

EUROFLEETS2

Partnership and scope



EUROFLEETS Final conference, June 13, 2013

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



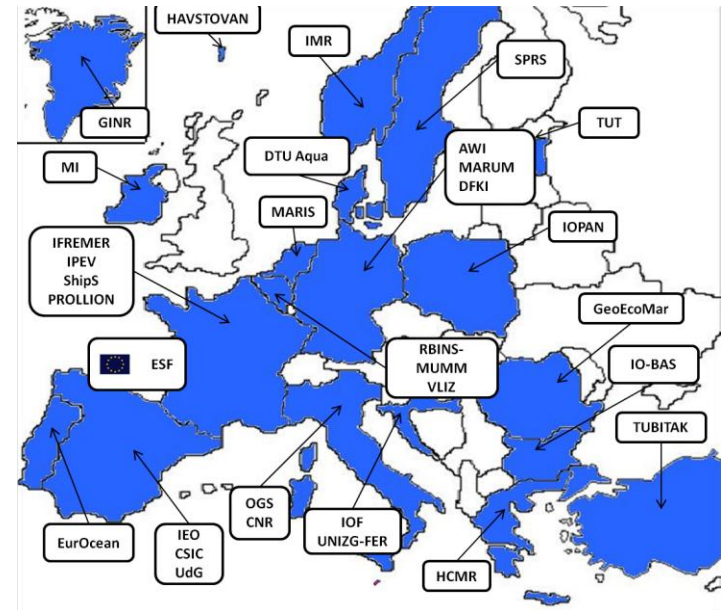
EUROFLEETS2 key figures

- **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 | 11 IOPAN, Poland |
| 2 AWI, Germany | 12 IPEV, France |
| 3 OGS, Italy | 13 IO-BAS, Bulgaria |
| 4 IEO, Spain | 14 MARUM, Germany |
| 5 HCMR, Greece | 15 MARIS, Netherlands |
| 6 CNR, Italy | 16 EurOcean, Portugal |
| 7 GeoEcoMar, Romania | 17 TUT, Estonia |
| 8 MI, Ireland | 18 VLIZ, Belgium |
| 9 CSIC, Spain | 19 IMR, Norway |
| 10 RBINS-MUMM, Belgium | 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)
- *3D HD camera* (MARUM)
- *ROV Liropus* (IEO)
- *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

