Data management for European fleet of research vessels in EUROFLEETS+

EUROFLEETS+ (EF+) EU H2020 project facilitates free of charge access to 27 research vessels, and multiple AUVs and ROVs from European and international partners by means of transnational access (TA) calls.

EF+ adopted a Data Policy making EF+ cruise data findable, accessible, interoperable and reusable (FAIR). Data management (DM) is integrated and deployed in synergy with SeaDataNet, European network of NODCs. The DM strategy is to ensure metadata and data of TA cruises to become available for dissemination and inclusion in major European and global marine data exchange systems.

To achieve this, research teams are required to formulate their cruise DM plans, and use components designed for deploying the EF+ DM strategy: 1) equip RVs with a shipboard system (EARS) to gather and transfer metadata and data as acquired during cruises, both by automatic systems and manual entries; 2) assign DM experts (NODCs) to assist principal investigators and vessel operators, before, during, and after the TA cruises; 3) validate and archive all gathered metadata and data at NODCs for long term stewardship, and wider distribution, using SeaDataNet for exchange and publishing at several European and international portals, such as CMEMS, EMODnet, EurOBIS, GEOSS, and IOC-IODE portals and the EF+ EVIOR portal.

Distinction in 'en-route' data acquired by fixed sensors and 'manual' data from human operations, requiring post-processing, e.g. analysing samples. EARS will gather 'en-route data' for regular transfer and publishing at EF+ EVIOR portal in a dynamic vessel tracking interface, using SWE techniques. While 'manual' data will be transferred by PI's to NODCs using EMODnet Ingestion.