

## **WP 2013 FACT SHEETS ON STRATEGIC PRIORITIES – OCEANS OF THE FUTURE**

### **Facts & figures**

Seas and oceans provide the basis for large and essential economic sectors (shipping, coastal tourism, offshore oil and gas, fisheries, aquaculture, marine biotechnology, marine renewable energy...) but they are under considerable environmental pressure from human activities and climate change. The main maritime economic sectors account for nearly six million jobs in Europe. Coastal/maritime tourism in the EU provides an annual added value of €170 billion (2.7 million jobs); maritime transport €195 billion (2.5 million jobs); energy and raw materials €123 billion (57,000 jobs); seafood production and ecosystem services €12 billion (291,000 jobs); maritime monitoring and surveillance €6.6 billion (19,000 jobs); and coastal protection €3.7 billion (31,000 jobs), of which €200 million is for environmental monitoring.

**How much do we plan to invest in 2013?** Approximate budget of €155 to €160 million.

- The "Ocean of Tomorrow 2013" call: € 55 million to support large cross-cutting actions, for example: on marine sensing technologies, with the aim to improve reliable measurements of key parameters in the sea; new materials that can avoid bio-fouling on mobile and stationary structures and equipment; and new technologies for large offshore wind farms and related logistics. Projects will bring together technology providers and end-users, with a view to maximise applications and innovation.
- Marine and maritime topics will also be addressed through the various thematic priorities of the "Cooperation" programme, for a total value of around €100 million. Topics include: sustainable management of Europe's deep sea and sub-sea floor resource; towards zero emission ships; design tools, enabling technologies and research to facilitate ocean energy converter arrays; breakthrough solutions for mineral extraction and processing in extreme environments; diversification and selective breeding of fish species and products in aquaculture; CO2 algae bio refinery

### **Why this priority?**

Marine and maritime sectors display a large potential for further growth. In addition to tourism, transport, seafood production, a big potential exists for developing renewable energy at sea (off-shore wind energy, ocean energy). Innovative products and components derived from marine organisms through biotechnology are already being used in food, pharmaceutical, cosmetic and chemical industries.

### **What results do we expect in which area?**

#### Implementation of relevant EU policies

- Support the implementation of EU policies, in particular the reform of the Common Fisheries Policy, the Integrated Maritime Policy, the Marine Strategy Framework Directive, the European Community Regulation on chemicals and their safe use, the EU Strategy for Key Enabling Technologies, the Lead Market Initiative on Bio-based products, and Roadmap activity of the European Wind Initiative;

#### Understanding and monitoring of the sea

- Development of effective tools for in-situ monitoring of the marine environment; new discoveries that can contribute to reduce the cost and increase the reliability of marine data; climate-related processes and combined impact of stressors on marine environments; coasts at threat (Tsunamis).

#### Sustainable management of aquatic resources

- Further steps toward the implementation of the ecosystem-based approach into fisheries and aquaculture management; sustainable management of deep-sea and sub-sea floor resources.

#### Marine sectors competitiveness

- Increased and more sustainable production from the EU aquaculture sector (diversification of new species, selective breeding) and industrial development of algae; advances in biosensor research; a boost to ocean energy; solutions for mineral extraction and processing in extreme events, intelligent network to supply raw materials.