



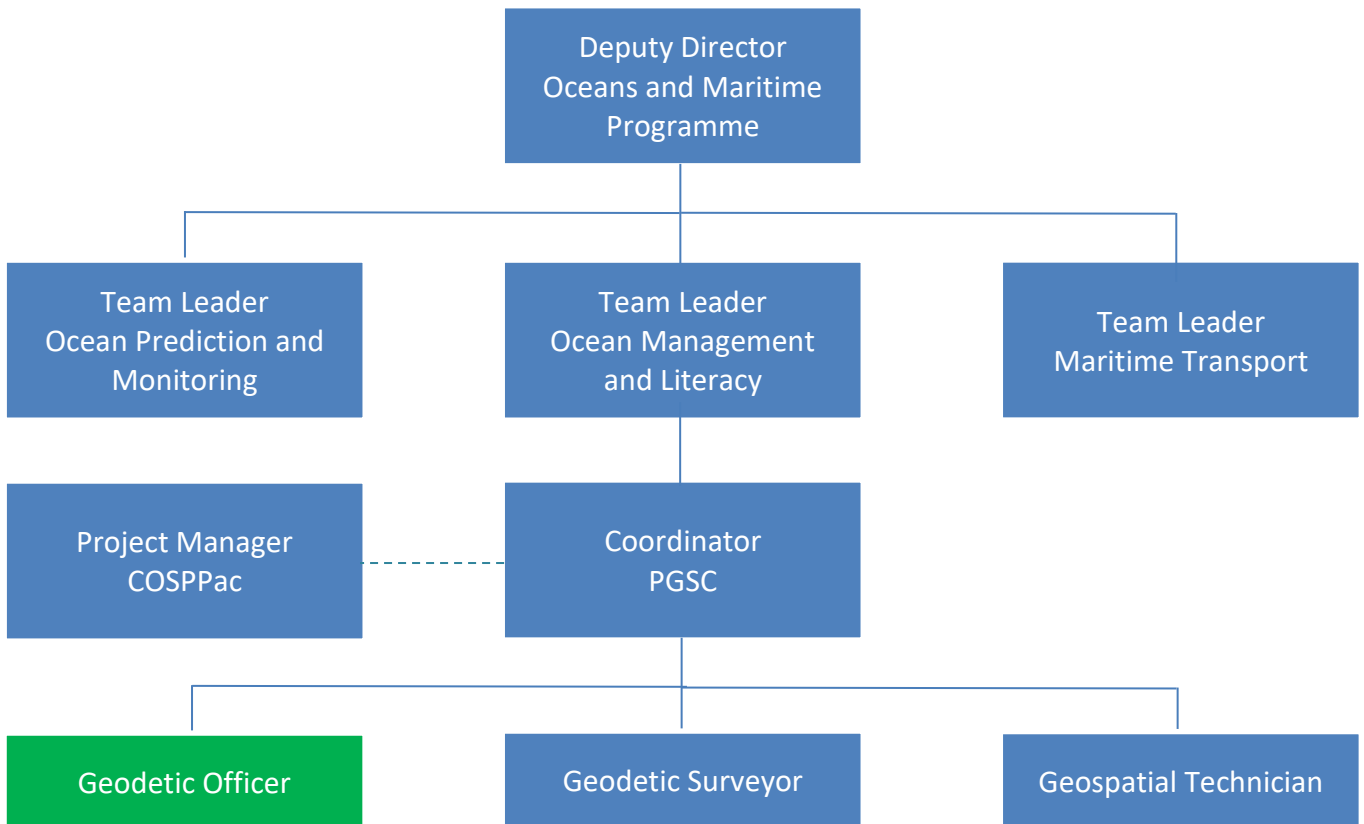
## JOB DESCRIPTION

<b>Job Title:</b>	Geodetic Officer
<b>Division/Programme/Section:</b>	GEM/OMP/ Ocean Management and Literacy
<b>Location:</b>	Suva, Fiji
<b>Reporting to:</b>	Coordinator Pacific Geospatial and Surveying Council (PGSC)
<b>Number of Direct Reports:</b>	0
<b>Purpose of Role:</b>	The Geodetic Officer plays a critical role to support the Geodetic Unit within SPC, in the management and execution of geodetic surveying and related activities. Specifically, the job holder will provide support in the planning and implementation of geodetic activities under the Climate and Oceans Support Programme in the Pacific (COSPPac).
<b>Date:</b>	June 2024

### Organisational Context and Organisation Chart

The Geoscience, Energy and Maritime (GEM) Division of SPC is comprised of three programmes and one Programming Performance and Systems Unit. The three programmes are: i) Oceans and Maritime; ii) Georesources and Energy; and iii) Disaster and Community Resilience. The Oceans and Maritime Programme is organised to respond to SPC members' needs in three focus areas – Policy and Governance; Technical Assessment and Data Management; and Capacity Building and Gender. The Oceans and maritime Programme has a holistic approach in the three areas to successfully assist SPC members towards achieving four main outcomes: i) Good Oceans and Maritime Governance; ii) Sustainable Maritime Transport and Safe Navigation; iii) Strengthened Ocean and Coastal Monitoring and Prediction Services; and iv) Improved Ocean Literacy and Maritime Capacity.

The SPC Geodetic unit within Oceans & Maritime Programme of the Geoscience Energy Maritime Division serves important functions related to geospatial data, surveying, mapping, and related activities. These several important functions of the Geodetic Unit include geodetic surveys and infrastructure, mapping and cartography, coordinate systems and datums, geospatial data management, geospatial analysis and modeling, quality assurance and standards, training and capacity building, collaboration and coordination, research, and development. Overall, the SPC geodetic unit plays a crucial role in providing accurate and reliable geospatial information for various applications, including land management, infrastructure development, environmental monitoring, and disaster management. It underpins all the spatial data infrastructure and supports decision-making at national, regional, and global levels.



**Key Result Areas (KRAs):**

The position of the jobholder encompasses the following major functions or Key Result Areas (KRAs):

1. Technical support and assistance
2. Data analysis and reporting
3. Capacity building
4. Geodetic logistics

*The performance requirements of the Key Result Areas are broadly described below: -*

<b>Jobholder is accountable for</b>	<b>Jobholder is successful when</b>
<p><b>KRA 1: Technical support and assistance (30%)</b></p> <ul style="list-style-type: none"> <li>• Support the activities of the Pacific Geospatial and Surveying Council</li> <li>• Provide technical capability towards the strengthening of Geodesy in the region.</li> <li>• Support technical solutions towards the use of the different survey methodologies for survey applications such as topographical surveys using Total Stations, GNSS survey equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Geospatial and surveying activities are well supported in the region.</li> <li>• Geospatial activities and surveys are designed in line with the capacity and needs of the member countries.</li> <li>• Surveys campaigns and sites are well planned, executed and reported on.</li> <li>• Ensure that lessons learnt are collated, accessible and capitalized on.</li> </ul>

<p>and Drones as per standard operating procedures.</p> <ul style="list-style-type: none"> <li>• Plan, actively support, and coordinate, with national counterparts in conducting field survey campaigns and related activities.</li> <li>• Ensure surveying workflow adheres to global standards and best practices.</li> <li>• Support the development and implementation of a 6-monthly infrastructure maintenance program for the Pacific Sea Level and Geodetic Monitoring (PSLGM) Project under the Climate and Oceans Support Programme in the Pacific (COSPPac)</li> <li>• Schedule and arrange the geodetic activities under the COSPPac programme, ensuring deliverables are completed on schedule.</li> <li>• Assist in the installation of geodetic infrastructure such as GNSS CORS and tide gauges as required.</li> <li>• Respond to member or partners requests relating to geospatial and surveying ensuring these requests are properly logged.</li> <li>• Support in the research of latest technology, methodology, products/tools with providers of services/tools for in-house and Pacific wide use.</li> <li>• Ensure compliance with the principles and practices of the Workplace Health and Safety regulations.</li> </ul>	<ul style="list-style-type: none"> <li>• In-country departments and offices for field survey schedules (before, during and after) is well supported.</li> <li>• Field survey campaigns are well aligned to global best practices and standards.</li> <li>• 6-monthly checks are compiled and shared with stakeholders</li> <li>• Field survey data and information are checked, compiled, and shared with stakeholders.</li> <li>• Health and safety considerations and risk management policies and guidelines are followed</li> </ul>
<p><b>KRA 2: Data analysis and reporting (30%)</b></p> <ul style="list-style-type: none"> <li>• Post-process and analyse survey data related to geodetic surveys and topographical surveys using different survey applications such as Global Navigation Satellite System, Total Station, and Drones.</li> <li>• Adopt and adhere to standard operating procedures or best practices during post-processing and analysis for surveying, mapping, and charting requirements.</li> <li>• Responsible for the quality assessment and control of field survey data.</li> <li>• Support the update of the geospatial and surveying data into relevant database.</li> <li>• Operate various geospatial and survey software packages for post processing and analysis of field survey data into final products.</li> <li>• Provide support for the review, verification and validation of survey data and information.</li> <li>• Provide support to writing, compilation and review of survey reports.</li> </ul>	<ul style="list-style-type: none"> <li>• High quality survey datasets, information, maps, charts, and reports are produced and shared in a timely manner.</li> <li>• All survey data and information are compiled accordingly to best practices and standards.</li> <li>• Support and maintain for effective data sharing and access mechanisms.</li> <li>• Survey data and information is further analyzed and manipulated into geospatial products for greater accessibility and interpretation.</li> <li>• Awareness of best practices in surveying and mapping and standard operating procedures in the region is done with relevant stakeholders.</li> <li>• Survey reports are published with geospatial data and information are available to stakeholders.</li> </ul>

<ul style="list-style-type: none"> <li>• Provide support towards effective data management of survey data and information to regional and national agencies, such as data handling, conversions, and compilations.</li> <li>• Ensure technical reports pertaining to geospatial and surveying are well written and published on schedule.</li> </ul>	
<p><b>KRA 3: Capacity building (20%)</b></p> <ul style="list-style-type: none"> <li>• Train national staff in the use of geospatial and surveying instruments for data acquisition.</li> <li>• Map and assess activities relating to geospatial and surveying components of national counterparts and regional projects.</li> <li>• Provide input to training materials relevant to geospatial and surveying user needs.</li> <li>• Support national counterparts in procuring instruments, software and other relevant tools as required.</li> <li>• Assist to integrate and identify knowledge gaps and user requirements into training materials.</li> <li>• Provide support to the Pacific Geospatial and Surveying Partnership Desk (PGSPD) for capacity building in the region.</li> <li>• Provide support towards MEL related practices.</li> <li>• Provide support and assistance for engagement and collaboration with global and regional initiatives for online training needs in the region.</li> </ul>	<ul style="list-style-type: none"> <li>• Standards Operating Procedures and Best Practices are available to member states, partners, and stakeholders.</li> <li>• Training materials developed are shared and accessible, e.g. via online courses, portals, and printed materials.</li> <li>• Capacity mapping exercises and stakeholder surveys are undertaken, and feedback is incorporated into future training events and materials.</li> <li>• There is evidence of PICTs benefiting from geospatial and surveying capacity trainings.</li> <li>• Ensure that the region is well informed with upcoming capacity initiatives and available resources.</li> <li>• Priorities of the Pacific Geospatial and Surveying Strategy receive specialist assistance and technical backstopping.</li> <li>• Trainings are well planned, conducted and training reports are produced in a timely manner.</li> </ul>
<p><b>KRA 4: Geodetic logistics (20%)</b></p> <ul style="list-style-type: none"> <li>• Lead the mobilization of survey equipment for geospatial and surveying activities.</li> <li>• Arrange the maintenance of surveying equipment.</li> <li>• Initiate and manage in-field survey schedules and survey teams in the project member countries.</li> <li>• Provide logistics support in terms freight clearance for survey equipment.</li> <li>• Support work plans and surveys with their equipment supply chain (e.g. Procurement and freighting) and any other aspects.</li> <li>• Ensure that requirements and procedures stipulated by biosecurity, customs, etc. are adhered to and do not delay sending or receiving equipment to / from countries.</li> <li>• Liaise closely with technical stakeholders in advance of the visits to ensure availability of resources for on-site work and effective</li> </ul>	<ul style="list-style-type: none"> <li>• Survey equipment mobilized are readily available for project use and are well scheduled for access to stakeholders.</li> <li>• Maintenance check list for the stations and survey equipment are maintained.</li> <li>• Geodetic infrastructures are installed and well maintained.</li> <li>• Geodetic survey activities are well planned and completed following SPC policy and guidelines.</li> <li>• Yearly planning is compiled, and calendar of activities is readily available.</li> <li>• Tools, equipment, parts, and modules are available when needed and freighting is undertaken within SPC's procurement procedures.</li> <li>• Shipments are cleared efficiently and with minimum disruption.</li> </ul>

<p>coordination of survey and installation activities.</p>	<ul style="list-style-type: none"> <li>• In-country counterparts are informed and understand in-kind contributions that may be required</li> <li>• SPC member countries and projects have timely and professional support for their geodetic field requirements.</li> <li>• Survey hardware and software are well maintained (calibrated) and are up to date.</li> </ul>
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The above performance requirements are provided as a guide only. The precise performance measures for this job will need further discussion between the jobholder and supervisor as part of the performance development process.

**Most Challenging Duties Typically Undertaken (Complexity):**

- Providing timely support and relevant assistance on a wide range of technical issues within the programme and provide effective support towards geodetic science.
- The incumbent will be required to travel extensively, long duration travel may also be required within the region that has many health hazards such as malaria, dengue fever, non-potable water supplies and poor sanitary facilities.
- Working extended hours under difficult environmental conditions, including bad weather or hot sun.
- Work with people from different backgrounds according to culture and work ethics.
- Facilitate discussions and influence decision making at national or regional technical forums

**Level of Delegation:**

- Overall budget managed by the role: 0
- Budget sign off authority without requiring approval from direct supervisor: 0

**Functional Relationships & Relationship Skills:**

Key internal and/or external contacts	Nature of the contact most typical
<b>External</b>	
<ul style="list-style-type: none"> <li>• National entities in member countries such as Lands and Survey Departments, Hydrographic Offices, Meteorological departments, and maritime sectors, etc.</li> <li>• Member country counterparts, Technical, Director level.</li> <li>• Technical partners within international and regional organisations such as UNGGIM, FIG, NOAA, BoM, GA, LINZ, NIWA, IHO, etc</li> <li>• Consultants, companies, and service providers, e.g. publications editors, printers,</li> </ul>	<ul style="list-style-type: none"> <li>• Liaison and awareness of survey visits to project countries.</li> <li>• Capacity building initiatives for in country assistance.</li> <li>• Provide support on appropriate methods and approaches, technical exchanges, seeking advice, training workshops.</li> <li>• Provide logistics support for shipment of survey equipment to project countries for the project.</li> </ul>

training consultants, specialists, shipping agents etc.	
<b>Internal</b>	
<ul style="list-style-type: none"> <li>• PGSC Coordinator</li> <li>• COSPPac Project Manager</li> <li>• Team Leader – OML</li> <li>• Team Leader – Technical Assessment</li> <li>• Team Leader – OPM</li> <li>• Procurement</li> <li>• Finance Section</li> <li>• Tech Admin &amp; Assistance</li> </ul>	<ul style="list-style-type: none"> <li>• To seek approval and/or guidance.</li> <li>• Advise on geospatial and surveying stakeholder needs &amp; emerging technologies.</li> <li>• Support resource mobilisation.</li> <li>• Obtaining advice on OMP policies and procedures; providing feedback on OMP reporting.</li> <li>• Maintain internal contacts.</li> <li>• Day to day tasks</li> <li>• Seek advice and guidance on tasks.</li> <li>• Collaborative report writing</li> <li>• Plan field schedules and logistics administrative matters</li> </ul>

**Personal Specification:**

*This section is designed to capture the expertise required for the role at the 100% fully effective level. (This does not necessarily reflect what the current position holder has.) This may be a combination of knowledge / experience, qualifications or equivalent level of learning through experience or key skills, attributes or job specific competencies.*

**Qualifications**

<b>Essential:</b>	<b>Desirable:</b>
<ul style="list-style-type: none"> <li>• Degree in surveying or closely related field is essential with at least 5 years of progressive work experience in the field of geodetic surveys, analysis and reporting.</li> <li>• Driving License</li> </ul>	<ul style="list-style-type: none"> <li>• Postgraduate qualifications in Geospatial Science, Surveying, GIS, or equivalent</li> </ul>

**Knowledge/Experience**

<b>Essential:</b>	<b>Desirable:</b>
<ul style="list-style-type: none"> <li>• At least 5 years of progressive work experience in the field of geodetic surveys, analysis, and reporting</li> <li>• 5 years regional development experience</li> <li>• Problem-solving at technical level</li> <li>• Good working knowledge of the institutional context and partners within at least one of the following sectors: (i) lands and surveying, (ii) maritime (iii) meteorological services</li> <li>• Understanding of practices, techniques, concepts and theoretical principles around precise first order levelling, control surveys and Global Navigation Satellite Systems (GNSS).</li> </ul>	<ul style="list-style-type: none"> <li>• Practical experience in Pacific Island environments</li> <li>• Awareness of PIC issues particularly as they relate to climate change and sea level rise.</li> <li>• Applied geospatial research experience in, preferably related to datum.</li> <li>• Well versed in geospatial open-source software</li> <li>• Understanding of database principles.</li> <li>• Ability to troubleshoot with the GNSS Survey Instruments and the Surveying Instruments and work around to integrate different surveying equipment.</li> </ul>

<ul style="list-style-type: none"> <li>• Knowledge in geodesy and surveying relating to horizontal and vertical reference framework, locally, nationally and regionally.</li> <li>• Ability to post process and analyse survey data collected using different survey technologies such as Total Station Height Traversing and GNSS Surveys</li> <li>• Experience with data handling and data management system.</li> <li>• Capable of report preparation and communication skills</li> <li>• Demonstrated oral and written communication skills in English.</li> <li>• Experience in capacity development needs and networks.</li> </ul>	
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**Key Skills/Attributes/Job Specific Competencies**

The following levels would typically be expected for the 100% fully effective level:

Expert level	<ul style="list-style-type: none"> <li>• Static and Kinematic GNSS techniques with other satellite derived survey tools.</li> <li>• Understanding of survey standards, techniques and applications relating to the geospatial and survey activities.</li> <li>• Coordinate field surveys and projects at national level.</li> <li>• Precision Levelling Monitoring using the Electronic Distance Measurement Equipment Height Traversing technique.</li> <li>• Communicate a strong vision for the region and a clear understanding of the regional issues and priorities with respect to geodesy, surveying and geospatial services.</li> </ul>
Advanced level	<ul style="list-style-type: none"> <li>• Computer skills with geodesy, surveying, and geospatial platform.</li> <li>• Theoretical principles of Surveying, Geodesy, Geospatial and Hydrography.</li> <li>• Survey data processing and analysis.</li> <li>• Field survey operations in the Pacific region</li> <li>• Technical training in a workshop environment.</li> <li>• Geospatial Survey Standards and Specifications</li> <li>• Hydrographic survey techniques</li> <li>• Aerial surveys and applications</li> <li>• Online databases and portals</li> </ul>
Working Knowledge	<ul style="list-style-type: none"> <li>• SPC Policy &amp; Procedures</li> <li>• Provision of high quality, timely services</li> <li>• Confidence and articulateness in both oral and written communication</li> </ul>
Awareness	<ul style="list-style-type: none"> <li>• Development challenges within the Pacific region</li> <li>• Ability to work effectively in a multidisciplinary, cross-cultural environment and to have both gender and cultural sensitivities.</li> <li>• Disaster risk management and coastal hazards</li> <li>• Climate change and adaption</li> </ul>

## **Key Behaviours**

*All employees are measured against the following **Key Behaviours** as part of Performance Development:*

- Professional/Technical Expertise
- Change and Innovation
- Interpersonal Skills
- Effective Communications & Relationships
- Teamwork
- Promotion of Equity and Equality
- Judgement

## **Personal Attributes**

- Quick Learner
- Friendly demeanor
- Demonstrated high level commitment
- Performs well under pressure
- Positive attitude to work
- Highly motivated
- Demonstrates cultural and gender sensitivity
- Well organized

### **Change to Job Description:**

From time to time, it may be necessary to consider changes in the job description in response to the changing nature of the work environment – including technological requirements or statutory changes. Such change may be initiated as necessary by SPC. This Job Description may also be reviewed as part of the preparation for performance planning for the annual performance cycle.