Marine Institute Job Description

Position	**Temporary Team Leader - Senior Data Analyst, Data Management**
Contract	**Temporary Specified Purpose Contract for a duration of up to 2 years , SEAI & EMSO LINK Funded - Continuation**
Service Group	**Ocean Science and Information Services (OSIS)**
Location	**Rinville, Oranmore, 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 an Integrated Maritime Plan (IMP) for Ireland. HOOW sets out a roadmap for the Irish Government's vision, high level goals and integrated actions across policy, governance and business to enable our marine potential to be realised (see www.ouroceanwealth.ie).

Description of appropriate Service Group:

Ocean Climate and Information Services (OCIS)

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 Science and Information Services incorporates:

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

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. Information Services & Development section provides coordination and direction for ICT and data technologies and process development. IS&D are made up of four teams including:

- **Data Management:** The team provides guidance and support to promote best-practice management of the Institute's scientific data assets. This includes storing data in central databases, facilitating access to data through catalogues and data services. The team works with groups throughout the organisation to promote best practice in data process and technology. The team is also focused on development of connectivity with national and international data networks and also engaging with research programmes at national and international level.
- **Application Development**: the team manages software development and systems integration services in support Institute operational and research activities. In particular, the team focuses on supporting operational activity where off-the shelf solutions are not available, and with developing the Institute's digital platform services.
- **IT Operations: the** team continually develops the Institute's ICT infrastructure to ensure it operates in a reliable and efficient manner and that it has the capacity to support changing requirements for operational and advanced research activities.
- **SLA Data and Information 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.

Ocean Energy RTDI in the Marine Institute

Ireland's offshore renewable energy resources, in the form of offshore wind, wave and tide are considered as being among the best in the world. The Marine Institute is actively promoting research into wave and tide energy. The Marine Institute, in association with Sustainable Energy Authority Ireland, established the Galway Bay Wave Energy Test Site for testing 1/4 scale Wave Energy prototypes. Planning is underway to improve the facilities at the site. Development is underway for a full scale grid connected test site of the Northwest coast of Ireland (AMETS).
The Marine Institute and SEAI are collaborating with a number of partners on the development of a national test and demonstration facility for marine energy and technology at the 1/4 scale ocean energy test site in Galway Bay. The Institute also works closely with the SEAI, academia, state agencies, international research groups as well as the renewable energy sector in the development of policy and the targeting of strategic investment.

The MI and SEAI have an annually renewed Service Level Agreement, supported by a multi-annual agreement, which describes a range of collaborative activities which underpin the delivery of key elements of the Offshore Renewable Energy Development Plan.

Key Related Projects

Ocean Energy Test Site Cabled Observatory Data System
The implementation of a streaming data system to communicate, process and make available data from the Galway Bay ocean energy test site cabled observatory. This system make live data streaming from 20m depth in Galway Bay available online and in archive form for marine renewable energy research and development. The system will be expanded over time.

Marine Renewable Energy Portal – Data Services
Development and maintenance of the online Marine Renewable Energy Portal data services (see **www.oceanenergyireland.com**). Content will come from a ranges of partners and will consist of real-time data, online maps, text, video and image content.

Ireland's Marine Atlas
Ireland's Marine Atlas has been developed as part of the MSFD programme based on data from a wide variety of national sources. This Atlas and its underlying data services will be of significant value to future marine activities in Ireland. The Institute will oversee the ongoing management and development of the data services behind the atlas and the update of the user interface to newer HTML5 technologies that are mobile compatible.

EU Projects
As the IOC-designated National Oceanographic Data Centre the Marine Institute connects Irish marine data into a number of EU data networks, including EMODNET and ICES. In addition, the Institute is a key member of the EMSO ERIC and in the SeaDataNet AISBL and participates in related activities and projects including developing data standards and services.

Digital Ocean
Systems to support access to relevant information across teams and organisations with appropriate analytics can greatly improve the effectiveness of public services and the data inputs to research. It is intended to extend and develop a framework for data services from multiple sources including through R&D projects e.g. **www.digitalocean.ie**.

Strategic National Projects
IS & D has an active role in supporting and developing new research and service-development projects funded through national, EU and commercial funding.

Summary of the Role:

The Team Lead Senior Data Analyst will be responsible for developing data and information content and services focused on the marine renewable energy programme. These will include coordinating the ongoing development of the existing Marine Renewable Energy data services which are made available online including through the Ocean Energy Ireland portal (**www.oceanenergyireland.ie**), the information services supporting the Galway Bay ocean energy test site and co-located cable observatory, and coordinating requirements and data and information sharing with 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, as well as EU projects and programmes such as EMODNET, SeaDataNet and EMSO.

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

Principal Tasks:

- Developing customer focussed content and services for inclusion in Ireland's Marine Renewable Energy Portal (**http://www.oceanenergyireland.com**)
- In conjunction with the IS&D Section Manager, Data Management Team Leader, Application Development Team Leader, and other IS&D and MRI personnel, define the technical direction and implementation plan for the development of related data and information services.
- Leverage a range of data from surveys, sensors, labs, numerical models and satellite sources from the Marine Institute and external partners to add value to these programmes.
- 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.
- Define and develop data research projects and related data research and development infrastructure.

Reporting Structure:

The successful candidate will be based at the Marine Institute HQ in Oranmore and will report to the Information Services & Development Section Manager or their authorised designate.

Contacts:

The Information Services and Development Section Manager, the IS&D Data Management Team Leader, members of the Data Management Team, Application Development and IT Operations teams, and the OCIS Marine Institute Marine Research Infrastructures (MRI) renewable energy programme team. Other contacts include Institute Directors, managers and other OCIS team members, staff across the organisation including Data Coordinators, the National Marine Technology Programme Co-ordinator, external contacts including the Sustainable Energy Authority of Ireland, other partner agencies and Departments.

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

Essential:

- A degree in computer science, data analysis or related discipline, or a degree in physical oceanography, engineering or numerical discipline with a diploma in computer science, data analysis or related discipline.
- A minimum of three years relevant and demonstrated work experience.
- Experience of developing online services, reporting, analytical and / or data visualisation capabilities.
- Experience of using enterprise database management solutions such as SQL Server or alternative.
- 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 interoperable metadata, and the issues around its creation and publication

Desirable:

- Exposure to data from scientific or environmental data would be very beneficial including spatial data, predictive models, sensor data, etc.
- Some experience with using scripting languages such as Python.
- Experience with project management.
- Experience of developing information products or services.
- Some exposure to software development processes and tools e.g. Agile, .Net, Javascript, JSON, REST services, Team Foundation Server / Github.
- Understanding of new technology such as Azure or other cloud platforms.
- Knowledge of relevant international data and metadata standards, e.g. Schema.org, INSPIRE Spatial Data Infrastructure, SeaDataNet, EMODnet**.**
- A post graduate qualification in data analytics, GIS, earth science, or oceanography or data analytics work experience would be beneficial.

Special personal attributes required for the position:

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

Salary:

Remuneration is in accordance with the Public Sector, Department of Finance approved Salary Scale for the Team Leader (Engineer II grade) with a salary of €63,908 per annum pro-rated with time worked. You will become a member of the Single Public Service Pension Scheme.

Annual Leave:

Annual leave entitlement for a Team Leader is 27 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, by your manager or their authorised representative.

Duration of Contract:

The contract will be issued on a temporary specified purpose basis and will run for a duration of up to 2 years subject to continued funding. The successful candidate will be on probation for the first 12 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/TL-SNR-DA/Feb 2022.**

Closing date for Applications:

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.