

JOB DESCRIPTION

Job Title:	Electronics Officer
Division/Programme and Section/Project:	Geoscience Energy and Maritime Division/Ocean and Maritime Programme
Location:	Suva, Fiji
Reporting to:	Team Leader – Technical Assessment
Number of Direct Reports:	0
Purpose of Role:	The jobholder will predominantly lead the maintenance work for the Pacific Sea- Level Monitoring (PSLM) in particular the sea level component including supporting installation of permanent and temporary sea level recording stations. This role will work with a maintenance team to provide support component of the Climate and Oceans Support for the Pacific (COSPPAC) Project. The Officer will perform a wide range of maintenance, verification and return-to-service tasks on sea level stations as well as marine monitoring and surveying campaigns throughout the Pacific Region. The jobholder will also provide basic training to local National Meteorological Services staff and other relevant departments.
Date:	January 2024

Organisation Context:

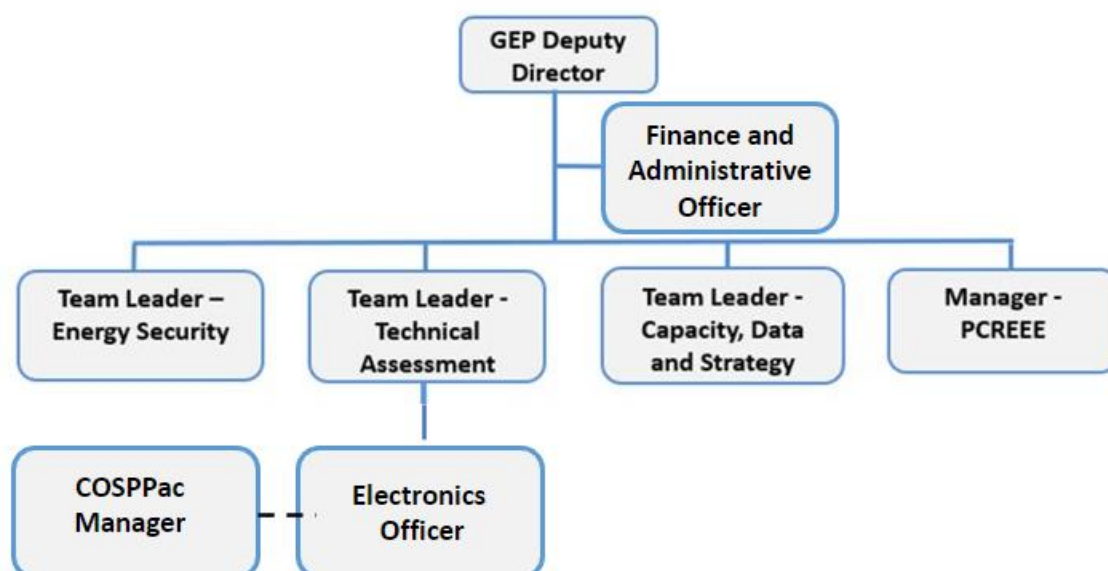
The SPC GEM Division undertakes a wide range of projects and initiatives across four principal programme areas:

- **Disaster and Community Resilience Programme (DCRP):** As the largest technical component of the SPC GEM Division, the DCRP engages in advanced applied science and technical activities. It supports Pacific Island countries and territories (PICTs) in addressing current and future challenges in disaster and climate risk management, as well as water security. The DCRP leads in the operationalisation of the Framework for Resilient Development in the Pacific (FRDP), providing coordinated technical support according to the specific needs and priorities of SPC members.
- **Oceans and Maritime Programme (OMP):** Dedicated to enhancing a resilient Blue Pacific economy, OMP focuses on integrated ocean management, improved ocean services, early warning capacities, and the development of a sustainable maritime transport sector. It assists Pacific Island governments in making informed decisions based on sound scientific knowledge for a clean, safe, and efficient maritime realm. The programme's efforts are grounded in innovation, capacity building, marine technology transfer, and ocean literacy.

- **Georesources and Energy Programme (GEP):** Committed to aiding the energy transformation in PICTs, GEP provides substantial technical support and guidance, particularly concerning geological resources essential for resilient infrastructure development. It leads SPC's initiatives in driving and coordinating the Framework for Energy Security and Resilience in the Pacific (FESRIP), advocating for a greener and more sustainable economy.
- **Earth and Ocean Observation Services (EOO):** Utilizing advanced global satellite and positioning systems, EOO supports the technical aspects of the SPC GEM Division. This programme is vital for understanding biophysical changes in the Pacific, including coastline evolution and maritime zone delineation. EOO is key in developing precise early warning systems for disasters, thereby protecting the lives and livelihoods of Pacific communities.

The Climate and Oceans Support Programme in the Pacific Phase 3 (COSPPac3) is supported by the Government of Australia and New Zealand. COSPPac has entered a third phase of four years (2023-2027) and builds on Australia's long-term support for core climate information services across the Pacific, ensuring the continued development of valued products and services for optimum impact for Pacific Island governments and communities. COSPPac3 is implemented by the Australian Bureau of Meteorology (the Bureau), in partnership with Geoscience Australia (GA), the New Zealand National Institute of Water and Atmospheric Research Limited (NIWA), the Pacific Community (SPC), and the Secretariat of the Pacific Regional Environment Programme (SPREP).

The Programme management is based at the Bureau of Meteorology in Australia and this role will work closely with the management unit to effectively implement COSPPac3.



Key Result Areas:

The job of Electronics Officer encompasses the following major functions or Key Result Areas:

1. Equipment Maintenance and Capacity Building
2. Technical Field Support
3. Documentation and reporting
4. Logistics

The requirements in the above Key Result Areas are broadly identified below.

Jobholder is accountable for	Jobholder is successful when
<p>KRA 1. Equipment Maintenance and Capacity Building 30%</p> <ul style="list-style-type: none"> • Support the development and maintain and document a Test and Evaluation Plan for functional testing of equipment and components prior to their deployment. • Responsible for the maintenance of all test equipment • Maintain familiarity with new equipment and keep abreast of new techniques • Responsible for servicing of all electronic equipment down to module level • Responsible for the maintenance of tide gauges sensors including working with PC hardware, software and satellite communications equipment. • Use of the reporting system (equipment database) to action and track maintenance schedules • Support Training and capacity building for meteorological and other ocean technical officers and electronic assistant across the region and reporting relevant information to OMP capacity development log • Support technical and instrumentation relation capacity building initiatives within SPC • Support equipment cataloguing within the GEM technical workshop ensuring the relevant instruments are calibrated on time and are in good working conditions. 	<ul style="list-style-type: none"> • Sensors are calibrated and serviced and ready to be used • Up to date inventory of Tide Gauges parts available • .Test Equipment functional and within calibrated specs • Equipment are readily interfaced for calibration and servicing and testing • Staff trained
<p>KRA 2. Technical Field Support 30%</p> <ul style="list-style-type: none"> • Investigate and report on unusual or unexpected equipment conditions. • Perform a range of work (including the more complex tasks on specific equipment) associated with the installation, maintenance and testing of a variety of electronic and other equipment. Coordinate with technical in-country counterparts, where assigned, and carry out on-the-job training as required. • Ensure compliance with the principles and practices of the Workplace Health and Safety regulations • Correspond with In-country departments and offices before field trip schedules • Follow up last report on each country visit or project • Assist BoM Sea Level maintenance staff with the installation, verification & maintenance visits at the 14 sea-level station sites in the Pacific region • Support the expansion of coastal and ocean observations for eg with the deployment of wave buoys or temporary tide gauges and any other relevant monitoring equipment. 	<ul style="list-style-type: none"> • Tide stations are maintained and operational • Emergency maintenance requests are dealt with timely and effectively to minimise downtime • User feedback of the function of tide gauge stations is positive • Surveys and maintenance visits are carried out safely and to a high standard

<p>KRA 3. Documentation and reporting 30%</p> <ul style="list-style-type: none"> • Prepare reports on sea-level station visits and surveys and transfer information in to the equipment database • Participate in the development and implementation of the workshop's strategies in relation to: installation and upgrade of equipment, evaluation and assessment of the equipment and its effectiveness, and meeting observational requirements • Generate summary reports from meta data records to support survey planning and scheduling of works • Provide information to manager on project level reporting and review • Prepare training documentation to build capacity of in-country agencies such as meteorological services in their understanding of tide station equipment and their application • Support the development of SOPs for stakeholders to manage and maintain coastal and ocean monitoring equipment within PICS 	<ul style="list-style-type: none"> • Good quality equipment is used effectively and efficiently to complete work schedules • Calibration and maintenance report are updated on the database and readily available upon request • Equipment issues are anticipated and raised ahead of time • Training material is available on the function and of sea-level stations
<p>KRA 4. Logistics 10%</p> <ul style="list-style-type: none"> • Support with field trips and forward planning • Support work plans and surveys with their equipment supply chain (e.g. Procurement and freighting) and any other aspects critical to schedule of surveys and site visits • Ensure that requirements and procedures stipulated by biosecurity, customs, etc. are adhered to and do not delay sending or receiving equipment to / from countries • Liaise closely with technical stakeholders in advance of the visits to ensure availability of resources for on-site work and effective coordination of survey and installation activities. 	<ul style="list-style-type: none"> • Yearly planning is done and calendar of activities is readily available • Tools, equipment, parts and modules are available when needed and freighting is undertaken within SPC's procurement procedures • Shipments are cleared efficiently and with minimum disruption • In-country counterparts are informed and understand in-kind contributions that may be required

Note The above performance standards are provided as a guide only. The precise performance measures for this position will need further discussion between the jobholder and supervisor as part of the performance development process.

Work Complexity:

Most challenging duties typically undertaken:

- Unscheduled trips at short notice with minimal supervision to investigate and report on unusual or unexpected equipment conditions and diagnose complex faults. Prepare associated reports.
- Faced with different issues and faults in all different Stations in different Countries.
- Perform maintenance activities on specialised electronic equipment down to module level.
- Development of manuals and documentation
- Frequent travel, with typical requirement of 7-14 days every 8-10 weeks, to remote locations, including poor sanitary facilities, malaria, etc. Longer duration travel may also be required.
- 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
- Conducting a project with specific results, objectives, indicators and timeframe and reporting accordingly
- Collecting the relevant data and information across a number of different sources to inform project activities
- Provide high-level technical advice and expertise and transferring knowledge through high-quality training standards
- Facilitate discussions and influence decision making at national or regional technical forums

Functional Relationships & Relationship Skills:

Key internal and/or external contacts	Nature of the contact most typical
External:	
<ul style="list-style-type: none"> • National Meteorological Offices • National Hydrographic offices • Lands and Survey Departments • Shipping Agents • Australian Bureau of Meteorology (BoM) • Customs agents 	<ul style="list-style-type: none"> • Organise Capacity Building for in country Assistance • Notify them of Shippings and activities • Paperwork for Sending and Receiving Shipments • Working alongside BoM staff on technical visits. • Receiving instructions from BoM lead technicians
Internal:	
<ul style="list-style-type: none"> • Manager COSPPac • GEM Team leaders • Team Leader – Technical Assessment • Procurement • Finance Section • Tech Admin & Assistance 	<ul style="list-style-type: none"> • Report of tasks undertaken • Purchase of new parts or Sensors • LPO for Shipping • Keeping Records of work undertaken • Liaising and listening

Level of Delegation:

The position holder:

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

Person 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 style="list-style-type: none">• Bachelor of Science, (Electronics or Electrical Engineering, Physics, Environment)• Driving License• Advanced diving certification• Boat masters license	<ul style="list-style-type: none">• Master in Science (Electronics or Electrical Engineering, Physics, Environment)• Commercial PADI Diving, Basics of fire safety, and medical Certificate• Certified trainer

Knowledge / Experience

Essential:	Desirable:
<ul style="list-style-type: none">• 5 years of progressive work experience• Demonstrated oral and written communication skills in English.• Good understanding of the working environment and experience working with Pacific Island countries, in particular COSPPac partner countries.• Troubleshooting Skills• Should have broad Technical Knowledge on Electronics and communications system used through the COSPPac project.• Should have a broad experience in Installing and commissioning sea level observing systems in the field• should have good knowledge in programming and deploying oceanographic, hydrographic, and relevant marine survey instruments.• Knowledge of Various Interfacing Software and Hardware• Flexible approach and ability to meet deadlines.• Proven maturity and discretion in dealing with government protocol, clients and staff.• Ability to work as part of a team or independently, under limited direction with strong commitment, personal drive and initiative.	<ul style="list-style-type: none">• Commissioning these systems in the field• Knowledge of Various Interfacing Software and Hardware• Flexible approach and ability to meet deadlines.• Excellent interpersonal skills• Experience in and collaborating with others in project team-oriented environment.• Ability to think innovatively and have a high level of judgment.• Experience in working in remote locations, preferably the Pacific Island Countries and Territories• Understanding of the UN Law of the Sea (UNCLOS)

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"> • Knowledge of how oceanographic and meteorological equipment operates, specifically with regards to the Sea Frame Tide Gauges • Able to Interface Computer to Sea Frame Station routinely for maintenance • Troubleshooting expertise and equipment repair skills. • Strong computer and software skills • Sound knowledge on importance of calibration of Sensors. • Diagnose problems and solve them under minimal supervision
Advanced level	<ul style="list-style-type: none"> • Proficient technical experience in the specified field of tide an ocean monitoring • Ability to set priorities successfully in order to meet tight deadlines and targets. • Analytical skills and the ability to master new material and equipment quickly. • Communicate well with others and have the ability to transfer skills to in-country technical partners.
Working Knowledge	<ul style="list-style-type: none"> • SPC's procurement policy • Provision of high quality, timely services • Confidence and articulateness in both oral and written communication
Awareness	<ul style="list-style-type: none"> • Geographic Information Systems. • Land survey techniques. • Meteorological instrumentation. • Adaptation and development issues in small pacific island countries.

Key Behaviours

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

Commitment/ Personal Accountability

- Professional/Technical Expertise
- Teamwork
- Customer Focus
- Effective Communications & Relationships
- Change and Innovation
- Interpersonal Skills
- Judgement
- Building Individual Capacity

Personal Attributes

- Quick Learner
- Friendly demeanour
- Demonstrated high level commitment
- Performs well under pressure
- Positive attitude to work
- Strongly committed
- Highly motivated
- Excellent interpersonal skills
- Demonstrates cultural and gender sensitivity

- Well organized
- Sound judgement

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.