



Organization of European activities: status

P.Y. Le Traon, S. Pouliquen 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 $\frac{1}{4}$ 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.**



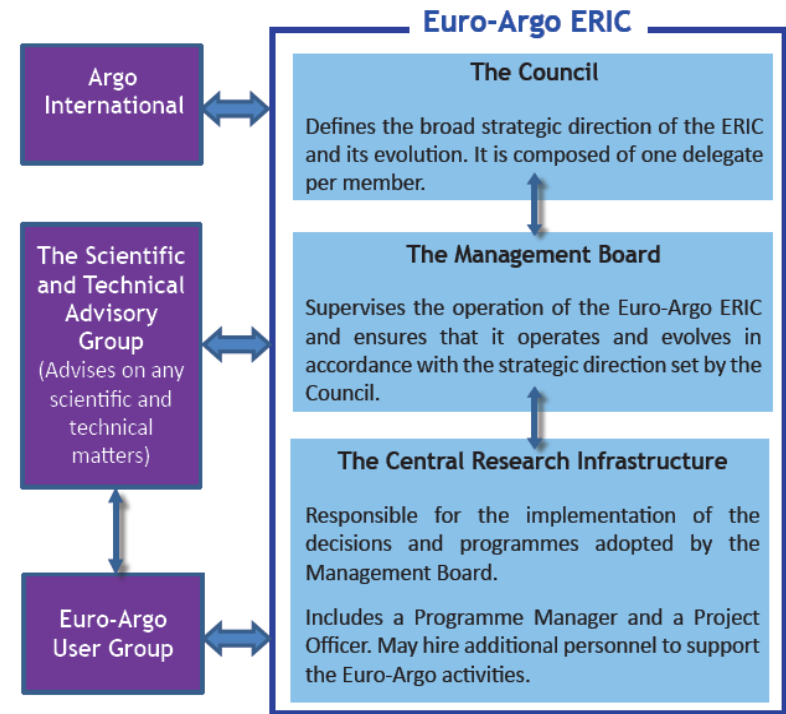
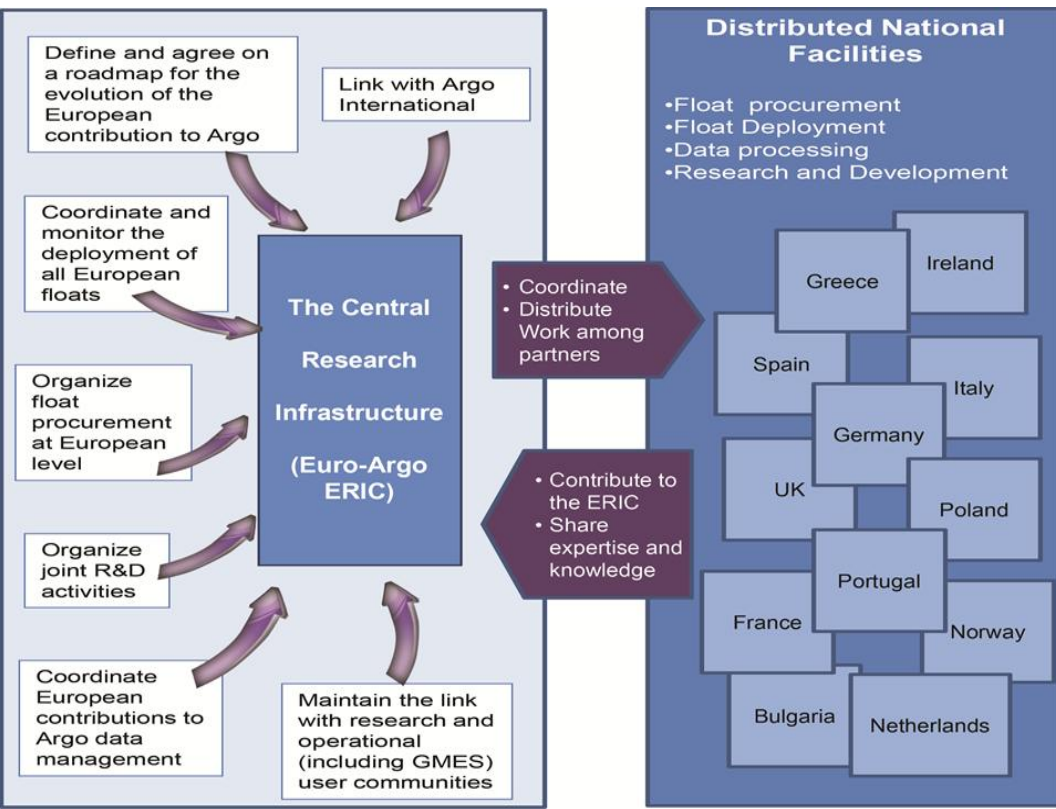


Organisation of the Euro-Argo RI

A central facility and distributed national facilities

Objectives: Improve, Strengthen and Sustain European contributions to Argo

Unified voice for Europe in Argo



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 ?)



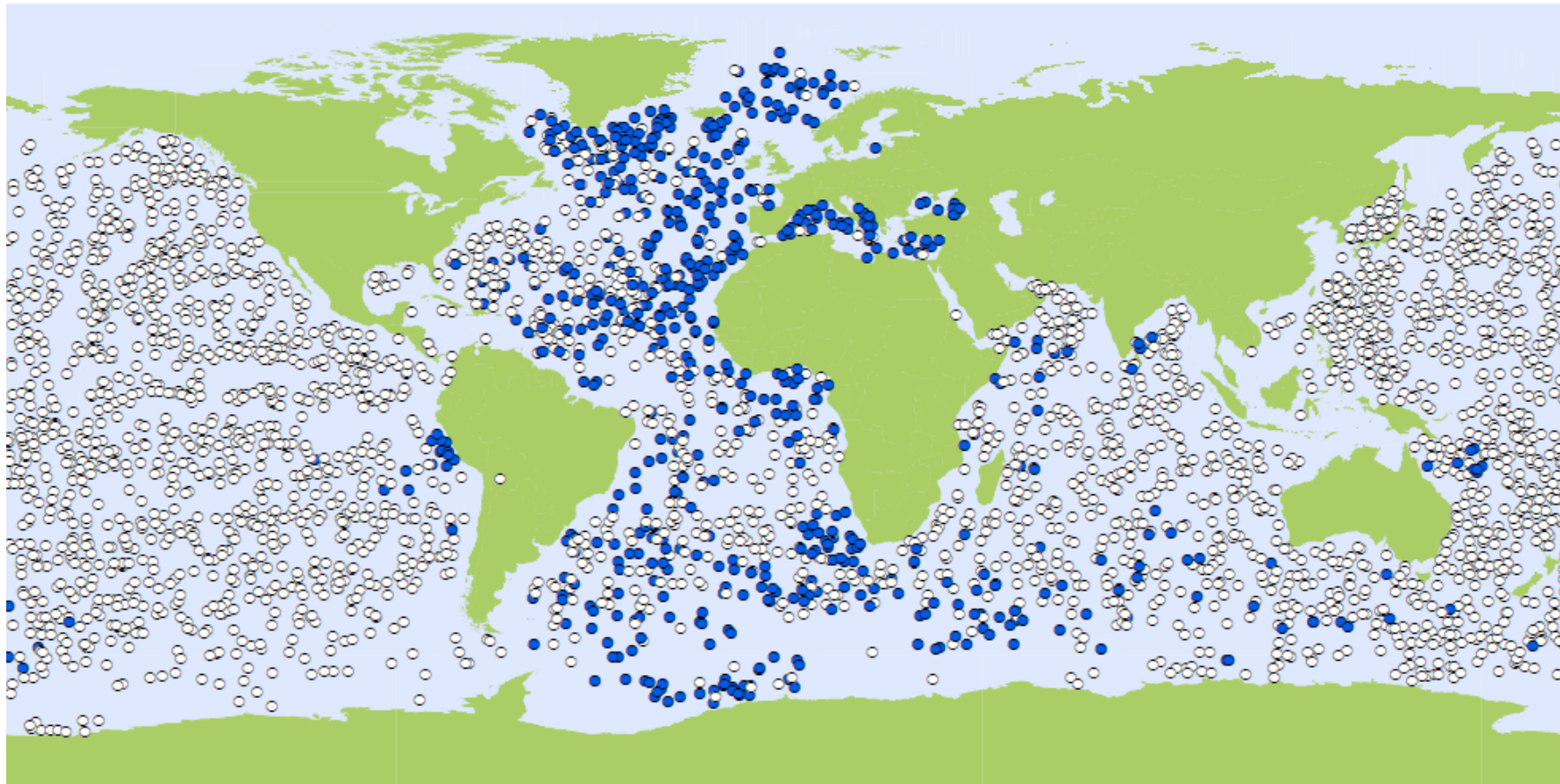
Two phases for the Euro-Argo ERIC

- **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

- | | | | | |
|----------------------|---------------|-------------------|--------------|----------------------|
| ● BULGARIA (0) | ● GERMANY (0) | ● LEBANON (0) | ● POLAND (0) | ● UNITED KINGDOM (0) |
| ● EUROPEAN UNION (0) | ● GREECE (0) | ● MAURITIUS (0) | ● SPAIN (0) | |
| ● FINLAND (0) | ● IRELAND (0) | ● NETHERLANDS (0) | ● SWEDEN (0) | |
| ● FRANCE (0) | ● ITALY (0) | ● NORWAY (0) | ● TURKEY (0) | |

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

	2011 Argo deployed	2011 Argo extension deployed	2012 Argo deployed	2012 Argo extension deployed	2013 deployed	2013 Argo extension deployed	2014 deployed estimated	2014 Argo extension estimated	2015-2020 plans (per year)
Bulgaria	3					1		3	3
European Union					2	2		10	
Finland	2		3			4		3	3
France	53		82		65	16	70	10	80
Germany	48		72		31	7	51	20	40
Greece						2		6	5
Ireland	3		2		1		3		3
Italy	1		2	17		12		25	25
Netherlands	7		7		4		10		7
Norway						1	3	3	3
Poland			1				2		1
Portugal					0	0			
Spain	17		6		4		2	3	3
Turkey	0		0		0	4	0	0	
UK (Mauritius)	39 (4)		25	13	30 (2)	2	38 (2)	17	40
Total	173	0	213	17	137	53	177	102	
	173		230		190		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)

