

Marine Institute Job Description

Position	INFOMAR Scientific & Technical Officer (STO) Habitat Mapping Specialist
Grade & Contract	Temporary specified purpose contract for a maximum duration up to December 31st, 2026 – INFOMAR Funded - DECC
Service Group	Ocean, Climate & Information Services (OCIS) Advanced Mapping Services (AMS)
Location	Marine Institute, Rinville, Co. Galway The Marine Institute has a Blended Working Policy in Place

Who will you Work With and What Will The Role Involve?

The Habitat Mapping Specialist Scientific Technical Officer (STO) will expand capacity in the Marine Institute and INFOMAR in the area of marine habitat mapping. The individual will have experience in manipulation of large integrated datasets and be responsible for integrating and interpreting available physical and biological seabed mapping and ground-truthing data. The applicant will be expected to have an excellent work ethic, strong inter-personal skills and relish the opportunity to work in a busy and thriving office environment.

INFOMAR is an integrated programme and will involve elements of hydrographic surveying, oceanographic, biological and sediment sampling, ROV Operations, geophysical survey and habitat mapping. The individual will work towards standardising, improving and streamlining data workflows, to optimise downstream value of interpreted data and associated products. The outputs will contribute towards MSP, MSFD, ORE and Habitats Directive reporting and monitoring, as well as inputting to downstream digital web-mapping and data delivery services in turn supporting development of marine resource management plans. The STO will also support relevant seabed mapping and data analytics R&D initiatives undertaken by the team, as well as development of seabed classification products associated with acoustic data analysis. INFOMAR supports delivery of EMODnet Seabed Habitats and H2020 Mission Atlantic through management of work packages, and project management of EMFAF SeaShelf project.

This will augment existing skill sets, underpin operational programme needs, and support future R&D initiatives. The work focus will be on:

- Integration and interpretation of coastal and marine data resources including bathymetry, backscatter, seabed classification, geophysical, remote sensing, and groundtruth data.
- Output of integrated habitat mapping datasets for development of chart products and integration to GIS data services.

Development of standardised approaches, procedures and products for Irish marine habitat mapping across relevant departments, agencies, and industries.

What Will You Be Doing Every Day?

Principal Tasks:

- Support to Advanced Mapping Services team in all aspects of marine habitat mapping.
- Contribute to delivery of AMS and INFOMAR supported projects (EMODnet, EMFAF etc.).
- Emont Seabed Habitats Work Package delivery (in co-operation with WP lead).

- Development and delivery of EMODNet outputs as required (Storymaps, Infographics, Outreach items, Updates for EUSeaMap).
- Collation and delivery to ICES and OSPAR Data Calls.
- Integration of multibeam, remote sensing, geophysical and groundtruth data for habitat mapping, and generation of seamless land to marine map products and services.
- Production of standardised habitat maps of priority marine areas and identification of critical data shortfalls should they exist.
- Compilation and incorporation of ancillary data relevant to identification and delineation of sensitive and/or valued marine habitats.
- Archive and logging of all collected habitat data for further processing.
- Responsible for developing, coordinating and undertaking prioritised ground-truth plans and requirements, and reporting of same.
- Liaise with Geological Survey Ireland Marine Survey Unit team, Marine Institute benthic and pelagic information personnel, MSP, MSFD ORE, EMFAF Teams, DHLGH National Parks and Wildlife Services and Marine Environment Team to ensure efficient prioritised approaches are in place for all habitat mapping interpretational and operational efforts.
- Implementation of QC and HSE procedures and guidelines on and offshore.
- Participation in multidisciplinary research and data analysis activities supporting integrated research.
- Participation in relevant working groups (ICES etc.)

What do You Need to Have Done to Apply for This role? (Education, Professional or Technical Qualifications, Knowledge, Skills, Aptitudes, Experience and Training)

Essential / Important:

- A degree in marine science/geoscience or the equivalent combination of experience/qualifications in Marine Biology, Earth Science, or a related discipline.
- A thorough understanding of current best practice in approaches and methodologies applied in marine Habitat Mapping, as well as data confidence and accuracy issues.
- Experience in production of marine habitat mapping products.
- An aptitude for data interpretation and integration for the ongoing production of habitat maps and associated GIS data products and services.
- A proven understanding of the key data types required for generation of composite habitat maps, and the processes required to bridge gaps related to different survey techniques and associated data e.g. Multibeam / Sidescan Sonar / Photogrammetry.
- Strong data management skills, with demonstrated experience in metadata handling, and data archiving and process reporting.
- Understanding of Irish and EU policy and responsibilities associated with marine habitat mapping.
- Highly competent with ESRI ArcGIS, including experience with Spatial Analyst.
- A high level of computer literacy (including Word, Excel, PowerPoint, Internet/Email).

Ideally Nice to Have / Desirable:

- A post graduate or other professional qualification (e.g. marine science, hydrography, remote sensing, GIS, earth science, or oceanography).

- Specific experience with relevant INFOMAR data resources, as well as other publicly available Irish data resources for marine habitat mapping.
- Familiarity with Remote Sensing, and associated relevant data, particularly for coastal zone mapping.
- Experience with data visualisation software packages (e.g. Fledermaus, Agisoft etc.).
- Familiarity with INFOMAR Quality Management Framework and data management procedures.
- Record of publishing in peer-reviewed scientific journals or writing other well-received technical reports and white papers.

What else do you need to know?

(Special personal attributes required for the role)

- An ability to work in an organised manner and progress work independently.
- Good interpersonal, written and verbal communication skills in addition to effective numeracy skills.
- An analytical approach to problem solving.
- Effective organisation, time management and administration skills.
- Experience in collaborating with scientists and members of multi-disciplinary technical teams.
- A full clean driving licence and own transport.

Description of Service Group and the Wider Team

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

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 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.

Who Will You Report to / Who will Manage and Support You?:

The successful candidate will be based at the Marine Institute HQ in Oranmore and will report directly to the Advanced Mapping Team Leader(s), Section Manager or designated alternative.

What we offer

We value our staff, and we value their contribution to the work of the Marine Institute. In return for this, we provide benefits that promote a healthy work-life balance and which we hope will help them to develop professionally. These include personal and career development, work/life balance policies, an employee assistance programme, "Bike to Work" Scheme, staff medicals and annual flu vaccination.

Training

A full range of training will be provided as required, on the job and through appropriate courses. Training needs will be identified through the MI Performance Management Development System (PMDS).

Contacts:

Marine Institute: Advanced Mapping Section Manager, Advanced Mapping Section Team Leader (s), Chief Scientist (s), FEAS, MEFSS (particularly the team delivering technical aspects of MSP & MSFD for DECC, DHLGH & DAFM). EMFAF Projects Team. Other Section Managers, Team Leaders and STOs across MI Service Groups

Externally: Programme partners Geological Survey Ireland. EMODnet Seabed Habitats Project Partners. Regular liaison with national and international project partners and collaborators. Government Departments, State Agencies, Higher Education Sector, Private Sector, Voluntary Groups and International Organisations.

Salary:

Remuneration is in accordance with the Public Sector, Department of Finance approved Salary Scale for Scientific and Technical Officer Grade which runs from €38,083 - €77,284 on a full time basis per annum pro-rated with time worked. You will commence on the first point of the scale €38,083 and become a member of the Single Public Service Pension Scheme unless you are currently or have worked in the Public Sector in the past 6 months and are a member of another Public Sector Scheme.

Annual Leave:

Annual leave entitlement for a Scientific & Technical Officer (Engineer III grade) is 25 working days per annum pro-rated to reflect time worked. Annual leave entitlements are exclusive of Public Holidays. All leave must be approved in advance in line with Marine Institute leave policies and using time and leave management system in place, by your manager or their authorised representative.

Duration of Contract:

This temporary specific purpose contract of employment will be 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 6 months of this contract.

Who is 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 Ireland’s scientific agency responsible for supporting the sustainable development of the state’s maritime area and resources. We do this through conducting applied research and providing scientific knowledge, advice and services to government, industry and other stakeholders and users. This policy advice capacity, our broad mandate, and the research programmes we fund and undertake, give us a unique insight into the science-policy interface and make us an exemplar in the provision of integrated ocean knowledge.

The Marine Institute provides a broad range of essential scientific support to its parent department, the Department of Agriculture, Food and the Marine (DAFM). There is an increasing demand from Government for the data and evidence that are essential to inform national policy and to underpin the state’s governance of our maritime area. Through laboratory, field and seagoing work, the Institute carries out statutory environmental, fisheries and aquaculture surveys, seafood testing and other monitoring programmes assigned by government. The Institute plays an important role in supporting the state’s response to the impacts of our changing seas and oceans, through working with the national and international scientific community to observe, study and understand our changing oceans. This essential scientific advice supports industry, protects consumers and underpins legislative and other obligations aimed at the protection and management of the marine environment.

Our vision - *The Marine Institute is a national and international leader in ocean knowledge that benefits people, policy and planet.*

Our Mission - *The Marine Institute provides scientific, research and development services to government, agencies, industry and society that support the sustainable use of our maritime area, the protection and restoration of marine ecosystems, and promote a shared understanding of the ocean.*

There are 6 broad service areas within the Marine Institute; (1) Ocean, Climate and Information Services, (2) Marine Environment & Fish Health Services, (3) Fisheries Ecosystems Advisory Services, (4) Irish Maritime Development Office, (5) Policy, Information and Research Services and (6) Corporate Services.

The Marine Institute 5 Year Strategic Plan (2023 to 2027) is available [Here](#)

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, H91 R673. All correspondence for this post should quote reference **OCIS/STO/INFO/HABITATMAP/OCT24**

Closing date for Applications:

All applications for this post should be received by the Marine Institute in advance of **12th of November 2024**. Unfortunately, late applications cannot 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 (GDPR) 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 organisation that champions Diversity, Inclusion & Equality for all. We encourage and welcome applications from anyone interested in this role.

Please do advise if there are any special accommodations required for the recruitment process. We are here to help you access opportunities with us.