EUROFLEETS2
Partnership and scope
EUROFLEETS2: the continuation and the enhancement of EUROFLEETS with more operational initiatives

- EUROFLEETS2 key figures and partnership
- The Trans National Access: the core activity of the project based on the process successfully proven in EUROFLEETS
- The Networking Activity with i) the fostering of the industry involvement for an enhanced impact of RVs on innovation, ii) several operational initiatives aiming to demonstrate the cost-effectiveness increase brought by a better coordination, iii) actions towards the training of the next generation of scientists, and iv) the continuation of coordination efforts (including the Polar fleets),
- The Joint Research Activity inter-connected with NA and TNA
EUROFLEETS2 key figures

• An expanded Consortium with 31 beneficiaries from 20 European countries proposing together their Research Vessels and equipment, and their know how within the EUROFLEET2 I3 project

• Commencement date 1st March 2013 and 4 years duration

• 6 months time-overlap with EUROFLEETS1 to ensure continuity in the Trans National Access and meet the scientific demand

• A budget of 9 M€ allowing to offer a high number of RVs and equipment
The partnership

31 marine institutes, universities, foundations and SMEs from 20 European countries (member states with 4 recent ones, 4 associated countries and 1 OCT - Overseas Countries and Territories -)

1 Ifremer, France
2 AWI, Germany
3 OGS, Italy
4 IEO, Spain
5 HCMR, Greece
6 CNR, Italy
7 GeoEcoMar, Romania
8 MI, Ireland
9 CSIC, Spain
10 RBINS-MUMM, Belgium
11 IOPAN, Poland
12 IPEV, France
13 IO-BAS, Bulgaria
14 MARUM, Germany
15 MARIS, Netherlands
16 EurOcean, Portugal
17 TUT, Estonia
18 VLIZ, Belgium
19 IMR, Norway
20 DTU-Aqua, Denmark
21 SPRS, Sweden
22 TUBITAK, Turkey
23 ESF, France
24 GiNR, Greenland
25 HAVSTOVAN, Faeroe Islands
26 IOF, Croatia
27 UNIZG-FER, Croatia
28 UdG, Spain
29 DFKI, Germany
30 PROLLION, France
31 SHIP Studio, France
RVs and equipment engaged in the EUROFLEETS2 TNA

• A higher number of RVs (22) representing 59 fully funded days on board

  8 Global/Ocean class RVs and 109 days on board 14 Regional class RVs

- Aegao (HCMR)
- Akademic (IO-BAS)
- Angeles Alvarino (IEO)
- Belgica (RBINS-MUMM)
- Bios-DVA (IOF)
- Celtic Explorer (MI)
- Celtic Voyager (MI)
- G.O Sars (IMR)
- Hespérides (CSIC)
- Magnus Heinason (Havstovan)
- Mare Nigrum (GeoEcoMar)
- Marion Dufresne (IPEV)
- Marmara (Tubitak)
- OGS-Explora (OGS)
- Polarstern (AWI)
- Pourquoi pas? (Ifremer)
- Ramon Margalef (IEO)
- Salme (TUT)
- Sanna (GINR)
- Sarmiento de Gamboa (CSIC)
- Simon Stevin (VLIZ)
- Urania (CNR)

• 5 equipment made available to promote exchanges of equipment on board
  European RVs and in doing so to foster a higher inter-operability within
  Europe

- MEBO (MARUM)
- ROV Max Rover (HCMR)
- ROV Liropus (IEO)
- 3D HD camera (MARUM)
- 3D HD camera (Ifremer)
(NA) Fostering the involvement of industry for an enhanced impact of RVs on innovation

• **Targeted industrialists**: those engaged in operating research and survey vessels and associated equipment, those using marine and ocean data and those engaged in design and outfitting of vessels and scientific equipment

• Main objectives:
  • Establishing a regular **dialogue with industrialists** as providers and users
  • Exploring **opportunities for technology transfer and innovation**
  • Creating guidelines to improve IPR management and protection
  • Making an inventory of exploitable results to be transferred to industry
(NA) Operational initiatives

- Overarching goals of EUROFLEETS1 further expanded and matured in EUROFLEETS2 though operational initiatives aiming at reducing at long-term the operation costs of marine infrastructure and also at improving marine data quality:
  
  - Develop the concept of « Regional virtual fleet » for transnational cooperation at regional level
  - Define a sustainable concept for transnational exploitation of embarked equipment. The selected case: the multi-channel seismic system
  - Upgrading and maintenance of the EVIOR portal + deployment of a common meta-data acquisition and transmission software (EARS) on board volunteering RVs.
(NA) Contribution to the training of the next generation of scientists

• A well-evaluated aspect of the EUROFLEETS2 proposal
• Successful within EUROFLEETS despite a lack of fundings and thanks to several generous EUROFLEETS beneficiaries (82 students and technicians trained during on board training courses)

• 4 complementary objectives:
  • Preparatory workshops to the EUROFLEETS2 calls for ship-time: 1st workshop will be held in Tallin, Estonia, 20-24 August 2013
  • On board training courses: RV Urania, RV Salme and RV BIOS-2
  • A 5-7 days pilot experiment of floating university on board RV DANA
  • Other training activities in connection with cruises funded within TNA
(NA) Coordination efforts initiated in EUROFLEETS1 pursued and strengthened in the EUROFLEETS2 NA

• The Fleet Evolution Group (FEG) will be maintained and extended to new beneficiaries, aiming at promoting optimal coordination within European Research fleets and fostering a shared strategic vision. The database aggregating the strategic views of European RV operators will be followed up and extended to international fleets managers.

• Exploration of various scenarios and opportunities to lead to a sustainable funding stream of TNA

• Preparation of the insertion of a group of new RVs in an update of the ESFRI roadmap

• Development of a cruise scheduling tool to enhance the visibility of RVs scheduling and eventual availability
(NA) Flagship initiative for polar access (NA)

• An emblematic « Pioneering group » of EUROFLEETS2 aiming at coordinating the European Polar Research Vessels (PRV) and optimizing their usage by:
  • Determining the available capacities of PRVs
  • Comparing the available capacities with the scientific demand
  • Establishing models for optimization of this fleet by a better coordination of the vessels scheduling and by harmonizing the deployment of ice-strengthened RVs with the heavy icebreakers

• Work plan involving IASC (International Arctic Science Committee), SCAR (Scientific Committee on Antarctic Research) and other international partners relevant in Polar Research
A Joint Research Activity inter-connected with NA and TNA

- Relevant inputs from the EUROFLEETS1 JRA and NA:
  - The EARS software meta-data acquisition is one of the EUROFLEETS2 operational initiatives
  - The guidelines towards new future new buildings and innovative eco-design for RRVs
  - The 2 3D HD compact cameras developed within EUROFLEETS1 are made available by Marum and Ifremer in the EUROFLEETS2 Equipment call
The Joint Research Activity within EUROFLEETS2

• 3 Work Packages of the EUROFLEETS2 JRA focused on:
  - **Guidelines and generic designs for RRVs** (specifications, innovative basic designs and innovative technologies for optimisation of existing ships)
  - **Innovative technologies for Hybrid and Autonomous Underwater Systems** with i) optical 3D mapping and control strategies for AUVs, ROVs and HROVs, and ii) development of new compact batteries for underwater systems
  - **Software and tools**, with i) further development in EARS, ii) standardisation of the data acquisition process, iii) analysis of e-access technologies to develop shore to ship e-access
Thank you for your attention