EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

24 marine institutes, universities, foundations and SMEs, from 16 European countries (Member States –4 recent ones- and associated countries), agree to propose together their research vessels, the associated equipment, their know how in the frame of the EUROFLEETS I3 project.

1 IFREMER France  9 CNR Italy  17 IPEV France
2 AWI Germany  10 IMS-METU Turkey  18 IO-BAS Bulgaria
3 OGS Italy  11 GeoEcoMar Romania  19 MARUM Germany
4 IEO Spain  12 MI Ireland  20 MARIS Netherlands
5 HCMR Greece  13 Imares Netherlands  21 EurOcean Portugal
6 NERC U.K.  14 CSIC Spain  22 TUT Estonia
7 FCT Portugal  15 RBINS-MUMM Belgium  23 VLIZ Belgium
8 MPIMM Germany  16 IOPAS Poland  24 IMR Norway

FP7-2008-INFRA-2008-1.1.1 : Bottom-up approach : Integrating activities in all scientific and technological fields
A very significant group of key marine research actors in Europe, covering all the eco-regions

IFREMER : EUROFLEETS Coordinator

FP7-2008-INFRA-2008-1.1.1 : Bottom-up approach : Integrating activities in all scientific and technological fields
Concepts and objectives:

Strategic importance for the marine research: despite the development of satellites and floats, Research Vessels and associated equipment are still irreplaceable in providing the access to the sea water column and the sea floor, for monitoring, for sampling, for servicing the seabed observatories that will play a key role in marine sciences in the near future.

« Marine research infrastructures represent an estimated 50% of the running costs » (Academy of Finland, 2003).

Coordination is worth:

Fragmentation, together with a lack of cohesion and strategic vision, is still the most important weakness of the European marine research infrastructure.

FP7-2008-INFRA-2008-1.1.1 : Bottom-up approach : Integrating activities in all scientific and technological fields
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Concepts and objectives:

A project in coherence with the EU policies:

Aberdeen Declaration - A New Deal for Marine and Maritime Science - 22nd June 2007: «Support for other key infrastructures, including for example … research fleets which, because of their size and complexity, can only be operated and sustained on a partnership basis»

Action Plan for a Maritime Policy (EC, Com1278/2,2007) proposes «to take into consideration the need for supporting specialised infrastructures, research vessels, etc… »

European Strategy Forum on Research Infrastructures (ESFRI) : the EUROFLEETS consortium has the ambition to contribute concretely to the concepts risen by the European Research Area and promoted by the ESFRI.

FP7-2008-INFRA-2008-1.1.1 : Bottom-up approach : Integrating activities in all scientific and technological fields
Based on the recommendations of the ESF-Marine Board Position Paper 10: « European Ocean Research Fleets – Towards a Common Strategy and Enhanced Use » (March 2007), and developed in the frame of the MarinERA ERANET project (Oct. 2007), EUROFLEETS aims to:

- Define a common strategic vision for European research fleets and associated heavy equipment (e.g. submersible vehicles as ROVs and AUVs),
- Use more cost-efficiently the existing European ocean/global and regional fleets, develop their interoperability capacities,
- Facilitate a wider sharing of knowledge and technologies across fields and between academia and industry,
EUROFLEETS

Towards an Alliance of European Fleets

Concepts and objectives:

• Promote greener and sustainable research vessel operations and responsibility,

• Provide all European Researchers with a full access to high performing research fleets to conduct marine research,

• Foster the coordinated and joint development of European fleets in terms of capacity and performances.

FP7-2008-INFRA-2008-1.1.1 : Bottom-up approach : Integrating activities in all scientific and technological fields
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Networking Activities (7 work packages):
(Coordination of this Activity: IMR Norway)

STRATEGIC COORDINATION VISION (Leading partner IFREMER France)

• Fleets Coordination
• Common procurement strategy
• Long-lasting transnational access (*for post I3 funding*)
• Innovative e-access generalisation

FP7-2008-INFRA-2008-1.1.1: Bottom-up approach: Integrating activities in all scientific and technological fields
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Networking Activities:

VIRTUAL RESEARCH FLEET PLATFORM (Leading partner MARIS Netherlands)

- EUROFLEETS integrated information portal development
- Populating and maintaining the portal metadatabases with up-to-date information
- Establishment of the European Virtual Infrastructure in Ocean Research (EVIOR)
- Implementing a EUROFLEETS generic cruise planning system

FP7-2008-INFRA-2008-1.1.1: Bottom-up approach: Integrating activities in all scientific and technological fields
TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Networking Activities:

ECO-RESPONSIBILITY AND ECO-DESIGN FOR EXISTING AND NEW RESEARCH VESSELS (Leading partner NERC UK)

- Research Vessel Life Cycle Assessment
- Research Vessel Environmental Management Plan and System
- Guidelines towards future new buildings and innovative eco-design for regional research vessels

FP7-2008-INFRA-2008-1.1.1: Bottom-up approach: Integrating activities in all scientific and technological fields
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Networking Activities:

OPERATIONAL ISSUES – CONTRIBUTION TO OPERATIONAL FLUIDITY WITHIN EUROPEAN RESEARCH FLEETS (Leading partner CSIC Spain)

- Interoperability
- Coordinated scheduling process
- Vessel Operation Rapid Response Capabilities
- Standardisation and harmonisation of procedures

FP7-2008-INFRA-2008-1.1.1: Bottom-up approach: Integrating activities in all scientific and technological fields
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Networking Activities:

EUROFLEETS SCIENTIFIC USER ACCESS MODALITY AND PEER REVIEW (Leading partner AWI Germany)

This work package is devoted to the practical management of the calls (3) to be organised under the TNA activities: « Ocean » (TNA 1), « Regional 1 » and « Regional 2 » (TNA 2)

• Call preparation

• Call implementation

• Proposals for evaluation and selection

• Selection of young scientists to be trained onboard European RVs

FP7-2008-INFRA-2008-1.1.1 : Bottom-up approach : Integrating activities in all scientific and technological fields
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Networking Activities:

ADVANCED TRAINING AND EDUCATION (Leading partner OGS Italy)

• Formation of European marine scientists
• Cross-training and exchange of technical personnel
• Transnational deployment teams
• Internal training
• Training cooperation with third countries
• Education activities

FP7-2008-INFRA-2008-1.1.1 : Bottom-up approach : Integrating activities in all scientific and technological fields
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Networking Activities:

DISSEMINATION AND EXPLOITATION (Leading partner EurOcean Portugal)

• EUROFLEETS “Internet Hub”
• Plan for dissemination and communication
• Dissemination to the scientific community
• Dissemination to industrials
• Citizen awareness
• Industrial property and exploitation of results

FP7-2008-INFRA-2008-1.1.1 : Bottom-up approach : Integrating activities in all scientific and technological fields
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Trans National Access (Coordination of this Activity: HCMR Greece)

5 Ocean/Global Research Vessels for North and South Atlantic Ocean including polar seas, Indian Ocean

Celtic Explorer

L’Atalante

Nautilis

Explora

Polarstern

Marion Dufresne

FP7-2008-INFRA-2008-1.1.1: Bottom-up approach: Integrating activities in all scientific and technological fields
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Trans National Access:
14 Regional Research Vessels covering all the European seas organised on a decentralised way

Don Carlos I

Thetis

Bilim 2

FP7-2008-INFRA-2008-1.1.1: Bottom-up approach: Integrating activities in all scientific and technological fields
Joint Research Activities:
(Coordination of this Activity: MARUM Germany)

JRA1: UP TO DATE SOFTWARES TO FACILITATE TRANS NATIONAL ACCESS (Leading partner IFREMER France)

- General Requirement
- Development of the software tools for sensors calibration, data processing, survey reporting, cruise data standardisation
- Acquisition, integration and visualisation of oceanographic and molecular data – The Genomes Mapserver application
- Acquisition/import/export to and from on shore data centres
- Evaluation/qualification

FP7-2008-INFRA-2008-1.1.1: Bottom-up approach: Integrating activities in all scientific and technological fields
Joint Research Activities:

JRA2: DEVELOPMENT AND INTEGRATION OF SHARED AND FLEXIBLE MODULES FOR ROVs, AUVs AND OBSERVATORIES (Leading partner MPIMM Germany), including:

- BGC (BioGeoChemical) module
- 3D HDTV module, for high resolution mapping.
- In situ Chemical Analysis and Sampling Payload (ICASP) module
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

**Impacts:**

Effective integration and long-term structuring impacts on research vessels coordination, for a cost-efficient marine research and quality of services:

- common investment strategy to avoid duplication
- transboundary programming of vessels to increase days at sea
- widen access and joint scientific cruises
- interoperable equipment and data
- eco-design construction of new vessels

*FP7-2008-INFRA-2008-1.1.1: Bottom-up approach: Integrating activities in all scientific and technological fields*
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Impacts:

Complementary impacts:

- Resolution of common technological issues,
- Contribution to standards,
- Training and education to improve new skills and expertise,
- Contribution to European policies: Integrated Maritime Policy, Research Infrastructures, European Research Area,
- Contribution to European competitiveness,
- Dissemination of results, citizen awareness.

FP7-2008-INFRA-2008-1.1.1 : Bottom-up approach: Integrating activities in all scientific and technological fields
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Gender aspects:

Key roles of women in the project:

Antje Boetius, MPIMM Group leader, Deep sea oceanographer, Professor of Microbiology. Leader of the JRA2 work package and chairperson of the Scientific Advisory Committee.

Rosalia Santoleri, head of CNR-ISAC Satellite Oceanography Group. Senior researcher, physical oceanographer.

Rita da Silva Santos, Scientific Officer, in charge of Information management on marine research infrastructures (research vessels, underwater vehicles).

Alessandra Giorgetti, coordinator of NODC (National Oceanographic Data Centre/IOC) research unit; scientific coordinator of OGS activities within SeaDataNet, ADRICOSM-STAR and the National meteo-marine data archive project ARCHIMEDE.

Hélène Leau, Vessel manager, 15 years at sea: site surveys, offshore seismic prospection, oceanographic cruises managing.

Prof. Dr. Karin Lochte, Deep sea Biologist, Director of AWI, member of the German Wissenschaft Rat. Leader of the work package on « EUROFLEETS Scientific user access modality and peer review »

FP7-2008-INFRA-2008-1.1.1 : Bottom-up approach : Integrating activities in all scientific and technological fields
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

EUROFLEETS links with other European projects:

SeaDataNet (FP6 I3 project), for a standardised data management

EMSO, for the servicing of the seabed observatories

EURO-ARGO, for the servicing of profilers deployment and recovery

Research programmes like HERMES 2, EUROCEANS, MARBEF, ESONet.

The future ERANet on marine research

*FP7-2008-INFRA-2008-1.1.1: Bottom-up approach: Integrating activities in all scientific and technological fields*
EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

Project management:

FP7-2008-INFRA-2008-1.1.1: Bottom-up approach: Integrating activities in all scientific and technological fields