



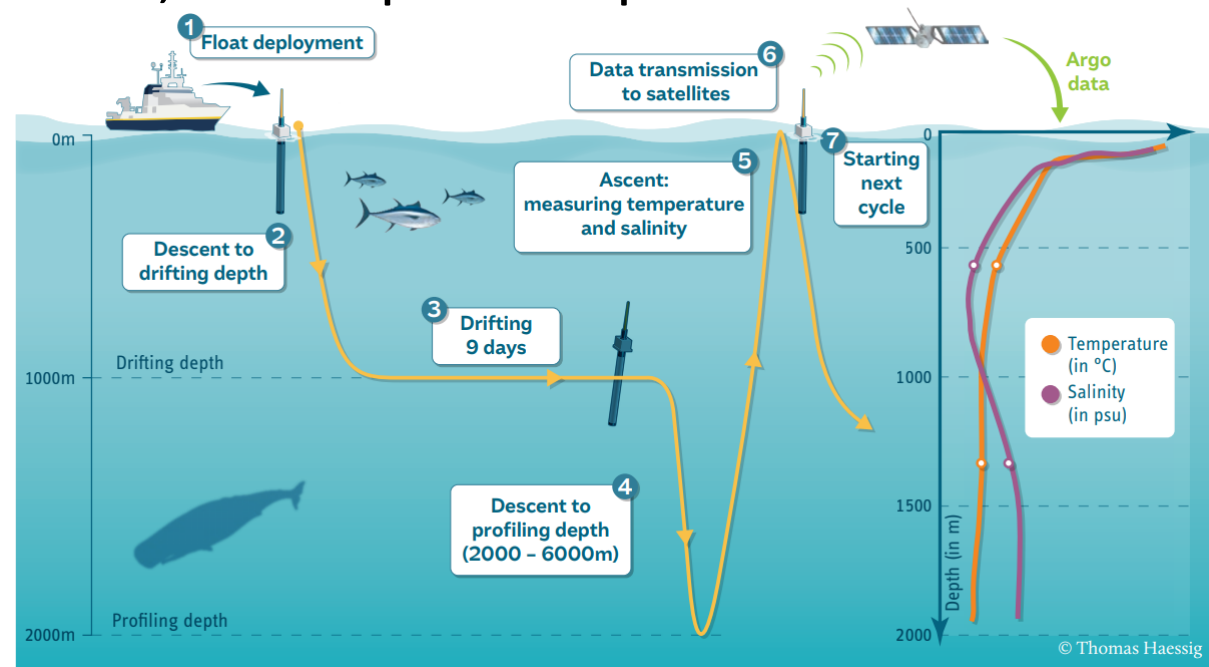
How MOCCA project contributed to strengthen European manufacturers position in Argo program

*SESSION 1 - OCEAN OBSERVING TECHNOLOGY: OPTIMISING
EUROPEAN CAPABILITY*

EC Observation event | 18 June 2021

- **Argo**: an active fleet of about 4000 autonomous floats
~800 floats deployed yearly (25% by EU countries)
- **MOCCA: 150 Argo floats measuring temperature and salinity deployed in 3 years**
(2016-2018)
5M€ co-funded by the European Maritime and Fisheries Fund (EMFF)
- Coordinated by the **Euro-Argo ERIC** that sustains, develops and optimises the European contribution to Argo

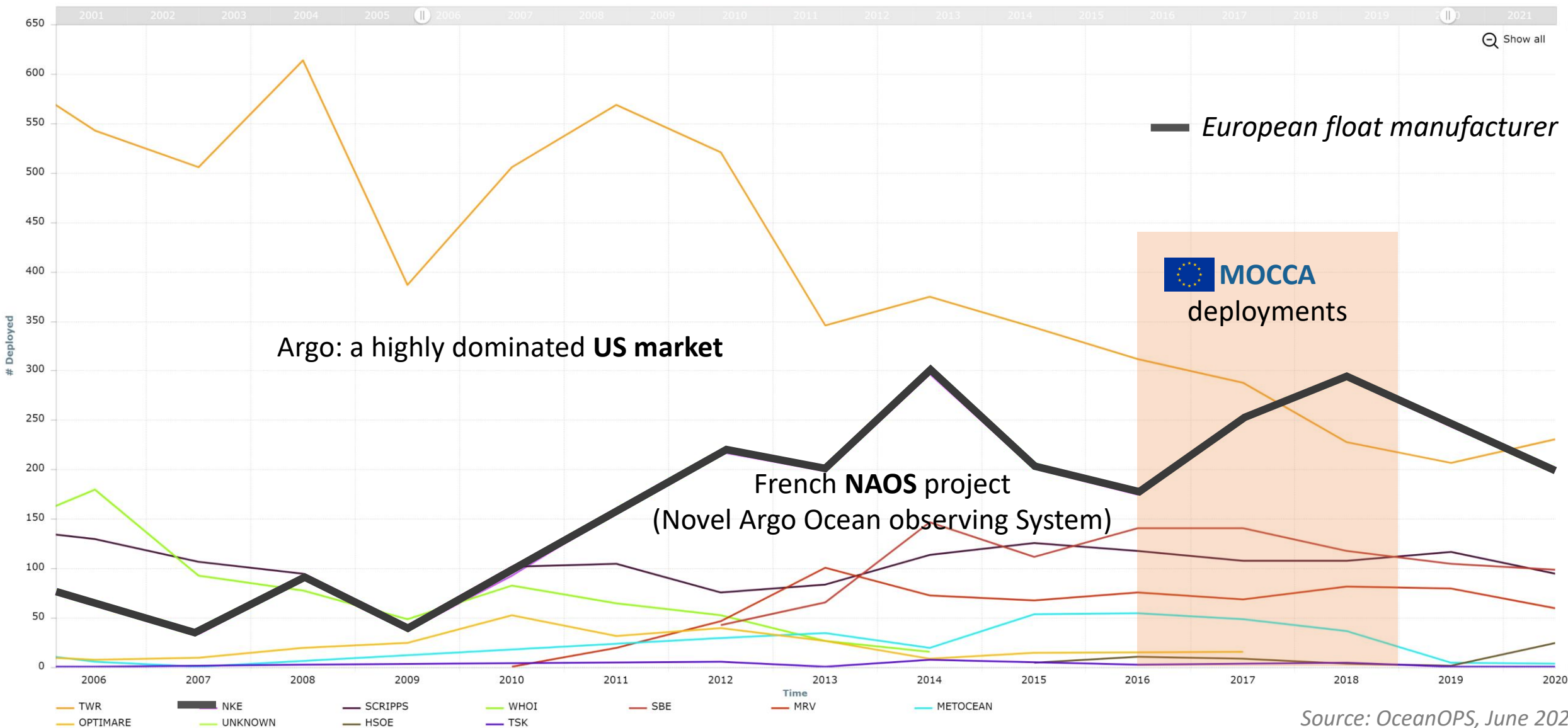
Able to initiate network upgrades in response to specific European research interests, towards high latitudes, biogeochemistry (BGC) measurements to study ecosystem parameters and down to deeper abyssal depths.





Context

Argo deployments timeline grouped by float manufacturer





MOCCA outcomes for European Capabilities

- **European Argo manufacturer reached the first position in market sales in 2017-2019** and is the only one that increased its market over the period
- **Float performances** (profiting from **R&D project development**) were **showcased with MOCCA** and the **European Argo manufacturer increased its market opportunities** afterwards
- **Other partnerships with the private sector were sustained or developed**
 - Floats satellite communications (CLS, France)
 - Floats deployments (Orange Marine, Passenger ships, Sailing ships, etc.)
- **The number and coverage of observations increased** (25K CTD profiles collected by MOCCA fleet), **especially in European Seas**
- The Euro-Argo **strategic plan** was revised thanks to the trials performed in MOCCA (e.g. Baltic, high-latitude regions, coastal areas, etc.)

- Argo relying on US (more recently also Canada) manufacturer for the provision of highly accurate and stable CTD sensors
- Need to:
 - extend the range of available manufacturers or sensor models on Argo platforms for existing variables (T&S, BioGeoChemical)
 - develop the availability of manufacturers or sensor models on Argo platforms for new variables (BioGeoChemical)
 - support manufacturers in the test/pilot phases after proof of concept
 - develop links with the private sector in general (for deployment, for sponsoring, for products, etc.)
 - sustain or develop efficient relationship with the floats and sensors manufacturers (monitoring, data quality, data management, etc.)



Opportunities

- **R&D projects are needed to support floats and sensors innovation and testing** in Europe (e.g. ERC REFINE, French Argo 2030 and PIANO, German DArgo2025 and C-Scope, etc.)
- **Implementation projects or sustained funding mechanism are required to turn these R&D innovations into significant European market capabilities** (e.g. equivalent US GO-BGC project: 500 BioGeoChemical floats, 53 M\$ over 5 years)
- MOCCA has been instrumental in the development of the Euro-Argo RI and services, and the ERIC has demonstrated its capabilities to manage a large EC contribution
- Euro-Argo ERIC is ready to **implement** (procurement, deployment, monitoring, data management) **25% of the Global, Full-Depth and Multi-Disciplinary Argo Array, funded jointly by Member States and European Commission** in support to the European Services (Copernicus, EMODnet) but also European Blue Economy and European policies such as MSFD

Thank you for your attention



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More on MOCCA project:

<https://www.euro-argo.eu/EU-Projects/MOCCA-2015-2020>

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