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**JOB DESCRIPTION**

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| Job Title: | Team Leader - Earth Observation and Remote Sensing |
| Division:  Work Unit: | Geoscience, Energy and Maritime Division (GEM)  Directors Office |
| Responsible To: | Director, GEM |
| Responsible For: | Initially 3 direct reports, likely >9 within the timeframe of the contract. |
| Job Purpose: | This role will be responsible for the design and development of Digital Earth Pacific, which is SPC’s and the Pacific’s flagship Earth Observation programme. In leading the programme, the Team Leader will be required to liaise and negotiate with ministers and senior public servants from a variety of ministries in all of the PICTs. The Team Leader will also be required to manage partnerships with multinational private and public sector entities such as Microsoft, Esri, NASA and ESA. The Team Leader will guide and manage: 1) the technical staff developing the Digital Earth Pacific operational platform and open data pipelines; 2) capacity development of technicians and decision makers at national and regional level; and 3) advocacy and communication of EO work in SPC and the Pacific. |
| Date: | December 2021 |

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| **Organisation Context:** |

SPC has a long history of support to its member Pacific Islands Countries and Territories (PICTs) in the area of Earth Observation. The initial programme established under SOPAC has grown an established network and legacy in the provision of capacity support and supplementation to PICTs to meet their requests and needs in this space for the last 20 years. SPC through its Geoscience, Energy and Maritime (GEM) division continues to offer expertise and technical support to PICTs in a cross-spectrum of Earth Observation areas from Oceans, Coastal to Land based survey and assessments. It has assisted PICTs with the collection, analysis, and presentation of data via remote sensing, to provide its members with excellent applied science and knowledge for evidence-based policy-making and technical solutions.

This leadership role will focus on the Digital Earth Pacific programme, as the core regional public good provided by SPC through Earth Observations. The key duty will be to design and develop the architecture, products, and services for the Digital Earth Pacific platform in close consultation with key stakeholders. Digital Earth Pacific will support sustainable development activities and outcomes within all of SPC’s science and capability areas through providing geospatial decision ready products, and as such the Team Leader will be expected to build strong networks across the organisation.

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| **Organisation Chart:** |

Likely future staffing

Current staff

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| **Key Result Areas:** |

The position of Team Leader – Earth Observation and Remote Sensing encompasses the following major functions or Key Result Areas:

1. Management and Leadership
2. Earth Observation Advice and Technical Support
3. Project and Funding Implementation
4. Capacity Building and Training
5. Information and Database Management

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| **Jobholder is accountable for** | **Jobholder is successful when** |
| **KRA 1: Management and Leadership (20%)**   * Provide people leadership, engagement and operational guidance to contribute to the effective delivery of all functions and services within the EO unit, with a key focus on Digital Earth Pacific. * Work with GEM and SPC Senior Management to ensure Digital Earth Pacific and other EO work is embedded within Pacific regional sectoral initiatives. * Recruit and retain new staff with appropriate level of skills and experience as necessary ensuring effective induction into their functions within the unit. | * EO Unit is fully functional and effective with clear objectives and integrated service functions. * Leadership support and operational guidance provided to deliver effective EO services to the whole of SPC and Pacific initiatives through Digital Earth Pacific. * New staff with the appropriate skills and experience are recruited as necessary and effectively inducted into their unit service areas. |
| **KRA 2: Earth Observation Advice and Technical Support (40%)**   * Design and delivery of Digital Earth Pacific and other EO products to support PICT sectoral development work, both directly and through other SPC science and capability programmes.      * Enhance usability and effectiveness of the EO team in meeting functions to support SPC thematic and programme objectives, specifically through regional public goods. * Work with industry partners to ensure that SPCs EO team provides free and open decision ready products and services to drive increased sustainability and productivity across the Pacific. * Collaborate with the regional and international Earth observation community to ensure that SPC is learning from and leveraging as broad a range of expertise as possible. | * EO and RS data and products are increasingly requested used in the real world by PICTs and SPC Programme and project objectives and results are enhanced through EO services. * New technologies, methods and tools are explored and designed for the Pacific region. * Partnerships with Microsoft and Esri are enhanced, and new partnerships are formed with other multinational private sector entities. * SPC maintains and enhances a regional pacific network of EO practitioners and facilitates linkages and partnerships with international agencies such as NASA and ESA. |
| **KRA 3: Project and Funding Implementation (10%)**  * Implements strategic research projects that will underpin the next generation of capability for SPC EO, including specifically Digital Earth Pacific. * EO annual workplans are implemented and reported regularly with clear outputs and outcomes. * With the GEM and Resource Mobilisation directors, develop proposals for new EO initiatives in accordance with SPC regulations and donor requirements and ensure ongoing resource mobilisation. | * EO project deliverables and milestones are met within project contract requirements. * EO Team Workplan is prepared annually and updated regularly. * Project proposals with well resources budgets are developed in a timely manner. |
| **KRA 4: Capacity Building and Training (20%)**  * Design and deployment of high-quality training and capacity support by SPC EO staff, both within the organisation and directly to PICT technicians and decision makers. * PICT partners trained in Digital Earth Pacific and other EO tools and applications such that they are being effectively utilised in national development initiatives. * SPC Staff trained in operation of EO software and able to operate effectively and efficiently. | * EO and RS capacity are reported as increasing in SPC and across PICTs. * Training modules for Digital Earth Pacific and other EO operations and data management designed and delivered. * PICT partners trained and reporting improved knowledge and skills. |
| **KRA 5: Information and Database Management (10%)**   * Data collection, validation and input into the Pacific Data hub and other GEM databases. * Preparation of Web Based Database Displays. * Data Structure, Formatting and Backups. | * Data collection and validation and entry conducted regularly and efficiently. * Databases and web displays are effectively monitored and updated and backed up. * EO Information and updates are disseminated via appropriate communication mediums and technologies to PICTs. |

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| **Level of Delegation:** |

The position holder:

Routine Expenditure Budget or *Overall operational budget managed by the role: Approx. 300,000 Euro per year, expected to grow to 2-5 million Euro per year in 1-2 years*

* Is responsible within the limits provided by the manual of delegations, under SPC delegation policies for that level of accountability and responsibility.
* Has some degree of autonomy in liaising with senior stakeholders within and outside.
* Has a significant degree of planning own work.
* Preparation financial reports within the limits of the SPC delegation policy as outlined in project agreements.

**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.

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| **Work Complexity:** |

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| Most challenging duties typically undertaken: |
| * Lead, nurture and empower a multidisciplinary team to translate Earth Observation data into decision ready products that will help ensure the Pacific’s natural resources and environmental sustainability * Lead all aspects of developing Digital Earth Pacific, the Pacific’s first operational EO platform for producing free and open decision ready products; * Build, foster and leverage relationships with stakeholders from across all levels of Pacific government and the global EO industry; and * Understand and ensure the program realises the potential for Earth observations to transform the Pacific’s economy and improve the effectiveness of governments. |

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| **Functional Relationships & Relationship Skills:** |

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| **Key internal and/or external contacts** | **Nature of the contact most typical** |
| **External:**   * SPC member Countries * The Global EO Sector * Donors * Development Partners including crop and International agencies * Consultants | * Relationship and network development and maintenance * Technical correspondence and advice * Coordination with regional and national efforts * Operational and project management * Service delivery |
| **Internal:**   * SPC DG * GEM Director and Deputy Directors * SPC Divisions staff and projects managers working in EO related fields * SPC Technical advisors * GEM finance and procurement team | * Key support to SPC DG for new EO initiatives * Facilitating cross divisional advice and support as well as coordinating joint activities * Activity planning, advising and reporting on unit activities and results to successfully implement programmatic and cross-cutting approach * Briefing, reporting, supporting, gaining, resolving cross-cutting issues, negotiations for collaboration seeking * Sharing advice and learnings to align GEM with SPC’s strategic vision * Liaison and receiving advice on fundraising and resource mobilisation |

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| **Person Specification:** |

*This section is designed to capture the expertise required for the role at the 100% fully effective level. 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

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| Essential: | Desirable: |
| * Postgraduate qualification in earth observation or remote sensing science from a recognised university | * Preferable PhD level qualification with significant experience as a professional scientist or engineer in the relevant fields and part of this time in a management position |

**Knowledge / Experience**

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| Essential: | Desirable: |
| * At least 10 years of experience in Earth Observation or remote sensing, with progressive technical leadership and stakeholder management responsibilities over that time * Detailed understanding of earth observation data and satellites/sensors covering the Pacific region, and experience in integrating multiple streams of earth observation data into decision ready products * Experience with all aspects of operational open data cube technology, including pipeline processes for data ingestion * Experience in managing an Earth Observation team and staff performance management * Demonstrated experience in Project and financial budget management and reporting | * International leader in Earth Observations, with demonstrated experience of driving thematic change at a regional level. * Existing networks with the international earth observation community (e.g. GEO, CEOS), and with multinational private sector entities (e.g. Microsoft, Esri). * Demonstrated ability to strategically influence at executive management level within national government systems. * Work experience in the Pacific Region and having worked with Pacific Islanders |

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

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

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| Expert level | * The ability to provide expert technical and scientific advice * High Level of ICT literacy |
| Advanced level | * Strong Project and budget management skills * Strong Analytical skills * Ability to multi-task * Excellent communication skills - verbal and written |
| Working Knowledge | * Cultural sensitivity and awareness, with the ability to effectively work with team members from different cultural backgrounds |
| Awareness | * Development issues in the Pacific |

###### Key Behaviours

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

* Change and Innovation
* Interpersonal Skills
* Teamwork and collaboration
* Promotion of Equity and Equality
* Judgement
* Building Individual Capacity

## **Personal Attributes**

* Ability to think strategically
* Strong influencing skills
* Ability to drive change
* Facilitate conflict situations between staff
* Ability to work collaboratively and innovatively towards sustainable outcomes
* Respect for SPC corporate values
* Resilience

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| **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 our work environment – including technological requirements or statutory changes. Such change may be initiated as necessary by Director. This Job Description may be reviewed as part of the preparation for performance planning for the annual performance cycle.