

Mapping Seabed in and Around Ireland

The inshore waters of Ireland are areas of enormous activity and value. Yet more still needs to be learned about the physical, chemical and biological makeup of the seabed to ensure that effective resource management supports present and future economic and environmental issues. MacArtney supplied sonar equipment is mapping the seabed both in and around Ireland onboard the newly inaugurated vessel, the Keary, and onboard the Celtic Explorer.

Ireland's inshore water areas are an enormous source of income and activity. Such high activity needs to be carefully measured and monitored to ensure the long-term viability of this valuable asset. The most important starting point to mapping and measuring impact is to understand the waters and seabed as they are currently.

In an extensive project, the Infomar programme is currently surveying the 125,000km² of inshore waters to produce integrated maps showing the physical, biological and chemical makeup of the seabed. The new inshore survey vessel, the Keary, dedicated last month, has been equipped with MacArtney supplied side scan sonar and full-spectrum sub-bottom profiler housed in a retractable pod. It will spend the next few years mapping the inshore seabed, the side scan sonar investigating the topography and the first layers of sediment.

The complete side scan sonar and sub-bottom profiler system on the Keary also includes a MacArtney side scan winch, topside processors and acquisition and processing software, digital links and coax and deck cables.

MacArtney supplied equipment is also mapping the bed of the Irish Sea. In another part of the Infomar programme, a Moving Vessel Profiler (MVP) aboard the vessel, *Celtic Explorer*, will be mapping the offshore seabed. This survey is part of a Europe-wide initiative to provide a complete picture of underwater habitats and seabed.

Surveying and map work will continue for several years to come and will provide a complete marine atlas for waters in and around Ireland. This atlas will allow the continuing prosperity of the waters whilst providing invaluable information for policy makers and reducing the potential for environmental damage.