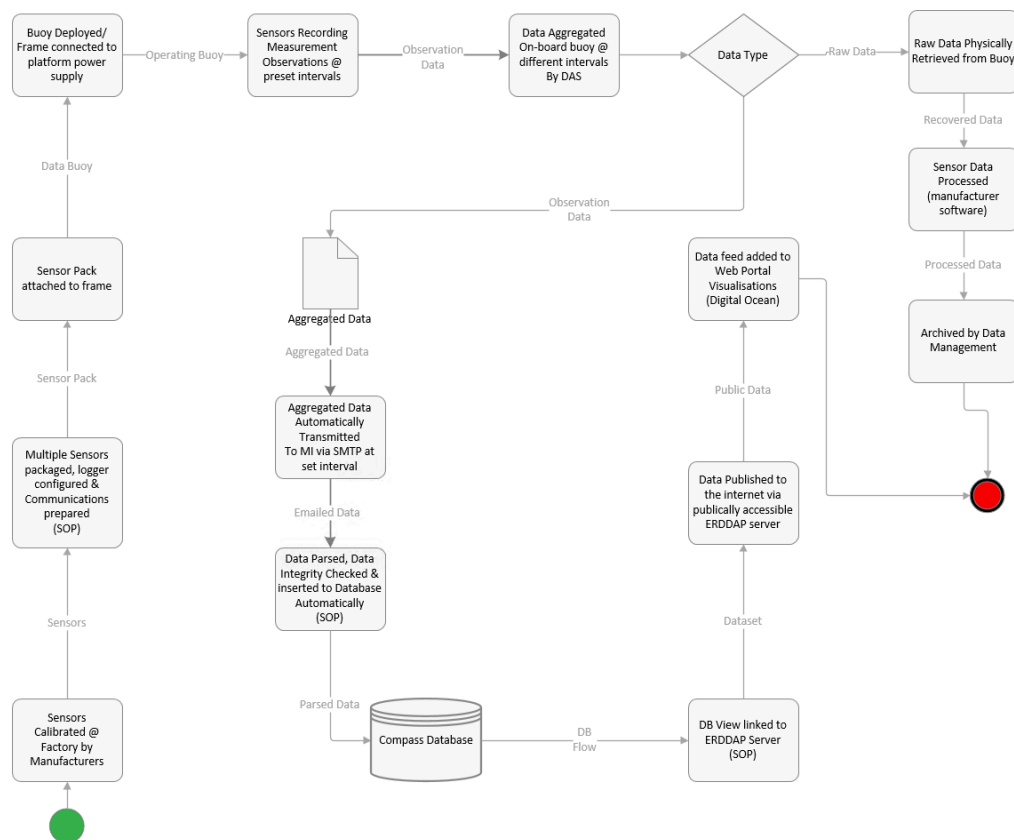# CULTIVATING A MUTUALLY BENEFICIAL OCEAN SCIENCE DATA MANAGEMENT RELATIONSHIP WITH BREXIT NATIONS

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Problem

Data management integration is a persistent problem in projects.

Time is wasted integrating database structures, data types, methodologies and outputs - no more.

Opportunity - COMPASS Project

Five organisations, spread across the UK and Ireland, have come together to improve their management of marine protected areas.

Three are bound for Brexit (AFBI, MSS, SAMS).

Despite this inevitability, significant efforts have been placed on harmonising data management processes and procedures between the partners, building towards a more integrated Europe.

Data Management Quality Management Framework

Guidelines for infrastructure, software architecture and metadata were introduced to guide this harmonisation and ensure adequate quality controls would be enforced.

Core to this were the completion of data management plans, process flows and standard operating procedures.

Data Process Flow

Data Management Plan

DATA COLLECTION
What data will you collect or create?

Text files aggregated by a Campbell logger on board a remote vehicle (buoy) based at Mace Head, Co. Galway. Data collection activity is funded by the Compass Project (INTERREG) under the auspices of SEUPBB in association with AFBI, IFI, MSS and SAMS.

How will the data be collected or created?

Collected by the sensors on-board the buoy, logged and timestamped by a Campbell logger. Transmitted via SMTP to several different email addresses for redundancy (MI mail, Gmail, Outlook). That data is parsed and updates an ever increasing table in PostgreSQL.

DOCUMENTATION AND METADATA
What documentation and metadata will accompany the data?

No named metadata standards are enforced at data collection but there are plans to adapt Inspire standards and the P01 vocabulary to the data at ingestion to database (pending other project's work).

ETHICS AND LEGAL COMPLIANCE
How will you manage any ethical issues?

A strict data sharing agreement has been drafted and is under legal review by the different Compass partners.

How will you manage copyright and Intellectual Property Rights (IPR) issues?

The data is owned by the originating organisation. Usage restrictions are explicitly covered in the data sharing agreement.

STORAGE AND BACKUP
How will the data be stored and backed up during the research?

Data is stored on-board the buoy in standard FAT-32 memory but also on an internal shared mail server. It is also backed up in two external places, as Azure blob storage (using the MI's Azure account) and an external mail client (Gmail). The data processor is charged with ensuring that these backups are current and maintained. In the case of a major system failure resulting in a loss of data, services can be rebuilt from backups or directly from source.

Through data management, relationships have been forged which should persist into a post-Brexit Europe.

The **COMPASS** project has been an exemplar of how close collaboration can persist and thrive in a changing political environment.