EUROFLEETS

TOWARDS AN ALLIANCE OF EUROPEAN FLEETS

- Two talks :

- Overview of the EC EUROFLEETS project

- Overview of Ifremer scientific softwares

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- EUROFLEETS is an EC project that was proposed in february 2008 in the context of the FP7 call. Start of the project at the beginning of 2009
- EUROFLEETS general objective is a optimised utilisation of the European fleet (ships and equipment).
- European countries agree to propose together their research vessels, the associated equipment, their know how in the frame of the EUROFLEETS

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

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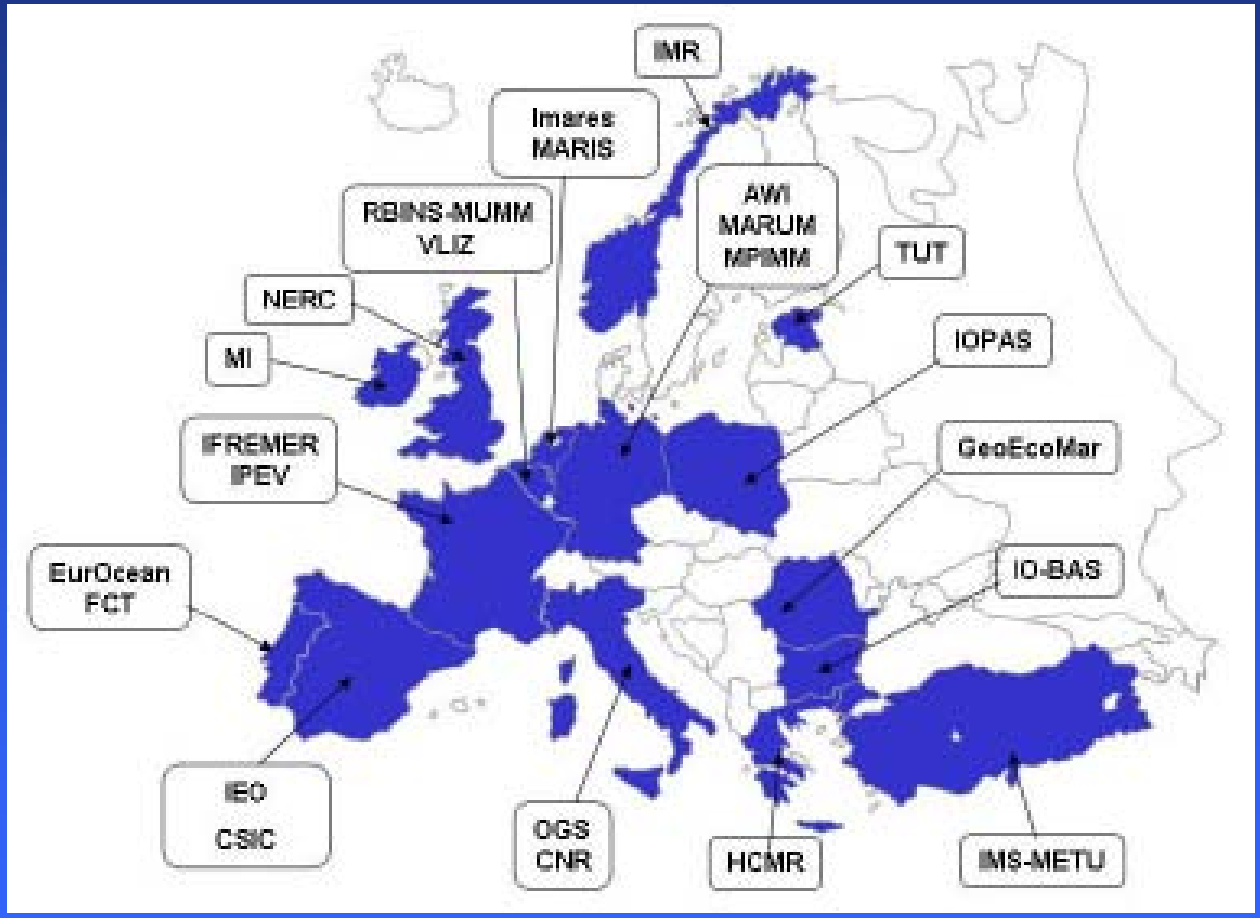
24 marine institutes, universities, foundations from 16 European countries



IFREMER : EUROFLEETS Coordinator

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Concepts and objectives - 3 equilibrated axis

- NA (Networking activities) : strategic vision for research fleets and heavy equipment, interoperability, sharing of knowledge between academia and industry,..
- TNA (Transnational access) : access to cruises (ships and vehicles)
- JRA (Technological development) : softwares for data management, payloads for vehicles

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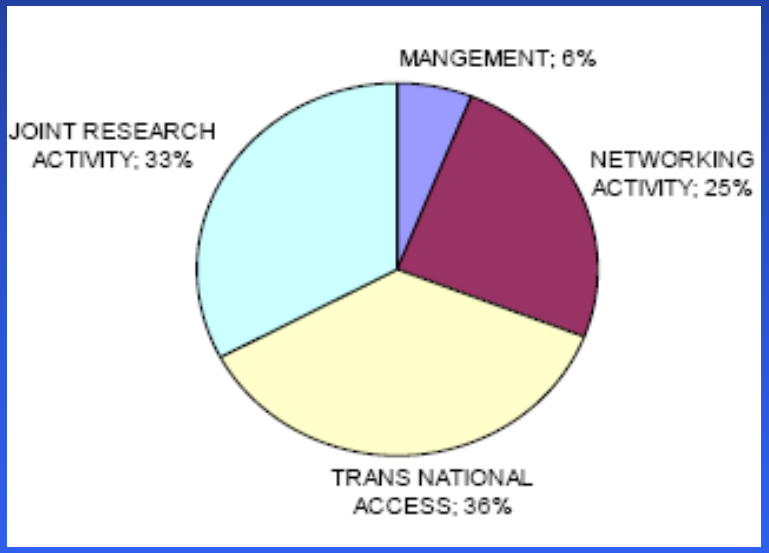
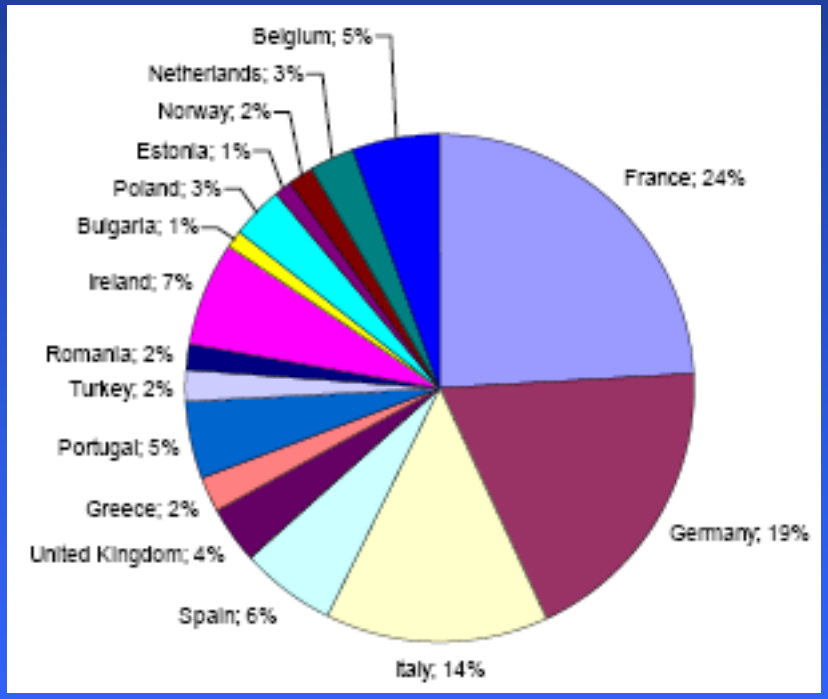
Budget :

Requested EU contribution : approx 7,00 M€



Distribution of budget per activity



Budget distribution per country

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Networking Activities (IMR) – 7 work packages

✓STRATEGIC COORDINATION VISION (IFREMER-22mm) : Common strategy on fleet evolution (roadmap), large equipment and regional class ship investment

✓VIRTUAL RESEARCH FLEET PLATFORM (MARIS-25mm) : Improvement of information sharing with integrated information portal developmentand generic cruise planning system

✓ECO-RESPONSABILITY AND ECO-DESIGN FOR EXISTING AND NEW RESEARCH VESSELS (NERC-66mm) : Based on Life Cycle Assessment, analysis of eco-performances, guidelines towards future new buildings and innovative eco-design for regional research vessels

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Networking Activities

- CONTRIBUTION TO OPERATIONAL FLUIDITY WITHIN EUROPEAN RESEARCH FLEETS (CSIC-82mm) : Interoperability (which vehicle on which ship) and standardisation (interfaces and procedures), R/V Operation rapid Response Capabilities
- ADVANCED TRAINING AND EDUCATION (OGS-33mm) : Formation of European marine scientists, cross-training and exchange of technical personnel)
- DISSEMINATION AND EXPLOITATION (EurOcean-37mm) : Internet Hub for dissemination and communication

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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


Nautile


Explora


Polarstern


Marion Dufresne

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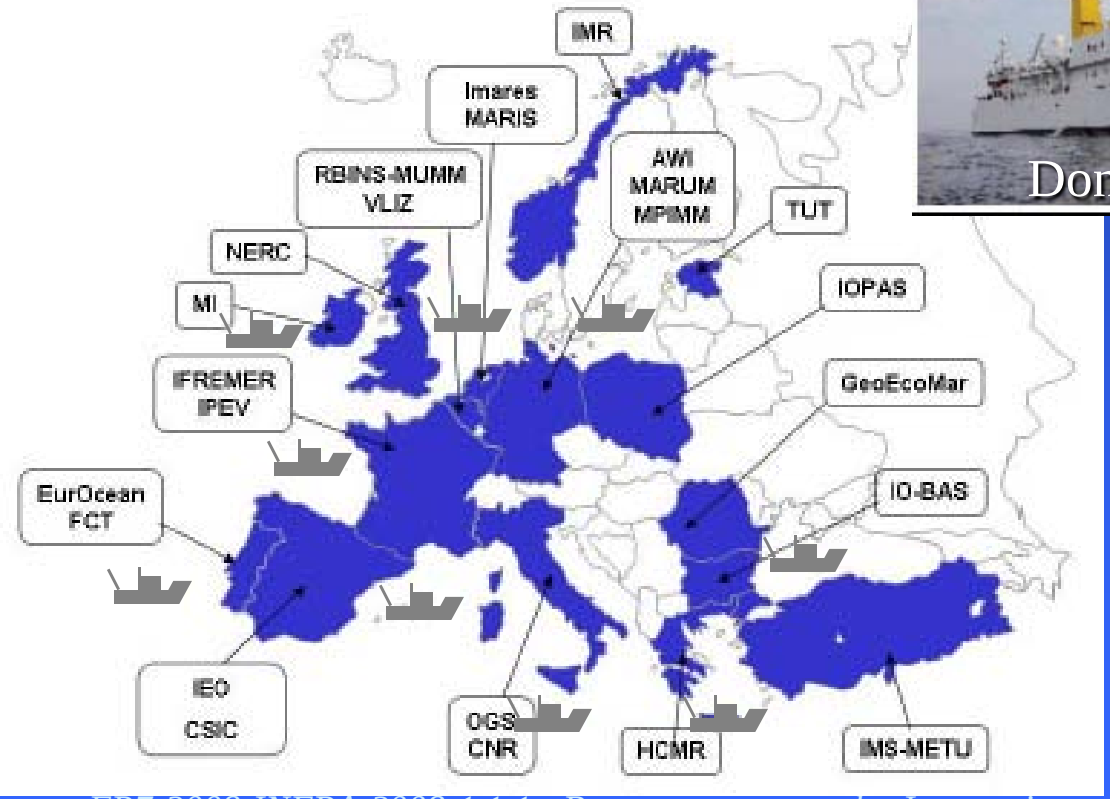
Trans National Access :

14 Regional Research Vessels covering all the European seas organised on a decentralised way



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JRA1 : SOFTWARES TOOLS TO FACILITATE TNA (IFREMER)

- Partners : IFREMER, CSIC, CNR, OGS, MUMM, MPI, GEOECOMAR, IOPAS, MARIS
- 1300 k€ total cost – funded up to 75% by EC
- 190 manmonths
- Development of softwares tools in 6 axis : sensors calibration, data processing, survey reporting, data standardisation, import/export to and from on shore data centres, genomic data base

JRA1 TASKS (1)

- Calibration tools (CNR, IFREMER, CSIC) : Aim is to offer and provide to the community basic tools to calibrate sensors.

- Processing tool (IFREMER, MPIMM, CSIC, OGS, MARIS, MUMM) : Process data coming from sensors and scientific equipment. Data will be geo-referenced and the system will be based on a multi-resolution, multi layers approach. Quality control and data interpretation functionalities will be important aspects.

JRA1 TASKS (2)

- Survey reporting tool (OGS, CNR, IOPAS, MPI, MUMM, CSIC) : Recording of information on events occurred during a survey (scientific/technical observation, anomalies, ..)

- Standardisation (CSIC, MARIS, MPI, OGS, MUMM, CNR) : Improve the management and the standardization of data for the cruises.

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JRA1 TASKS (3)

- Acquisition/import/export to and from on shore data centres (CNR, MPI, OGS, MUMM, CSIC): To implement data collection on board ships, develop a methodology and software for operational data transmission, quality control and data access from ship to shore data centres linked with SeaDataNet

- Acquisition, integration and visualisation of oceanographic and molecular data (MPI, OGS, CNR, MARIS) : multi-resolution database for the acquisition, management and combined analysis of large scale genomic and contextual oceanographic data needs to be developed.

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JRA2 : DEVELOPMENT OF SHARED AND FLEXIBLE MODULES FOR ROVs, AUVs AND OBSERVATORIES (MARUM)

- BGC (BioGeoChemical) module in two modes : ROV payload or autonomous with energy and real time commuinication
- 3D HDTV module, for high resolution mapping,
- *In situ* Chemical Analysis and Sampling Payload (ICASP) module (mass spectrometer, fluorimeter, CTD probe)

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- ...good luck to every partner