

Marine Institute Job Description

Position	Higher Executive Officer – Data Analyst
Grade & Contract	HEO (Administrator) Grade. Temporary Specified Purpose Contract up to 28th February 2027 funded by SEAI Master Service Agreement
Service Group	Ocean Climate and Information Services (OCIS)
Location	Marine Institute, Oranmore, Co. Galway, Ireland The Marine Institute has a Blended Working Policy in Place

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

The Sustainable Energy Authority of Ireland (SEAI) and the Marine Institute (MI) have been working in partnership on projects related to offshore renewable energy since 2009. The relationship has been formalised through a series of master service agreements (MSAs). The MSAs provide for the provision of research and development services which the MI carry out on behalf of SEAI, related to the delivery of the Department of Environment, Climate and Communications' (DECC) national offshore renewable energy programme and related Government policies. The work under the MSA provides support across a range of services, however there is strong emphasis on the joint development and operation of the SmartBay facility in Galway Bay which supports the development of emerging wave, floating wind, and associated technologies.

At the national programme level, increased joint research and development activities will be undertaken by MI, SEAI and DECC to significantly contribute to the evidence base available to DECC for the long term, sustainable and planned development of Ireland's immense wind, wave and tidal renewable energy resources through the National Spatial Strategy for Offshore Renewable Energy.

The SEAI MSA Data Analyst will be responsible for the specification and the development of data and information content and services focused on the marine renewable energy programme. These will include coordinating the ongoing development of the information services supporting the SmartBay test site and co-located cabled observatory, and coordinating requirements and data and information inputs from a range of sources, including the Marine Institute and government partners, 3rd level research organisations and existing systems such as Ireland's Marine Atlas, the Digital Ocean, etc.

The individual will work within the Institute's Information Services and Development team. This role will support the team's capacity to implement robust operational data services with high quality content which can be utilised by a range of stakeholder groups nationally and internationally.

What Will You Be Doing Every Day?

Principal Tasks:

- Lead the development of data services and products, leveraging data from a range of sensors, labs, numerical models and satellite sources from the Marine Institute and external partners.
- Coordinate the management of programme data, using best practice data management and in line with the Marine Institute's data policies. This includes implementing well-managed

data storage, including using structured databases, and using well-defined data processes and marine data standards.

- Ensure the application of the Institute's internationally accredited Data Management Quality Management Framework to related data workflows.
- Develop collaborative links across the Institute's teams to ensure Marine Institute data is made available for reuse to support the programme objectives.
- Provide technical and organisational support to develop a national marine data hub for ORE-related requirements, with the integration of data from relevant external partners to ensure national marine data can support the programme objectives.
- Support connectivity with national and international projects and networks (www.digitalocean.ie, <http://atlas.marine.ie>, www.isde.ie, www.emodnet.eu) to provide regional access to marine data and information.
- Provide ongoing technical support, aligned with the Institute's technical architecture and practice, for data management and infrastructure related projects under the SEAI MSA.
- Definition and development of data research projects and related data research and development infrastructure.
- Participate in regular reviews in conjunction with the appropriate staff and/or service provider to ensure that client requirements are met and that on-going value for money is assured.
- Support clients' requirements where possible to ensure satisfaction with existing services.
- Attend relevant meetings on behalf of the Marine Institute (as defined by the appropriate Section Manager or Director).
- Work with OCIS and MI support staff to ensure financial, reporting and administrative deadlines are met.
- Participate as required in liaison with other Government Bodies, research centres and universities, both national and international.
- Any other duties relevant to the project, grade and role as required from time to time.

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 relevant qualification in computer science, data science or related discipline.
- At least 2 year's demonstrable experience at a suitable level of responsibility.
- Demonstrable experience of using enterprise database management solutions such as SQL Server or alternative.
- Experience of developing data reporting, analytical and / or data visualisation capabilities using a structured development process e.g. AGILE.
- Demonstrable experience in the following:
 - Business analysis and requirements gathering
 - Technical specification
 - Oversight and delivery of project outputs
 - Customer support and problem management
 - Experience in working as part of a team
- Strong communication skills, including technical documentation and oral presentations.
- Proven collaboration skills including team working and wider project outreach and networking.
- The ability to work unsupervised with demonstrated ability to use initiative.

- A demonstrable understanding of data concepts e.g. metadata, and the issues around its creation and publication.

Ideally Nice to Have / Desirable:

- Exposure to data from scientific or environmental data would be very beneficial including spatial data, predictive models, sensor data, etc.
- Experience with scripting and visualisation technologies e.g. Javascript, Python, PowerBI, Tableau, Jupyter notebooks, etc.
- Experience of working with dynamic data e.g. from sensors or models.
- Understanding of related technical trends e.g. cloud platforms, APIs incl. REST and OGC, IoT, Unity and Unreal Engine, AI tools, etc.
- Experience of development processes with version control and release management would be very beneficial e.g. AGILE with DevOps/GitHub.
- Experience of using project management for development of data or digital services.
- Knowledge of relevant data standards, e.g. ISO19139 metadata, INSPIRE, Schema.org, SeaDataNet, EMODnet.
- Some familiarity with the marine sector.
- A post graduate qualification in computer science or related, data analytics, GIS, earth science, or oceanography or data analytics work experience would be beneficial

What else do you need to know?

(Special personal attributes required for the role)

This is an exciting opportunity to work on progressing developments in support of the national offshore renewable energy programme. This position is one of 17 roles funded under a MSA between the Sustainable Energy Authority of Ireland and the Marine Institute. The current MSA runs from 2024 to 2026 with an optional 2-year extension. This position will start in 2nd Quarter 2024, and would suit an adaptable, enthusiastic, and diligent person. You should:

- Be solutions-oriented with good initiative and problem-solving ability.
- Have an ability to work in an organised manner and progress work independently.
- Be able to work within a matrix structure.
- Have good interpersonal skills, with ability to positively interact with a wide range of personality types.
- Have an ability to effectively communicate results of teamwork in written and audio-visual formats.

Description of Service Group and the Wider Team

The mission of 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 & Climate Services
- Marine Research Infrastructures

Information Services & Development (IS&D)

Information Services & Development (IS&D) is responsible for the co-ordination of data activities and the provision of information technology. IS&D are made up of four teams:

- **Data Management:** the team works with groups throughout the organisation to promote best practice in data process and technology. This includes providing guidance and support to promote best-practice management of the Institute’s scientific data assets, storing data in central databases, facilitating access to data through catalogues and a variety of data services. The team is also focused on development of connectivity with national and international data networks and also engaging with research programmes nationally and internationally.
- **Application Development:** the team manages software development and systems integration services in support of Institute operational and research activities, including for sensor data services, labs information systems, and online services. In particular, the team focuses on supporting operational activity where off-the shelf solutions are not available, and facilitate integration with other Institute systems.
- **IT Operations:** the team develops and operates the Institute’s ICT infrastructure to ensure it operates in a reliable and efficient manner and with cyber-resilience as a corner-stone, in addition to enabling the development of new operational and advanced research capabilities.
- **SLA Technical Data Services:** the team provides technical data and information service support to specific marine environmental programmes such as MSP and MSFD under the SLA with DHLGH.

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

The successful candidate will report to the Information Services & Development (IS&D) Section Manager or appropriate delegate within the IS&D Section.

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:

Within the Marine Institute:

OCIS Director, SEAI MSA Section Manager and team, wider OCIS staff, other Sections Managers, Team Leaders, Scientific and Technical Officers across MI Service Groups, Corporate Services support staff.

External:

Sustainable Energy Authority of Ireland, Department of Environment and Climate Change, P&O Maritime Logistics, device developers, researchers, external suppliers and contractors.

Salary:

Remuneration is in accordance with the Public Sector, Department of Finance approved Salary Scale for HEO (Administrator) Grade which runs from €57,122-€71,939 on a full time basis per annum pro-rated with time worked. You will commence on the first point of the scale €57,122 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 HEO Grade is 29 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 the period up to the 28th February 2027 with a possible 2-year extension. The successful candidate will be on probation for the first nine 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/POST4-HEO/DATA/SEP24**

Closing date for Applications:

All applications for this post should be received by the Marine Institute in advance of **12pm noon, 7th 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.