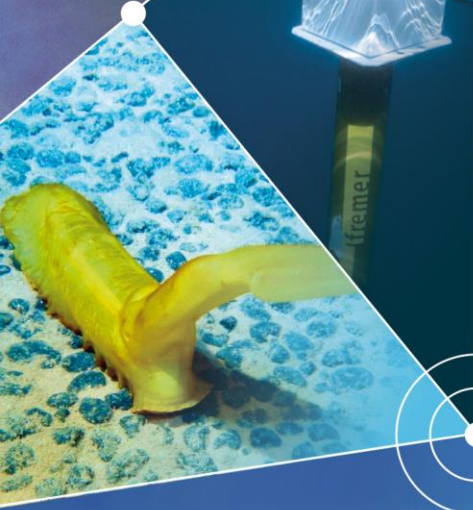
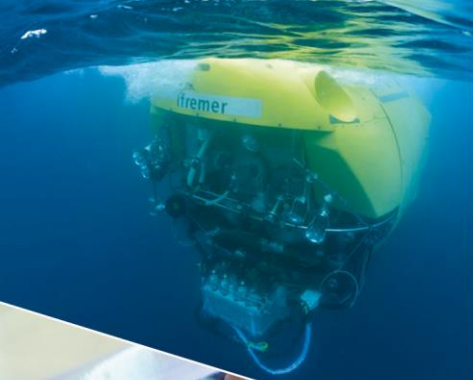




Towards a joint observing system of systems in the Mediterranean

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Towards an observing system of systems in the Mediterranean – Challenges

Sustainably manage the resources and develop services offered by the Mediterranean Sea faces several challenges:

- The **lack of knowledge on the state of the marine environment** and its evolution, but also the difficulty of characterizing **the pressures** exerted by human activities on the sea and the coast
- The **complexity** of the functioning **of the marine "socio-ecosystem"** and the interactions at work, with the consequent lack of reliable predictive models and the difficulty of building scenarios
- The **difficulty in predicting** the consequences of large-scale **changes** at work (global warming, sea level rise, biodiversity erosion, etc.) **that will significantly impact Blue economy** sectors

Coordinated observation is crucial to well understand, monitor and manage the – interconnected - Mediterranean marine ecosystem

Towards an observing system of systems in the Mediterranean – Main issues

Blue Growth demands for a **holistic approach**, integrating knowledge on oceanic dynamics, ecosystem structuration and functioning, and economy and societal needs. However, we can see:

- **Huge imbalance between EU and non-EU countries**
- **Poor coordination** across actors involved in observation and monitoring :
Research, governmental agencies, NGOs, private sector
- **Lack of standardisation** of methodologies
- **Poor integration** across disciplines (i.e. physics/chemistry/biology, land/sea...)

Towards an observing system of systems in the Mediterranean – Needs

- Develop capacities and programmes for **coordinated oceanographic cruises** in the whole Med
- Develop transnational joint observing systems, through a **network of marine based facilities and coastal multidisciplinary stations** able to address environmental threats and pollution, and related hazards
- Define/label **laboratories of reference** and bring them together on key specific domains of activity
- Reinforce the access to **land-based facilities** and strengthen Trans National Access (**TNA**) calls (especially by facilitating their access for non-EU scientists)

BLUEMED Priority goal 4/13 : Towards an observing system of systems



BLUEMED Implementation Plan proposes to launch **two “Strategic Actions”**:

1 - Regional Task Force on Coastal Observing Systems for defining laboratories of reference; set-up a coordinated network of coastal multidisciplinary observing stations; reinforce the access to land-based facilities and strengthen Transnational Access calls to facilitate access for non-EU scientists

2 - Cooperation Programme for environmental data collection and sharing between marine economic sectors, environmental authorities, research sectors, and citizens

Towards an observing system of systems in the Mediterranean

- **Developing a sustainable blue economy** in the Mediterranean will not be possible without **carefully watching the marine ecosystems** and better **understanding how it responds to pressures**
 - **For mutual benefits** a large range of **actors needs to cooperate** and share the same vision
- => Encourage **synergies** between economic sector, private stakeholders, NGOs, MPAs, citizen science projects the field of marine observation and monitoring

