Organization of European activities: status

P.Y. Le Traon, S. Poulquen and Euro-Argo RI partners

AST-15
Halifax, March 18, 2014
The Euro-Argo European Research Infrastructure

- **Objective**: ensure a long term European contribution to Argo

- **Proposal**: Europe establishes an infrastructure for ¼ of the global array
  - Deploy about 250 floats per year to contribute to the Argo core mission including regional enhancements (Nordic seas, Mediterranean&Black seas) (maintain an array of 800 floats).
  - Prepare and contribute to the extension of Argo (e.g. marginal seas, biogeochemistry, deep ocean, polar regions)
  - Dual use: ocean and climate research and operational oceanography (GMES/Copernicus)

- Set up a new European legal structure (Euro-Argo ERIC) that will allow European countries to consolidate and improve their contribution to Argo international (agreements at ministerial level). **APRIL/MAY 2014.**
Objectives: Improve, Strengthen and Sustain European contributions to Argo

Unified voice for Europe in Argo

**Organisation of the Euro-Argo RI**

A central facility and distributed national facilities

Define and agree on a roadmap for the evolution of the European contribution to Argo

Coordinate and monitor the deployment of all European floats

Organize float procurement at European level

Organize joint R&D activities

Coordinate European contributions to Argo data management

Link with Argo International

**The Central Research Infrastructure (Euro-Argo ERIC)**

- Coordinate
- Distribute Work among partners
- Contribute to the ERIC
- Share expertise and knowledge

**Distributed National Facilities**

- Float procurement
- Float Deployment
- Data processing
- Research and Development

**The Central Research Infrastructure**

Responsible for the implementation of the decisions and programmes adopted by the Management Board.

Includes a Programme Manager and a Project Officer. May hire additional personnel to support the Euro-Argo activities.

**The Scientific and Technical Advisory Group**

Advises on any scientific and technical matters

**The Management Board**

Supervises the operation of the Euro-Argo ERIC and ensures that it operates and evolves in accordance with the strategic direction set by the Council.

**The Council**

Defines the broad strategic direction of the ERIC and its evolution. It is composed of one delegate per member.

**Local Host**

France (Ifremer, Brest)

**Members**: Bulgaria, Finland, France, Germany, Greece, Italy, Netherlands, United Kingdom

**Observers**: Norway, Poland

**Candidate Members**: Spain, Ireland (Portugal ? Turkey ? Sweden ?)
Two phases for the Euro-Argo ERIC

- **2012-2015 (transition phase and phase 1 of the Euro-Argo ERIC)**
  - Light structure: 1 programme assistant (100%), 1 programme manager (20%) (+ secretariat, IT and administrative support from host)
  - Budget for missions (incl. ERIC members), workshops, WWW
  - Funding by members and observers (national) (no EU funding for central coordination). EU funding through FP7 projects (e.g. SIDERI and E-AIMS).

- **2015+ (phase 2 of the Euro-Argo ERIC)**
  - Structure: 1 programme assistant, 1 programme manager (50%), 1 technician, 1 or 2 engineer/scientist (ERIC employees/seconded by members to the ERIC).
  - Budget for missions (incl. ERIC members), workshops, WWW
  - Funding by members and observers and the European Union
  - 50 to 100 floats/year procured by the ERIC with EU funding. EU co-funding to consolidate the data processing and management system. Work delegated to members for data processing. Most likely through DG MARE (Copernicus).
  - Preparing/implementing the new phase of Argo (e.g. bio-Argo, deep Argo, Arctic) (Horizon 2020 projects and national) (e.g. E-AIMS, Atlantos).
  - Consolidated European contribution to the Argo Information Centre and the international structure.
Euro-Argo floats as in February 2014

624 floats incl. 65 oxygen and 45 bio-optical floats
Euro-Argo views on the long term evolution of Argo

**Priority 1**: maintain the global array. Increase European contribution from 150-200 floats to more than 200 floats/year and consolidate the data processing system.

**Priority 2**: evolution of Argo to address new scientific and operational (GMES/Copernicus) challenges. Contribute to the implementation the new phase of Argo (biogeochemistry, deep ocean, polar, marginal seas, near surface measurements).

Implementation in EU marginal seas is part of « our initial Euro-Argo core ». Pilot experiments for bio and deep have started or are planned (E-AIMS, Remocean, NAOS, Atlantos).

Long term plans have been proposed (e.g. SIDERI roadmap) and should be discussed with Argo international (see AST-15 agenda).
European contribution to Argo

For several years, Euro-Argo contribution has been above 200 floats/y. It has already included an evolution of Argo mission: about 30 floats/y marginal seas, 40 floats/y high latitudes, 20 floats/y Bio-Argo

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|                | 173                | 230                           | 190                | 213                           | 279           | 213                           |

Our contribution is improving but is still below our 250 floats/y target.

This target should be reached in 2015 thanks to EU funding (50 to 100 floats/year)

Our long term goal (TBC) is a contribution of more than 250 floats/year with about 20 floats/year in the Med/Black Seas, 40 floats/year for high latitudes, 50 deep floats/year (20%) and 50 biogeochemical floats (20%)
Conclusion

The very objective of Euro-Argo is to ensure a long term contribution of Europe to Argo

European level is needed: improved efficiency in all implementation aspects

- We have defined, agreed and are setting up a new European legal structure and organization.

- This will allow EU member states to better coordinate, consolidate and improve their contribution to Argo international.

- Euro-Argo ERIC will be in place in a few weeks.

- Good progress to develop a new long term EU funding line for Euro-Argo.

- Strong requirements from European stakeholders (research, Copernicus) to start implementing the new phase of Argo (bio, deep, high latitude).