



## Marine Institute Job Description

<b>Positions</b>	<b>Temporary Scientific &amp; Technical Officer (STO) – Application Development (Fisheries Software)</b>
<b>Grade &amp; Contract</b>	<b>Scientific &amp; Technical Officer Temporary specified purpose contract for a maximum duration of up to 31st December 2027 (EUMAP – EMFAF funded)</b>
<b>Service Group</b>	<b>Fisheries Ecosystems Advisory Services (FEAS) / Ocean, Climate &amp; Information Services (OCIS) Information Services and Development (IS&amp;D)</b>
<b>Location</b>	<b>Marine Institute, Rinville, Oranmore, Co. Galway (noting that we have recently introduced our blended working policy which may apply to this role)</b>

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

The Scientific and Technical Officer (STO) will work within the IS&D Application Development team and working closely with the FEAS data management team to develop and support software applications to help deliver the DCF/DCMAP programme. The job will focus on improving and migrating existing applications and databases to newer technology, and on developing new data collection solutions (including those required for increased use of electronic data capture and self-sampling). A key aim of the role is the implementation of software applications using a consistent and reusable approach in order to:

- improve data quality by allowing best practices in quality control and assurance to be applied to all data;
- allow more effective sample tracking from collection through its lifespan;
- allow different datasets to be combined more easily;
- allow easier extraction for end-users such as ICES, the RCGs, and EU;
- allow easier data publishing through systems such as EMODnet Biology;
- ease maintenance by utilising common technological platforms within the MI.

These activities will contribute to the delivery of Ireland’s obligations under the Data Collection Multi Annual Programme (DCMAP) funded under the European Maritime, Fisheries and Aquaculture Fund (EMFAF 2021 to 2027).

The Marine Institute has carried out Ireland’s obligations under the Data Collection Framework (DCF) since 2002. The DCF programme involves at sea and port sampling of catch and landings, scientific surveys (e.g. acoustic, egg, groundfish, underwater TV surveys, shellfish and commercial vessel), management and analyses of data, assessment and provision of scientific advice on the sustainable exploitation of fisheries resources. The current DCF (EUMAP) will run over the period 2022-2027 and will provide the scientific data that supports implementation of the Common Fisheries Policy (CFP).

### What Will You Be Doing Every Day?

#### Principal Tasks:

The STO will work as part of the IS&D Application Development team and collaborate closely with FEAS data team to achieve the following tasks:



- Migrate existing .Net applications and related databases to newer technology.
- Develop new applications to support electronic data capture and self-sampling.
- Support and further develop existing FEAS software applications used for data processing and analysis. and to enhance process quality.
- Work with IS&D database administrators to ensure that databases used for related applications are secure, optimised and can be well managed.
- Work with the wider IS&D team to ensure software processes are optimised and allow for responsive and high quality software development, delivery and support.
- Work with FEAS, IS&D and the wider Marine Institute to support implementation of the Data and IT-related strategy.
- Work with the Application Development and FEAS Data Team Leaders to ensure software bugs are prioritised and resolved in a timely manner.
- Support and enhance our ability to publish data via platforms such as EMODnet Biology.
- Liaise with users within FEAS and the wider Marine Institute to identify requirements.
- Participate in Research Surveys as required.
- Carry out any other duties assigned from time to time, appropriate to the position.

## 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 third level degree or equivalent higher qualification in IT / Computer Science, engineering or other numerical discipline.
- Experience of developing software applications in C# using .NET / .NET Framework.
- Experience of developing SQL and working with databases such as SQL Server or similar enterprise scale DBMS.
- Experience of using version control systems such as Azure DevOps, GitHub, etc.
- Some experience of a structured software development process.
- Sufficiently fit to pass an ENG II Medical and Personal Survival Training Programme
- Excellent interpersonal skills and the ability to communicate effectively both in writing and verbally with technical, scientific and non-technical groups.

### Ideally Nice to Have / Desirable:

- Experience with managing, analysing, and visualising data.
- An understanding of broader technology concepts e.g. cloud, devops, mobile.
- Experience of working with a defined project management process.
- Experience of developing technical documentation and / or user guides.
- Experience of providing client support and interacting with end-users.
- Experience with statistical programming languages (e.g. R, Matlab, S, SAS)
- High level of experience in the use of Microsoft Office or similar office applications.
- Exposure to scientific data and / or projects e.g. fish and shellfish biology.
- Sea going experience

## What else do you need to know?

(Special personal attributes required for the role)

- Demonstrates dynamism, reliability and a positive attitude.
- A demonstrated willingness to learn.
- Self-sufficient while being a good team player.
- Experience in collaborating with scientists and members of a technical team.
- Ability to work diplomatically in resolving issues with stakeholders.
- The ability to work to deadlines and manage time effectively.
- Effective organisation and administration skills.
- Good time management and the ability to prioritise and meet deadlines.
- The willingness to question established processes with the aim of improving them.

## Description of Service Groups – The Wider Team

### Fisheries Ecosystems Advisory Services (FEAS)

Currently, FEAS consists of over 90 scientific, technical, post graduate and administrative staff under the directorship of Dr Ciaran Kelly. The Service group operates a significant part of their services from the Marine Institute headquarters in Oranmore, Co Galway with additional port-based facilities and a major [research facility at Newport](#), Co Mayo. The mission of FEAS is “to research, assess and advise on the sustainable use of marine fisheries resources”.

FEAS provide integrated advice and scientific support for the Irish government (principally the Department of Agriculture, Food and the Marine [DAFM](#)) on marine fisheries ecosystems related issues. A key output of FEAS is the annual [Stock Book and the annual Shellfisheries Stock Book](#). These provide the latest assessments and scientific advice for the resources exploited by Irish vessels and is a key reference for the Government's sustainability assessment presented annually to the Oireachtas. FEAS experts also provide scientific services and support to other government departments including Department of Housing, Local Government and Heritage ([DHLGH](#)) to address the Marine Strategy Framework Directive ([MFSD](#)) requirements through [OSPAR](#) and national reporting under an SLA ([service level agreement](#)). FEAS provide scientific services to Department of Environment, Climate and Communications ([DECC](#)) related to offshore renewable energy development.

FEAS experts actively participate at many meetings of the International Council for the Exploration of the Seas ([ICES](#)). At ICES our scientists are focused on advancing scientific understanding of marine ecosystems, providing information, knowledge and advice on the sustainable management of human activities affecting and affected by marine ecosystems. ICES is a key forum for scientific co-ordination of data collection and the provision of independent scientific advice. FEAS scientists are also encouraged to publish much of their work in peer-reviewed scientific journals.

FEAS experts also participate at other international fora including [STECF](#) (Scientific, Technical and Economic Committee for Fisheries), [ICCAT](#) (International Commission for the Conservation of Atlantic Tunas), [NEAFC](#) (North East Atlantic Fisheries Commission) and [NASCO](#) (North Atlantic Salmon Commission). FEAS provide scientific support for DAFM at various EU meetings (e.g. the EU Norway Agreements and the EU Council of Fisheries Ministers).

FEAS experts also carry out research and stock assessments on diadromous fish species (salmonids and eels) and are responsible for the salmon National Coded Wire Tagging and Tag Recovery programme and working closely with [IFI](#) (Inland Fisheries Ireland) on the Standing Scientific Committees for salmon and eel. In recent years FEAS has developed a core expertise in oceanic tracking of large marine fish. The FEAS Aquaculture Section is responsible for the operation of the



National Sea Lice Monitoring Programme and carries out a range of national and internationally funded research projects based at MI facilities.

Further details can be found on the Marine Institute website:

<http://www.marine.ie/Home/site-area/about-us/fisheries-ecosystems-advisory-services>

<https://www.marine.ie/site-area/areas-activity/fisheries-ecosystems/fisheries-ecosystems>

### **Ocean, Climate and Information Services (OCIS)**

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

### **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:

- **Application Development:** the team manages software development and systems integration services in the Institute to 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 to enable scientific and technical service delivery.
- **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 engaging with research programmes at national and international level.
- **IT Operations:** the team develops and operates the Institute’s extensive modern ICT infrastructure to ensure it operates in a reliable manner and effectively support the operational and research needs of the Institute.
- **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, supporting the reuse of data from a wide range of sources and works with teams across the Institute to deliver usable information to national marine programmes.

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

The successful candidate will be based at the Marine Institute, Rinville, Oranmore and will report to the IS&D Application Team Leader and working closely with the FEAS Data Team Leader. The software developer will work very closely with the wider IS&D and FEAS teams to deliver on DCF programme requirements.

### 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 a series of benefits that promote a healthy work-life balance which we hope will help them to develop professionally. These include training programmes to support personal and career development, Work/Life Balance policies, Employee Assistance Programme, Buddy/Mentoring 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

IS&D Section Manager and Team Leads, FEAS Section Manager and Team Leads, OCIS Director, FEAS Director, and wider team members; Marine Institute colleagues across other service groups.

#### Outside the Marine Institute

Department of Agriculture Food and the Marine (DAFM), Department of Housing, Local Government and Heritage (DHLGH), The OSPAR Commission on the Marine Environment of the North Atlantic, International Council for the Exploration of the Seas (ICES), various stakeholders and academic institutions.

### Salary:

Remuneration is in accordance with the Public Sector, Department of Finance approved Salary Scale for Scientific & Technical Officer, with a full time salary scale running from €35,336 - €72,999 per annum, pro-rated with time worked. You will 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 or are a member of another Public Sector Scheme.

### Annual Leave:

Annual leave entitlement for a Scientific & Technical Officer 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:



The maximum duration of this temporary specified purpose funded contract of employment will be up to December 31st 2027. The successful candidate will be on probation for the first six 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 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.

***Our vision - The Marine Institute, as a global leader in ocean knowledge, empowering Ireland and its people to safeguard and harness ocean wealth.***

***Our Mission - The Marine Institute, provides government, public agencies and the maritime industry with a range of scientific, advisory and economic development services that inform policy-making, regulation and the sustainable management and growth of Ireland’s marine resources. The Institute undertakes, coordinates and promotes marine research and development, which is essential to achieving a sustainable ocean economy, protecting ecosystems and inspiring a shared understanding of the ocean.***

In order to achieve this vision, the MI have 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 Services and (6) Corporate Services.

Further details can be found on

[www.marine.ie](http://www.marine.ie)

<https://www.facebook.com/marineinstituteireland>

The Marine Institute 5 Year Strategic Plan (2018 to 2022) 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](mailto:recruitment@marine.ie) or posted to Human Resources at the Marine Institute, Rinville, Oranmore, Galway. All correspondence for this post should quote reference **FEAS/STO/POST6/MAY2023**



Rialtas na hÉireann  
Government of Ireland



Có-mhaoinithe ag an  
Aontas Eorpach  
Co-funded by the  
European Union



*Foras na Mara*  
*Marine Institute*

All applications for this post should be received by the Marine Institute in advance of **12:00 noon on the 10<sup>th</sup> of May 2023**. 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 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.**