# Position Description

## Technical Services – CSOF4

The following information is for applicants

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| Advertised Job Title**:** | Spatial Data Manager |
| Job Reference: | 61055 |
| Relocation Assistance**:** | Will be provided to the successful candidate if required. |
| Applications Are Open To: | Australian/New Zealand Citizens and Australian Permanent Residents, temporary residents with full work-rights for the duration of the term, who do not require immigration sponsorship. |
| Percentage of Client Focus - Internal: | 90% |
| Percentage of Client Focus - External: | 10% |
| Reports to the: | Team Leader, Geophysical Survey and Mapping |
| Number of Direct Reports: | 0 |
| How to apply: | Please apply online at [jobs.csiro.au](https://jobs.csiro.au/) and enter the requisition number**.** Internal applicants please apply via ‘Jobs Central’ through the ‘People Hub’ icon |
| Contact details to discuss this position: | Stuart Edwardsvia email stuart.edwards@csiro.au or phone: 03 6232 5440  *Please do not email your application directly to Stuart Edwards. Applications received via this method will not be considered.* |
| If you have difficulty applying please contact: | Call 1300 984 220 or email [csiro.online@csiro.au](mailto:careers.online@csiro.au) between 8.30 am and 5 pm Australian east coast time. |

## Role Overview:

The role of Technical Staff in CSIRO is to provide support for scientific research in a diverse range of laboratory and field situations across a range of different research projects. This support consists of the application of accepted technical practices and the development of new practices. The work is usually carried out as a member of a centralised service.

The Spatial Data Manager will develop methodology to streamline the management and publication of bathymetric data, including contributing to the [AusSeabed](http://www.ausseabed.gov.au/) cloud-based data initiative. Working within a diverse team of professionals, the Data Manager will take a lead role in the development of infrastructure which facilitates CSIRO’s contribution to this initiative and be part of the team which develops the AusSeabed resource. They may also provide sea-going support for up to 85 days per year as part of the Geophysical Survey & Mapping Team, primarily on the CSIRO Marine National Facility RV Investigator.

The position will be based in the CSIRO Laboratories in Hobart. In addition to their primary role, the Data Manager will be engaged in and have exposure to bathymetric and geophysical data processing, technique development, data management, GIS analysis, map preparation and voyage preparation activities.

## Duties and Key Result Areas:

* Development of infrastructure which supports the machine-read exchange of spatial data sets.
* Liaison with stakeholders and collaboration with partner agencies concerning aspects of spatial data management, analysis and exchange.
* Management of databases and spatial data resources.
* Managing and responding to data requests, including GIS analysis and map creation.
* While providing support in a seagoing role monitor and maintain marine survey & geophysical equipment, including multibeam and singlebeam echosounders, sub-bottom profilers, gravity meter, magnetometer and other instruments as required **(Training Provided).**
* Under general direction, manage a facility or service supporting a large number of users, undertake a wide variety of tasks or tasks that have a high degree of technical difficulty, documenting procedures and training clients in systems and processes.
* Participate in the planning of projects and accept responsibility for carrying out major parts of the project, including data analysis, and typically make significant contributions to the interpretation and communication of results.
* Be able to proactively negotiate with external bodies.
* Utilise management expertise including the ability to plan, organise and monitor the allocation of resources across a facility.
* Develop original techniques, processes, equipment or software, especially when encountering new problems where methods are not defined and initiative is required in seeking new approaches to improve the service provided and meet client needs.
* Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

## CSIRO Competencies:

1. **Teamwork and Collaboration: Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.**
2. **Influence and Communication: Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others reactions.**
3. **Resource Management/Leadership: Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.**
4. **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
5. **Independence: Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).**
6. **Adaptability:** Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of changes.

## Selection Criteria:

*Under CSIRO policy only those who meet all selection criteria can be appointed.*

* A tertiary qualification in Geomatics/Spatial Science, Environmental Science, Computer Science, Earth Science, GIS, or a related field with an appropriate level of related work experience or a significant amount of practical work experience.
* Strong understanding of data management and quality assurance
* Proficient in the development of services and methodologies for web interchange of spatial data; for example Python, Angular.
* Knowledge of the application of Geoserver and Apache Spark to large spatial data sets.
* Proficient in GIS with experience of ESRI’s suite of GIS software or similar system (e.g. QGIS).
* Excellent recordkeeping skills, demonstrated ability to clearly communicate technical concepts verbally and in reports and papers.
* Demonstrated ability to work collaboratively as part of a highly competent and committed team, and to work independently with minimal supervision.
* The ability and willingness to work at sea for up to 85 days/year, to obtain an ASPEN Certificate of Medical Fitness; a Marine Security Identification Card, and an Elements of Shipboard Safety Certificate.

## Desirable Criteria:

* Experience in marine science or geophysical data acquisition will be an advantage.
* Experience of working with marine spatial datasets and large spatial databases.
* Experience or knowledge of Hydrographic Surveying and/or Marine Geophysics; data processing experience will be highly regarded.
* Prior experience with fieldwork and spatial data collection.

## Special Requirements:

* The ability and willingness to work at sea for up to 85 days/year
* The ability to obtain an ASPEN Certificate of Medical Fitness; a Marine Security Identification Card, and an Elements of Shipboard Safety Certificate.

## About CSIRO:

At CSIRO we solve the greatest challenges through innovative science and technology. See more [online](http://www.csiro.au/)!

Find out more about CSIRO [Oceans and Atmosphere](https://www.csiro.au/en/Research/OandA)