

#### **JOB DESCRIPTION**

Job Title: Geophysics Officer

**Division/Programme** Geoscience, Energy and Maritime (GEM) Division, Georesources and

Energy Program (GEP)

**Location**: Suva, Fiji

and Section/Project (if any):

**Reporting to:** Geotechnical Adviser

Number of Direct Reports: None

Purpose of Role: The Geophysics Officer will support the delivery of various GEM

Division projects through the provision of expert geophysics services, including geophysical surveys, data analysis/interpretation, report writing, and effectively communicating technical advice under the

guidance of the Geotechnical Adviser.

The Geophysics Officer will conduct capacity building activities to strengthen the geophysics capabilities of SPC and Pacific Island Countries and Territories. The Geophysics Officer will also support

resource mobilisation efforts related to geoscience initiatives

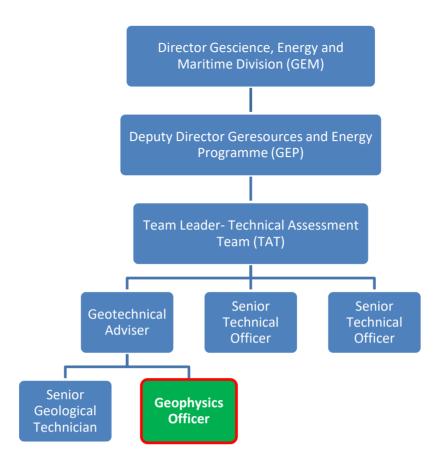
Date: October 2022

#### **Organisational Context and Organisation Chart**

SPC is the principal scientific and technical organisation in the Pacific region, proudly supporting development since 1947. We are an international development organisation owned and governed by our 26 country and territory members. We work for the well-being of Pacific people through the effective and innovative application of science and knowledge, guided by a deep understanding of Pacific island contexts and cultures. (https://www.spc.int/).

The GEM Division uses scientific and technical innovations to develop solutions that help overcome development challenges in the Pacific. GEM consists of four key technical programmes: Disaster and Community Resilience Programme (DCRP), Oceans and Maritime Programme, Georesources and Energy Programme, and Earth and Marine Observation Programme.

Providing energy security and supporting more informed decision making on the use of the region's geophysical resources is at the core of our Georesources & Energy Programme.



# **Key Result Areas (KRAs):**

- KRA 1: Lead geophysical/ geo-scientific surveys (35%)
- KRA 2: Analyse and interpret geophysical/ geo-scientific data, produce user-friendly outputs, and provide technical advice (35%)
- KRA 3: Capacity building (20%)
- KRA 4: Support SPC resource mobilisation efforts (10%)

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

#### Jobholder is accountable for

# KRA 1: Lead geophysical/ geo-scientific surveys (35%)

- Lead the planning, preparation and delivery of geophysical/geo-scientific surveys in marine and terrestrial environments across the Pacific region for multiple SPC projects, with support from the Geotechnical Adviser, as and when required
- Conduct desktop research/consultations and plan surveys which are designed to achieve project objectives, while considering budget, timeframe, risks, and other constraints.
- Liaise with stakeholders to organise travel and survey logistics, including engagement and consultation with SPC team members, PICT Governments, landowners and partners;
- Coordinate pre-survey testing, mobilisation and demobilisation of survey equipment, and ensure equipment is appropriately used during the survey;
- Collect terrestrial and marine scientific data and information using appropriate geophysical/ geo-scientific survey methods and equipment (including seismic reflection, gradiometer/magnetometer, multibeam/single beam bathymetry, and seismic refraction) ensuring that quality data is collected and stored appropriately;
- Troubleshoot issues, that may arise during fieldwork, requiring problem solving in remote locations and with limited resources and facilities
- Communicate effectively with the project management team regarding planning, progress, risks and issues

#### Jobholder is successful when

- Survey planning completed, including; work plan, budget, and risk management strategy
- Survey team and equipment successfully deployed, relevant stakeholders consulted, and necessary approvals granted
- Survey completed as per plan and relevant data collected and stored appropriately.
- Issue which arise during fieldwork resolved and field work resumed
- Project management team regularly updated

# KRA 2: Analyse and interpret geophysical/ geoscientific data, produce user-friendly outputs, and provide technical advice (35%)

- Process, analyse and interpret data using the relevant software
- Use raw and processed data to generate relevant outputs such as maps, geophysical models, tables, and graphics
- Write and review technical reports and outputs to meet the requirements of project deliverables
- Communicate technical information to PICT's and relevant stakeholders
- In collaboration with the Geotechnical Adviser, provide technical advice to internal and external stakeholders in relation to

- Data processed, analysed and interpreted using relevant software
- Data available in relevant maps, geophysical models, tables, and graphics.
- Quality technical reports and deliverables completed in a timely manner
- Technical information effectively presented and communicated to relevant stakeholders
- Sound technical advice provided to relevant stakeholders to enable informed decision making

relevant geo-scientific issues, including; mineral resources, infrastructure development, natural hazards, maritime boundaries, and geotourism. KRA 3: Capacity building (20%) Develop capacity building initiatives to Geophysics and knowledge and skills strengthen the geophysics capabilities of effectively transferred to relevant SPC SPC, in collaboration with the Geotechnical staff Adviser, as and when required Equipment and software evaluated and Train SPC staff to undertake geophysical recommendations provided to surveys, data analysis, and interpretation. management Evaluate SPC's geophysical equipment/ New equipment/software procured provide recommendations software, Geophysics and knowledge and skills regarding maintenance, calibration, and effectively transferred to relevant PICTs upgrades, and support the procurement of Workshops and knowledge sharing events new equipment/software when required. delivered Implement and deliver geophysics capacity building initiatives in PICTs through specialist on-the-job training, and attachments to ensure transfer of knowledge and skills; Coordinate geophysics training workshops and knowledge sharing events; **KRA 4: Support SPC resource mobilisation efforts** (10%) Under the direction of the Geotechnical Adviser: Relevant input provided as requested by the Geotechnical Adviser Support the preparation of concept notes, project proposals, work plans, consultations with stakeholders, and budgets Promote the work of the team to potential

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):**

- Conducting geophysical surveys in remote environments with limited communications and support.
- Delivering reports and technical outputs to high standards within allocated project timeframes.
- Liaising with a broad range of internal and external stakeholders.
- Required to travel extensively within the region.

# **Functional Relationships & Relationship Skills:**

clients and donors

Key internal and/or external contacts	Nature of the contact most typical
<ul><li>External</li><li>SPC Member Countries</li><li>Regional and International Partners</li></ul>	<ul><li>Stakeholder consultation</li><li>Technical advice</li></ul>

Development partner representatives based Country visits in Suva and in other PICTs. Networking **SPC Clients** Information and data sharing Data management Dissemination of relevant information and reports Justification and approval of country visits Internal Discuss work plan and budget Key internal contacts are: Task allocation Geotechnical Adviser Travel justification, authorization, arrangement Team Leader - Technical Assessment and processing Deputy Director - GEP Provide technical advice Other GEP staff members Collaboration Ocean and Maritime Programme Information and data sharing Disaster and Community Resilience Programme Discuss general work-related matters

#### **Level of Delegation:**

The position holder:

Routine expenditure Budget: €0Budget sign off authority: €0

#### **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

Essential:	Desirable:
<ul> <li>Bachelor of Science majoring in geophysics or marine geophysics from a recognized institution.</li> </ul>	Post graduate studies in geophysics

#### **Knowledge/Experience**

Essential:	Desirable:
<ul> <li>At least 7 years of work experience in geophysics or postgraduate research experience</li> <li>Demonstrated experience with a variety of geophysical survey methods including, seismic reflection, gradiometer/magnetometer, multibeam/singlebeam bathymetry</li> <li>Demonstrated experience at geophysical data analysis and interpretation with relevant software, and technical report writing.</li> </ul>	<ul> <li>Capacity building experience</li> <li>Experience/knowledge related to Pacific geology, cultures, and traditional knowledge</li> </ul>

 Excellent team player and participatory skills;
 Ability to plan, prioritise, and coordinate activities;

#### **Key Skills/Attributes/Job Specific Competencies**

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

Expert level	<ul> <li>Operations and management of marine geophysical and geological surveys, tools, and equipment.</li> <li>Geotechnical and marine survey software skills</li> <li>Analytical and technical skills</li> <li>Interpersonal, liaison, networking, and relationship building skills in a multi-cultural</li> </ul>
	environment, especially with Pacific Islanders  •
Advanced level	<ul> <li>Aptitude for the provision of high quality, timely service, data collection and delivery</li> <li>Capacity to transfer technical knowledge and expertise to team members and relevant project partners.</li> <li>Understanding of the regional issues and priorities as it relates to this sector</li> <li>Written and oral communication skills, including good written English and the ability to</li> </ul>
	<ul><li>write for and report to a variety of stakeholders to a high standard.</li><li>Operational Health and Safety rules</li></ul>
Workingknowledge	<ul> <li>Broad marine science technical experience</li> <li>Understanding of development issues and experience within the Pacific Region or similar Islands nations</li> </ul>
Awareness	<ul> <li>SPC Regulations and Policies</li> <li>Ability to work effectively in multidisciplinary, cross-cultural environment and to have both gender and cultural sensitivities.</li> <li>Willingness to undertake frequent travel within the region, including in remote areas.</li> </ul>

#### **Key Behaviours**

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

- Change and Innovation
- Interpersonal Skills
- Teamwork
- · Promotion of Equity and Equality
- Judgement
- · Building Individual Capacity

# **Personal Attributes**

- · High level of professional integrity and ethics
- Friendly demeanor
- · Demonstrated high level commitment to customer service

# **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.