Marine Institute Job Description

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<th>Temporary Scientific &amp; Technical Officer (STO) – Marine Data Analyst</th>
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<td>Contract</td>
<td>Temporary specified purpose contract for a maximum duration of 12 months (ProAtlantic - DG Mare Atlantic Checkpoint Contract)</td>
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<td>Service Group</td>
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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 MI have six service areas; (1) Ocean Science 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.

The Marine Institute 3 Year Strategic Plan (2015 to 2018) is available on; http://www.marine.ie/Home/sites/default/files/MIFiles/Docs_Comms/MI%20Strategic%20Business%20Plan%20-%202015%20-%202018.pdf. 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. Goal 2 of HOOW focuses on healthy marine ecosystems and specifically; to protect and conserve our rich marine biodiversity and ecosystems; manage our living and non-living resources in harmony with the ecosystem; implement and comply with environmental legislation (see http://www.ouroceanwealth.ie/).
Brief Description of Service Group:

The mission of OSIS 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 including SMARTBAY
  - Ocean Energy

Summary of the Role:

The successful candidate will work within the Advanced Mapping Services team as a Scientific and Technical Officer, with main responsibility for delivering project products and reporting for the Marine Institute supported elements of the ProAtlantic project. ProAtlantic represents the delivery of DG MAREs Atlantic Checkpoint Service.

The successful candidate will be responsible providing data collation and grid modelling for ProAtlantic and will work closely with international partners, namely IFREMER, France, EuroGOOS Secretariat, Belgium, CEFAS and HR Wallingford, both UK. Interaction with international organisations, such as ICES, will also be required.

The candidate will contribute to the outputs of the ProAtlantic project. This will include delivery of data grids and data adequacy reports. Preparation of the reports and relevant documentation following strict deadlines and formats will also be part of the role. There will be a requirement for travel to attend meetings within Europe.

Background to the Requirement

DG MAREs Atlantic Checkpoint is a basin scale wide monitoring system assessment activity based upon targeted end-user applications. It is designed to be a benchmark for the assessment of data existence and availability. The innovative outcome of this evaluation will be the assessment of fitness for purpose showing performance and gaps within the present monitoring systems.

The objective of this project is to investigate, through appropriate methodologies in the framework of key marine challenges, how current international and national data providers - among which primarily EU’s EMODNet, Copernicus and the DCF - meet the requirements of the stakeholders and deliver fit for purpose data. By so doing, the main gaps - thematic and geographic alike - will be readily identified in the Atlantic basin for the future consideration by DG MARE. For each challenge, specific web products in the form of maps, metadata, spreadsheets and reports will be delivered. However these products are not an end by themselves but rather a means of showing whether data were available, let alone accessible.

DG MAREs Atlantic Checkpoint service will be delivered by the ProAtlantic project. The objectives of the ProAtlantic project are divided into 11 Challenges/Work Packages (WP). While each partner will be involved in every challenge, acting as national point of contact, there will be greater involvement in some rather than others. WP 8: Fisheries Impact Challenge. MI is leading this WP with CEFAS as partner. Outputs include data grids (VMS/Seabed) and data adequacy reports.
Principal Tasks:

- Identify, acquire and collate data sources for the required data types (VMS/Seabed Data) in the Atlantic basin.
- Use ArcInfo, ArcView, ArcMap and other GIS software for collation of existing data, seafloor habitats data and VMS data.
- Use 'R' for analysis of available VMS data.
- Liaise closely with CEFAS on the development of 3 data grids.
- Produce gridded data layers in order to show the extent of fisheries impact on the seafloor.
- Implementation of a means of quantifying the impact of anthropogenic activity on the seafloor.
- Contribution to the data adequacy report, whereby for each challenge the availability and accessibility of data will be demonstrated.
- Collation of checkpoint data (or targeted production from challenges), checkpoint information (e.g. quality metadata, checkpoint indicators).
- Produce and contribute to any further technical and administrative reports and documentation for ProAtlantic service.
- Preparation of scientific papers emerging from the ProAtlantic service.
- Any other duties as relevant to the position and grade as required from time to time.

Reporting Structure:

The successful candidate will be based at the Marine Institute HQ in Oranmore and will report directly to the Advanced Mapping Services Team Leader.

Contacts:

**Marine Institute:** Advanced Mapping Services and Ocean Modelling team members within OSIS. Section Manager Advanced mapping Services and Oceanographic Services. Fisheries Ecosystems Advisory Services (FEAS) team members. Director OSIS. Data services Team. Other Sections Managers, Team Leaders and STOs across M.I. Service Groups

**Externally:** Regular liaison with ProAtlantic project partners: IFREMER, CLS and ACRI-HE (France), AZTI, CSIC (Spain), CEFAS and HR-Wallingford (UK), IPMA (Portugal) and EUROGOOS. NOAA, ICES Working groups and SCICOM. Ireland’s state agencies and government departments. External research groups both in Ireland and overseas.

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

**Essential:**

- Third level degree in a relevant Marine Science or related discipline with sound numerical background.
- Demonstrated knowledge of GIS.
- Demonstrated experience with statistical analysis.
- Demonstrated knowledge of marine habitats and fisheries data sources.
- Experience with interrogation and manipulation of marine data sets.
- Effective numerical and literacy skills including report writing skills.
- A high level of computer literacy (Word, Excel, PowerPoint, Internet/Email).
- 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.
• The ability to work unsupervised and to work well with others.
• A full clean Driving License.

Desirable:
• Post Graduate Degree in a relevant Marine Science, or related discipline.
• A minimum of 6 months relevant work experience to include manipulation of fisheries related data sets
• Demonstrated experience with statistical packages, ('R', or equivalent)
• Demonstrated knowledge of correlation and regression analysis.
• Demonstrated experience of integration of bottom contact fisheries and sensitive habitats data.
• Knowledge on means of quantifying the impact of anthropogenic activity on the seafloor.
• Sea going experience and sufficiently fit to pass an ENG II Medical.
• Record of publishing in peer-reviewed scientific journals.

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 skills.
• Ability to effectively communicate results of teamwork in written and audiovisual formats.

Salary:
Remuneration is in accordance with the Public Sector, Department of Finance approved Salary Scale for Scientific and Technical Officers, with a starting salary of €29,376 per annum pro-rated with time worked. You will become a member of the Single Public Service Pension Scheme.

Annual Leave:
The annual leave entitlement for a Scientific and 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 by your manager or their authorised representative in advance of being taken and 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 duration of 12 months, subject to continued funding under the ProAtlantic programme. A 6-month probationary period will apply to this role.

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 OSIS/STO/MDA-ProAtl/Jan-2017

Closing date for applications. All applications for this post should be received by the Marine Institute in advance of 12:00 Noon on Friday 3rd February 2017. Please note that late applications will not be accepted.

The Marine Institute is an equal opportunities employer