



## Cultivating a mutually beneficial ocean science data management relationship with Brexit Nations

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Integration of data management systems is a persistent problem in European projects that span multiple agencies. Months, if not years of projects are often expended on the integration of disparate database structures, data types, methodologies and outputs. Moreover, this work is usually confined to a single effort, meaning it is needlessly repeated on subsequent projects. The legacy effect of removing these barriers could therefore yield monetary and time savings for all involved, far beyond a single cross-jurisdictional project.

The European Union's INTERREG VA Programme has funded the COMPASS project to better manage marine protected areas (MPA) in peripheral areas. Involving five organisations, spread across two nations, the project has developed a cross-border network for marine monitoring. Three of those organisations are UK-based and bound for Brexit (the Agri-Food and Biosciences Institute, Marine Scotland Science and the Scottish Association of Marine Science). With that network under construction, significant efforts have been placed on harmonizing data management processes and procedures between the partners.

A data management quality management framework (DM-QMF) was introduced to guide this harmonization and ensure adequate quality controls would be enforced. As lead partner on data management, the Irish Marine Institute (MI) initially shared guidelines for infrastructure, architecture and metadata. The implementation of those requirements were then left to the other four partners, with the MI acting as facilitator. This led to the following being generated for each process in the project:

Data management plan: Information on how and what data were to be generated as well as where it would be stored.

Flow diagrams: Diagrammatic overview of the flow of data through the project.

Standard Operating Procedures: Detailed explanatory documents on the precise workings of a process.

Data management processes were allowed to evolve naturally out of a need to adhere to this set standard. Organisations were able to work within their operational limitations, without being required to alter their existing procedures, but encouraged to learn from each other. Very quickly it was found that there were similarities in processes, where previously it was thought there were

significant differences. This process of sharing data management information has created mutually benefiting synergies and enabled the convergence of procedures within the separate organisations.

The downstream data management synergies that COMPASS has produced have already taken effect. Sister INTERREG VA projects, SeaMonitor and MarPAMM, have felt the benefits. The same data management systems cultivated as part of the COMPASS project are being reused, while the groundwork in creating strong cross boundary channels of communication and cooperation are saving significant amounts of time in project coordination.

Through data management, personal and institutional relationships have been strengthened, both of which should persist beyond the project terminus in 2021, well 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, in spite of the ongoing uncertainty surrounding Brexit.