## Science & Technology Based Blue-Growth Initiatives in a Touristic Destination; SOCIB contribution to fill the science-policy gap.

Joaquín Tintoré (1,2), Lluis Gomez-Pujol (1), David March (3)

- (1) SOCIB, Balearic Islands Coastal Observing System, Mallorca, Spain.
- (2) IMEDEA (CSIC-UIB), Mallorca, Spain.

## **Abstract**

The appropriate and efficient use of scientific information for decisionmaking has been recognized as a significant challenge to the achievement of real, knowledge based sustainability and associated ecosystem-based management. Similar to a number of emerging "hot topics", considerable efforts have been dedicated to defining why the so called science-policy gap exists and providing panaceas as solutions for addressing it (i.e. what should be done). However, panaceas have been cited as ineffective for managing complex social-ecological systems and, in relation to the science-policy gap issue, they often imply significant academic and political reforms. Associated with theses changes, new monitoring technologies are being progressively implemented in open-ocean and coastal observatories and are providing new insights into science and society questions. Basically, new technologies are transforming the interplay between humans and coasts and bring new capabilities for a new science, new responses to society needs, therefore modifying substantially how we are managing the oceans and the coasts, and by this, contributing to bridge the science-policy gap.

SOCIB, the Balearic Islands Coastal Ocean Observing and Forecasting System, is one of such observatories, a multi-platform distributed and integrated system, a facility of facilities that extends from the nearshore to the open sea. SOCIB takes profit of the strategic position of the Balearic Islands at the Atlantic/Mediterranean transition area, one of the 'hot spots' of biodiversity in the world's oceans and also, of the society needs in islands where preservation of the environment is essential to assure, both residents welfare and the competitiveness of the tourist sector.

We present some of the SOCIB contributions to a more science based coastal management in a touristic destination, presenting specific examples related to the definition and implementation of 53 sustainability indicators and the implementation of a more science based beach management. These types of new marine infrastructures, because of their critical mass and sustained funding, are establishing new ways of international cooperation leading to major science breakthroughs, innovations in oceanographic instrumentation and new ways of more efficient and science based coastal and ocean management