

# MyOcean

## LISTEN TO OCEAN STORIES

*Analyzing the ocean enables us to better understand the Earth. For example, in Europe, our climate depends on the state of the oceans and seas. Changes in ocean currents and temperatures have a direct impact on our weather. Helping Europe obtain essential data from a better understanding of the seas, the project MyOcean aims at setting up infrastructures and services in preparation for the **GMES/Kopernikus Marine Services**.*

Public authorities and ships need to know when an oil spill threatens the marine environment. At the same time, information about the present and future impact of rising sea levels on coastal areas is of critical importance. And the range of applications keeps growing.

In this context, observing, monitoring and forecasting **temperature, salinity, currents and other parameters in oceans and seas provide important insights**. Today such information might enable vessels to choose faster shipping routes riding on currents, thereby saving fuel, reducing CO2 emissions and lowering costs.

Amongst possible applications, in the case of an oil spill, complex computer simulation models are used to reverse ocean currents. Comparing this data with shipping routes will enable public authorities to identify the origin of the spill and track down the perpetrators.

In the future, when dealing with climate change, **higher sea temperatures may impact currents such as those found in the Gulf Stream**, with profound impacts on European weather. Detecting higher temperatures requires monitoring and forecasting of the ocean as well as the availability of reference descriptions such as long time series of ocean data.



MyOcean will develop upgraded European capabilities for reference marine information and provide a wide range of key ocean indicators. Hence the project provides the major building blocks that are needed to allow the operational deployment of a full GMES/Kopernikus Marine Service.

In cooperation with national metrological services, the European Environment Agency and the European Maritime Safety Agency (EMSA) amongst others, MyOcean will undertake the pre-operational validation of GMES/Kopernikus Marine Services, and formally commission them. The project will establish a governance structure, which is intended to be adopted by the GMES/Kopernikus Service.



**PIERRE BAHUREL**  
IS PROJECT COORDINATOR

MyOcean is composed of a consortium of 60 partners from across Europe and is structured around a core team of Marine Core Service operators, and connected to key R&D players and experts.

This project benefits from the European operational oceanography strategy started within EUROGOOS networks, and progressively implemented through subsequent projects such as MERSEA Strand1, MERSEA, and BOSS4GMES under the Sixth EU Framework Programme for Research.

## QUESTIONS & ANSWERS

### What do you want to achieve with this project?

MyOcean aims at deploying the first integrated pan-European capacity for ocean monitoring and forecasting. MyOcean will lead the setting up and operation of this new service, built on past investments in research & development, system development and international collaborations.

### Why is this GMES/Kopernikus service important for Europe?

Implementing the European Marine Core Service is one of the top-three priorities of the GMES/Kopernikus program. It will strengthen the economic development of downstream activities and reinforce Europe's voice in terms of environmental policy.

### How does your work benefit European citizens?

The supported applications are maritime security, oil spill prevention, water quality, marine resources management, coastal activities, seasonal forecasting, climate change and ice sheet surveys. MyOcean products will be open and free, directly accessible by European citizens.



## LIST OF PARTNERS

- GIP Mercator Océan, France
- Met Office, United Kingdom
- Istituto Nazionale di Geofisica e Vulcanologia, Italy
- Stiftelsen Nansen Senter for Fjernmaaling (NERSC), Norway
- Danmarks Meteorologiske Institut (DMI), Denmark
- Puertos del Estado, Spain
- Marine Hydrophysical Institute National Academy of Sciences of Ukraine (MHI NASU), Ukraine
- Collecte Localisation Satellite (CLS), France
- Institut Français de Recherche pour l'Exploitation de la Mer (IFREMER), France
- Météo-France (MF-CNRM), France
- Koninklijk Nederlands Meteorologisch Instituut (KNMI), The Netherlands
- Consiglio Nazionale delle Ricerche (CNR), Italy
- Meteorologisk institutt (met.no), Norway
- Centre national de la recherche scientifique (CNRS), France
- Hellenic Ministry of Merchant Marine (HCMR), Greece
- Sveriges meteorologiska och hydrologiska institut (SMHI), Sweden
- EDISOFT - Empresa de Serviços e Desenvolvimento de Software, S.A., Portugal
- Institut National de Recherche Halieutique (INRH), Morocco
- Institute of Oceanology - Bulgarian Academy of Sciences, Bulgaria
- University of Cyprus, Cyprus
- Bundesamt für Seeschifffahrt und Hydrographie (BSH), Germany
- Carsten Brockmann Consult (BC), Germany
- Danmarks Tekniske Universitet (DTU-Space), Denmark
- Consejo Superior de Investigaciones Científicas (CSIC), Spain
- Starlab Barcelona, SL, Spain
- Tallinna Tehnikaülikool, Estonia
- Commission of the European Communities - Directorate General Joint Research Centre (JRC)
- ACRI-ST S.A.S., France
- Finnish Institute of Marine Research (FIMR), Finland
- Ente per le Nuove Technologie, l'Energia e l'Ambiente (ENEA), Italy
- Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS), Italy
- Stato Maggiore Aeronautica - Ufficio Generale Spazio Aereo e Meteorologia (USAM), Italy
- Agenzia per la Protezione dell'Ambiente e per i servizi Tecnici (ISPRA)
- Israel Oceanographic and Limnological Research (IOLR), Israel
- Havforskingsinstituttet (IMR), Norway
- TechWorks Marine Limited, Ireland
- Università ta' Malta, Malta
- Instituto Superior Técnico, Portugal
- National Institute for Marine Research and Development (NIMRD), Romania
- Centro Euro-mediterraneo per i Cambiamenti Climatici (CMCC), Italy
- Natural Environment Research Council, United Kingdom
- Plymouth Marine Laboratory, United Kingdom
- University of Reading (URead), United Kingdom
- HR Wallingford Limited, United Kingdom
- The Secretary of State for Environment, Food and Rural Affairs (CEFAS), United Kingdom
- Institut Royal des Sciences Naturelles de Belgique (IRSNB-KBIN-RBINS), Belgium
- Leibniz-Institut für Meereswissenschaften an der Universität Kiel (IFM-GEOMAR), Germany
- Norsk institutt for vannforskning (NIVA), Norway
- Institute of Accelerating Systems and Applications (IASA), Greece
- Nacionalni institut za biologijo (NIB), Slovenia
- Aarhus Universitet (AU), Denmark
- Danmarks Tekniske Universitet (DTU-Aqua), Denmark
- Suomen ympäristökeskus (SYKE), Finland
- Latvijas Universitātes Matēmatikas un Informatikas Instituts, Latvia
- Center of Marine Research (CMR), Lithuania
- Instytutu Morskiego w Gdańsku (MIG), Poland
- Fisheries and Oceans Canada (DFO), Canada
- University of Plymouth (UOP), United Kingdom
- Scientific Foundation Nansen International Environmental and Remote Sensing Centre (NIERSC), Russia
- European Centre for Medium-Range Weather Forecasts (ECMWF), United Kingdom

## COORDINATOR

**Mercator Océan, France**

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## PROJECT INFORMATION

MyOcean  
Contract no: 218812  
Starting date: 01/01/2009  
Duration: 39 months  
EU Contribution: € 33.800.000  
Estimated total cost: € 55.024.887  
[www.myocean.eu.org](http://www.myocean.eu.org)

