

Marine Institute Job Description

Position	Scientific & Technical Officer (STO) Data Manager - INFOMAR
Contract	Temporary specified purpose contract for a maximum duration of up to December 31st 2026 – INFOMAR funded - DECCE
Service Group	Ocean, Climate & Information Services (OCIS) Information Services And Development (IS&D)
Location	Marine Institute, Rinville, Co. Galway

Brief description of the Marine Institute:

The Marine Institute is a non-commercial semi-state body, which was formally established by statute (Marine Institute Act, 1991) in October 1992.

Under the Act, the Marine Institute was given the responsibility:

“to undertake, to co-ordinate, to promote and to assist in marine research and development and to provide such services related to marine research and development, that in the opinion of the Institute will promote economic development and create employment and protect the marine environment”.

The Marine Institute is the national agency responsible for marine research, technology, development and innovation (RTDI). The Marine Institute seeks to assess and realise the economic potential of Ireland’s 220 million acre marine resource; promote the sustainable development of marine industry through strategic funding programmes and scientific services; and safeguard the marine environment through research and environmental monitoring. The Institute works in conjunction with the Department of Agriculture, Food and Marine (DAFM) and a network of other Government Departments, semi-state agencies, national and international marine partners.

The vision of the Marine Institute is

“a thriving maritime economy in harmony with the ecosystem and supported by the delivery of excellence in our services “

In order to achieve this vision, the Marine Institute has six service areas; (1) Ocean Climate and Information Services, (2) Marine Environment & Food Safety Services, (3) Fisheries Ecosystems Advisory Services, (4) Irish Maritime Development Office, (5) Policy, Innovation and Research Support Services and (6) Corporate Services

The Marine Institute 5 Year Strategic Plan (2018 to 2022) is available here at

<https://www.marine.ie/Home/site-area/about-us/corporate-strategy>

Harnessing Our Ocean Wealth (HOOW) is Ireland’s Integrated Maritime Plan (see www.ouroceanwealth.ie). HOOW sets out a roadmap for the Government’s vision, high level goals and integrated actions to enable Ireland’s marine potential to be realised. As part of the implementation of HOOW, the Government published in 2017 the National Marine Research & Innovation Strategy 2017-2021. (see www.ouroceanwealth.ie).

Brief Description of Service Group:

The mission of **Ocean, Climate and Information Services (OCIS)** is *“To provide scientific, operational and analytical support and services to strategic RTDI and statutory monitoring programmes (at national and international level) to promote and support the sustainable development of Ireland’s marine resources “*

Ocean, Climate and Information Services incorporates:

- Information Services & Development
- Advanced Mapping Services
- Research Vessel Operations
- Oceanographic and Climate Services
- Research Infrastructures
- Operational elements of Discovery R&D Programmes including;
 - Advanced Technology
 - Renewable Ocean Energy

Summary of the Role:

The successful Scientific Technical Officer will work with the Advanced Mapping Services (AMS) and Information Services and Development (IS&D) teams, and other programmes including technical inputs into areas such as Marine Spatial Planning (MSP).

Work with both AMS and IS&D teams will directly support the management and spatial analysis of marine, hydrographic and geophysical data collected by the AMS team during INFOMAR and other supported programmes. It will insure that associated products, data services and tools are aligned with Marine Institute’s strategy, and support other key programmes including MSP and Marine Strategy Framework Directives (MSFD).

As the National Marine Data Centre, the Marine Institute collects and manages numerous data sets for a variety of purposes to support sustainable marine resource management on behalf of the public. INFOMAR is an integrated programme incorporating hydrographic & geophysical surveying, oceanography, seabed sampling, ROV Operations, and habitat mapping.

The Data Management STO, embedded in the IS&D team, will be primarily responsible for the management of INFOMAR data, and development of tools, services and products that will contribute to the INFOMAR programme final deliverables. The Data Management STO will provide support as required to AMS on relevant INFOMAR activity, research & innovation projects, and Marine Institute programmes.

The role will develop, support and ensure the availability of underlying data services, infrastructure and data management processes. This will include databases, data cataloguing and data access and analysis services. The role will also be responsible for the governance and maintenance of relevant data, to ensure compliance with data legislation and licensing terms, and to ensure the currency, availability and appropriate use of third party data.

The successful candidate will need to closely collaborate with a variety of external partners to define requirements and acquire relevant content.

The role requires the applicant to have a good knowledge of data management best practices, data analysis, advanced GIS and familiarity with development of web based services and data delivery tools. The applicant will be expected to have an excellent work ethic and strong inter-personal skills.

The opportunity to participate in limited offshore work may be facilitated, to develop an understanding of the full data cycle and to help to improve data integrity, security, and management.

Background to Requirement:

INFOMAR (Integrated Mapping for the Sustainable Development of Ireland's Marine Resource) is Ireland's national seabed mapping programme. INFOMAR is funded by the Department of Environment, Climate and Communications (DECC). It is delivered by joint management partners Geological Survey Ireland (GSI) and the Marine Institute (MI). INFOMAR aims to provide comprehensive and accessible marine datasets for Irish waters that underpin and add value to marine research, SOLAS Convention obligations and government policy. These products will foster growth within the national blue economy, maintain the health and integrity of our natural marine environment while facilitating international collaboration and best practice in the sustainable development of Ireland's marine resource.

The first 10-year phase (2006-2016) is complete and the outputs are underpinning a diverse range of navigational, environmental, cultural and international legislative requirements. During Phase 2 (2016-2026), mapping Ireland's remaining inshore and offshore waters will augment and enhance the value of Ireland's marine resource, through to programme completion end 2026.

The program delivers a wide range of benefits to multi-sectoral end-users across the national blue economy, with an emphasis on enabling MI and GSI stakeholders.

Principal Tasks:

- Data entry into Marine Institute's data services, with a particular focus on spatial data, in line with the requirements of the INFOMAR, MSP and MSFD programmes and supporting activities in the Marine Institute's Strategic Plan and Data Strategy.
- Ensure spatial data services, including online maps, spatial processing services and mapping APIs, are maintained to meet programme needs.
- Expand AMS data management and services in line with INFOMAR programme requirements and supporting activities in the Marine Institute's Strategic and Data Strategy plan.
- Analyse and report on data management requirements.
- Liaise closely with Geological Survey Ireland (INFOMAR program partner) to ensure the timely delivery of quality data to programme portals.
- Write documentation on data management practices within the Marine Institute and assist external partners with similar documentation.
- Develop and encourage the adoption of data management best practices, including through the Institute's data management quality management framework.
- Participation in multidisciplinary research and data analysis activities supporting integrated research and integrated programme delivery.
- Attend relevant meetings or working groups.
- Liaise with partners and staff involved in delivering programme objectives.
- Carry out supporting data management duties in the MI data management team.
- Any other duties as relevant to the position and grade.

Reporting Structure:

The successful candidate will be based at the Marine Institute HQ in Oranmore and will report directly to the IS&D Data Management Team Leader(s), Section Manager or designated alternative. Annual work plans will be co-developed and prioritised with AMS & IS&D management.

Contacts:

Marine Institute: Information Services & Development Data Management Team Leader and Section Manager, AMS Team Leaders & Section Manager, FEAS (MSFD & EMFF teams), MEFSS (MSP & EMFF teams). Data Management team members and working groups within OCIS & Marine Institute.

Externally: Programme partners Geological Survey Ireland. 3rd party project partners and collaborators across Ireland and Europe.

Education, Professional or Technical Qualifications, Knowledge, Skills, Aptitudes, Experience, and Training

Essential:

- A degree or equivalent higher qualification in IT / Computer Science, engineering or other numerical discipline with a diploma in IT/Computer Science.
- Experience in the management and analysis of data, ideally scientific and spatial data.
- Database development skills, preferably in MS SQL Server or similar enterprise scale DBMS.
- Knowledge of scripting languages (Python, JavaScript, etc.).
- Experience with Geographical Information Systems software (e.g. Esri ArcGIS, Global Mapper, QGIS, leaflet mapping, web map services).
- Experience of documenting technical specifications and workflows / processes.
- The ability to be well organised and work to deadlines identifying priorities and managing time effectively.
- Excellent interpersonal skills and the ability to communicate effectively at all levels both in writing and verbally with technical and scientific and non-technical groups.

Desirable:

- A postgraduate qualification in an IT, scientific or related discipline.
- Experience with development processes such as Agile and code / script management tools such as GitHub.
- Experience with making data available through online services.
- An understanding of quality management processes, particularly with regards to data or information systems.
- Experience with spatial data analysis.
- Experience with data visualisation and reporting tools.
- Experience with statistical analysis of data.
- Experience with machine learning for data processing, analysis or quality management.
- Record of publishing in peer-reviewed scientific journals or writing other well-received technical reports and white papers
- Familiarity with INFOMAR Quality Management Framework and data management procedures.

Special personal attributes required for the position:

- An analytical approach to problem solving.
- An ability to work in an organised manner and progress work independently.
- Dynamic and reliable.
- Self-sufficiency, while being a good team player.
- Good interpersonal written and verbal communication skills.

- Effective organisation, time management and administration skills.
- Experience in collaborating with scientists and members of multi-disciplinary technical teams.

Salary:

Remuneration is in accordance with the Public Sector, Department of Finance approved Salary Scale for the Scientific & Technical Officer (Engineer III grade) with a salary of €32,821 - €68,114 per annum pro-rated with time worked. You will commence on the first point €32,821 per annum pro-rated with time worked and reflecting time worked in the public sector in the most recent six months. You will become a member of the Single Public Service Pension Scheme unless you have access to an alternative pension scheme with service in a public sector role within the past six months.

Annual Leave:

The annual leave entitlement for a Scientific and Technical Officer is 25 working days per annum prorated to reflect time worked. Annual leave entitlements are exclusive of Public Holidays. All leave must be approved by your manager or their authorised representative in advance of being taken, in line with Marine Institute leave policies.

Duration of Contract:

The contract will be issued on a specified purpose basis for up to a maximum period of up to December 31st 2026, subject to continued funding. The successful candidate will be on probation for the first six months of this contract.

How to Apply:

A C.V. and letter of application, summarising experience and skill set applicable to the position should be emailed to recruitment@marine.ie or posted to Human Resources at the Marine Institute, Rinville, Oranmore, Galway. All correspondence for this post should quote reference **OCIS/STO-DATAMGR/April 2022**.

Closing date for Applications: All applications for this post should be received by the Marine Institute in advance of **12 noon Friday 22nd of April 2022**. Please note that late applications will not be accepted.

Use of Data - all personal data and the information submitted for this application will be used solely for the purpose of this campaign, after which it will be deleted in line with our General Data Protection Regulation Policy and data retention schedule. All information will be treated with the strictest confidence and accessed only by those involved directly in the campaign.

The Marine Institute is an equal opportunities employer and we welcome applications from anyone interested in this role. Please do advise if there are any special accommodations required for the recruitment process.