EUROFLEETS2 activities and results of its first year



16th ERVO meeting, June 11-12, 2014

EUROFLEETS2 : continuation and enhancement of EUROFLEETS with more operational initiatives

- An expanded Consortium in EUROFLEET2: 31 beneficiaries, of which 12 new comers (from Denmark, Sweden, Turkey, Greenland, Faroe Islands, Croatia, Spain, Germany and France) working together in 3 complementary activities, including two industrialists (SHIP-ST and PROLLION) involved in JRA:
- Trans National Access, based on the process successfully proven in EUROFLEETS, strengthened with more modern RVs (22) and pieces of equipment (5)
- Joint Research Activity
- Networking Activity with operational initiatives to demonstrate the costeffectiveness increase brought by a better coordination, with actions for the training of young scientists, and with the continuation of coordination efforts (including the Research Polar fleets)



The innovative ship-time and equipment-time call organized within EUROFLEETS2

Regional Calls (TNA 1): Global/Ocean and Regional Research Vessels will be opened together in calls for maritime regions.

- Regional 1 (Polar & Subpolar): March 2013/24th May 2013 Closed
- Regional 2 (Polar/Subpolar, North Atlantic, North Sea, English Channel, Celtic Sea, Baltic Sea and Bay of Biscay): 3rd December 2013/27 March 2014 – Closed
- Regional 3 (Mediterranean Sea, Black Sea, Red Sea): September to December 2014

Super-Integration Call (TNA 2): a single flagship project has been selected for the 4 years period giving access to several research vessels or to research vessels in combination with other infrastructures.

Super-Integration: 14 June 2013/16th September 2013 - Closed

Embarked Equipment Call (TNA3): funding the installation and usage of unique equipment not usually deployed on a Research Vessel not funded within the EUROFLEETS2 project.



Embarked equipment: 14 June 2013/16th September 2013 - Closed

Results from the Polar & Subpolar Call (Regional 1)



6 proposals have been submitted representing 42 partners

3 proposals recommended for funding by the Scientific Review Panel:

- ORCA cruise (led by NIOZ) o/b RV Sanna: 7-14 August 2014
- PREPARED cruise (led by OGS) and Polar plastics cruise (student project) o/b RV G.O. Sars: 5-15 June 2014 underway



Results from the Super-Integration Call

4 proposals have been submitted representing 54 partners

1 proposal recommended for funding by the Scientific Review Panel:

- MED-SUV.ISES project (led by INVG, Catania, Italy) in Seismology, Volcanology, and Geophysics for onshore and offshore seismic investigation in Southern Italy, with recording of active and passive seismic data
- A 3-leg operation organized o/b RV Sarmiento de Gamboa (Leg1 & Leg2: June/July 2014) and RV Aegaeo (Leg 3: November 2014?)

Press conference held on 27th May 2014 at INVG





Results from the Embarked equipment Call

1 proposal has been submitted and recommended for funding by the Scientific Review Panel:

IRIS project (led by CSIC) with the ROV Max Rover (HCMR) deployed on board the RV Sarmiento de Gamboa during a 12-day cruise in 2015





Access to the 4 other equipment was re-opened in the Regional 2 Call



First results from the Regional 2 Call under evaluation

- First Results: 22 proposals have been submitted
- > 10 different vessels have been requested
- 2 pieces of equipment (3D HDTV camera (1) & ROV Liropus (3)) have been requested
- Working Areas: Arctic 5 proposals

Antarctic 4 proposals North Atlantic 6 proposals Gulf of Cadiz 3 proposals Azores 1 proposal Baltic 1 proposal North Sea 2 proposals



Requested Vessels in Regional 2 Call





The Joint Research Activity within EUROFLEETS2

- 3 Work Packages under progress covering:
 - Guidelines and generic designs for RRVs (specifications, innovative basic designs and innovative technologies for optimisation of existing ships) to facilitate the future Regional RVs renewal
 - 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 the event-data logger software EARS, ii) standardisation of the data acquisition process, iii) analysis of e-access technologies to develop shore to ship



e-access

(NA) Operational initiatives

 Overarching goals of EUROFLEETS1 further expanded and matured in EUROFLEETS2 through operational initiatives aiming at reducing at long-term the operation costs of marine infrastructure and also at improving marine data quality, in particular:

- Development of the « Regional virtual fleet » concept for transnational cooperation at regional level First Deliverable almost completed
- Upgrade and maintenance of the e-platform EVIOR, in conjunction with a step-by-step deployment of the common meta-data acquisition and transmission software (EARS) on board volunteering RVs:
 - 5 beneficiaries involved in on-board installations: MUMM-OD, OGS, CSIC, Ifremer and IOPAN
 - EARS-V1 installed/tested on board RVs Belgica, OGS-Explora and Garcia Del Cid in September 2014
 - EARS-V2 prototype installed/tested on board RV L'Atalante in December 2014
 - > EARS-V2 final ready at the end of EUROFLEETS2 and sending information to EVIOR







European Virtual Infrastructure in Ocean Research (EVIOR)





http://www.eurofleets.eu/np4/virtual_rv

16th ERVO meeting, June 11-12, 2014

(NA) Contribution to the training of young scientists

Preparatory workshop to the EUROFLEETS2 calls for ship-time: workshop targeted to PhD students and early stage Post-Doc held in Tallin, Estonia, 18-20 February 2014. 10 applications submitted - Completed

- 2 training courses on board RVs Urania and RV Salme in summer 2014
 - ➢ 60 applications submitted for 24 available places
 - ➢ RV Urania: 5th to 8th July 2014
 - RV Salme 17th to 21st (or 19th to 23rd) August 2014
- 3rd training course on board RV BIOS-II in June 2015
 - Call launched beginning 2015 for 18 berths (including instructors)
- A 6-day pilot floating university on board RV Dana during a transit from Tromso (Norway) to Hirtshals (Denmark) in June 2015
 - Call launched in September-October 2014
- Other training activity for including students within EF2 funded- cruises



(NA) Coordination efforts started in EUROFLEETS1 and strenghtened in EUROFLEETS2

- 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.
- Ist recommendation: Update of the EurOcean RV Infobase through additional information and implementation new filtering functionalities
- The database aggregating the strategic views of European RV operators will be followed up and extended to international fleets managers.
- Development of a cruise scheduling tool to enhance the visibility of RVs scheduling and eventual availability
- Sub-part of a more complete development. Ongoing specification phase of a cruise planning system.



EUROFLEETS2 contribution on the scheduling tool in 2015

(NA) Flagship initiative for polar access

• 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 Completed
- 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



Thank you for your attention!

The last EUROFLEETS Deliverables of ERVO interest are available on the project public website (<u>http://www.eurofleets.eu/np4/29</u>):

- Report on guidelines for common peer review criteria and processes for scientific evaluation/selection
- TNA consolidated final report, contributions to NA1
- Report on perspectives for major underwater equipment new investment ...
- Database aggregating strategic views of fleet managers
- Report on diffusion of e-access on research vessels
- Guidelines for RV eco-design
- Implementation of selected best practices for education

