Argo Report 2017 – Euro-Argo ERIC

The Euro-Argo research infrastructure organizes and federates European contribution to Argo (www.euro-argo.eu); it is part of the European ESFRI roadmap on large research infrastructures. Ministries from 9 European countries (Finland, France, Germany, Greece, Italy, Netherlands, UK, Norway and Poland) agreed to form a legal European entity to organize a long-term European contribution to Argo. The Euro-Argo ERIC and its governance structure (Council, Management Board and Science and Technological Advisory Group) was set up by the Commission Implementing Decision (2014/261/EU) of May 5, 2014. The Euro-Argo infrastructure is made up of a central infrastructure based in France (Ifremer, Brest) which is owned and controlled by the Euro-Argo ERIC and distributed national facilities. The distributed national facilities operate with direct national resources. As part of the Euro-Argo research infrastructure, they agree to a multi-annual commitment of resources (in particular in terms of floats to be deployed and for the data system), and to coordinate their activities through the Euro-Argo ERIC. The Euro Argo ERIC delegates some of its activities to the national facilities who have the relevant expertise (e.g. data management and quality control, float deployment), and according to their areas of responsibility. In 2016 Ireland joined the ERIC followed by Spain early 2017 (Figure 1)

Figure 1: Euro-Argo partners and European contribution to Argo in January 2017
1) Status of implementation
The Euro-Argo ERIC was set up in May 2014 and its office is located in France, hosted by Ifremer, Brest. This infrastructure enables Europe to build and sustain a contribution to the global array while providing enhanced coverage in sea areas of particular European interests (e.g. the Nordic Seas, Mediterranean and Black Seas). The Euro-Argo ERIC coordinates the European contribution to Argo and monitor it with the aims of maintaining $\frac{1}{4}$ of the Argo array.

Since 2008 Euro-Argo have been working with the European commission to develop a European contribution in addition to the national ones. This is done through projects funded by EC and documented on Euro-Argo website.

Contribution to the Argo array:
- MOCCA (2015-2019): 120 T&S Floats purchased, 45 deployed in 2016, 75 planned in 2017 (Figure 2);

Figure 2: MOCCA floats deployment plan. Stars show floats already operational and dots the current plans (including floats already deployed) for the end of 2016 and 2017.
2) Present level of (and future prospects for) national funding for Argo including summary of human resources devoted to Argo

The Euro-Argo ERIC Office is a team of 5 persons with project management, technical and scientific background.

The Euro-Argo ERIC developed a strategy for the development of Argo for the next decade. This document has been reviewed by the Euro-Argo STAG (Scientific and Technical Advisory Group) in which Argo International is represented by one of its co-chair Susan Wijffels. A new version will soon be published on Euro-Argo website at http://www.euro-argo.eu/Outreach/Documents. An implementation plan of this Strategy is under development and should progress in 2017-2018 taking into account Argo International priorities.

The Euro-Argo ERIC office team is also developing with its partners tools for at-sea monitoring that will allow to have a better view of the European fleet, its status, its efficiency and weaknesses. The Euro-Argo ERIC office team is also working on KPIs to document European contribution to the international network and plan to work with AIC on these issues.

Euro-Argo is working with the European Commission to develop a plan for BGC (BioGeoChemical) and DEEP European contribution to Argo that would complement the European national contributions.

3) Summary of deployment plans (level of commitment, areas of float deployment) and for other commitments to Argo for the coming year (and beyond where possible)

In 2017, 75 T&S floats, 6 BGC and between 4-7 DEEP floats will be deployed by the ERIC with the help of its partners. The deployment plan is still under development and will take into account the known plans at AIC, the priorities identified at AST18 as well as the deployment opportunities available and the cost for float shipments to remote areas.

4) Summary of national research and operational uses of Argo data

Argo data and/or products derived from Argo data are used for operational oceanography within the Copernicus Marine Environment Monitoring Service (http://marine.copernicus.eu/), for satellite calibration and validation (see E-AIMS booklet) and for research carried on by the Euro-Argo ERIC partners (see national reports for details).

5) Issues that your country wishes to be considered (and resolved) by AST regarding the international operation of Argo

None at the writing of this report.

6) CTD data uploaded to CCHDO

Done by Euro-Argo ERIC members.

7) Bibliography