JOB DESCRIPTION

Job Title:	Statistics Adviser (metadata and SDMX)
Division/Team:	Statistics for Development Division (SDD) Statistics Infrastructure and Dissemination (SID)
Location:	Nouméa, New Caledonia or Suva, Fiji
Reporting to:	Manager Statistics Infrastructure and Dissemination
Number of Direct Reports:	None
Purpose of Role:	Develop and maintain SDMX data structures and other metadata supporting statistical dissemination in the Pacific Data Hub .Stat platform (PDH.stat). The role involves collaborating with internal and external stakeholders regarding data modelling and data documentation, developing semantic assets fostering data interoperability, and supporting the setup of corporate data modelling and metadata management methodologies and infrastructure.
Date:	October 2024

Organisational Context and Organisation Chart

The **Pacific Community (SPC)** is the principal scientific and technical organisation in the Pacific region, supporting development since 1947. We are an international development organisation owned and governed by our 27 member countries and territories. In pursuit of sustainable development to benefit Pacific people, our organisation works across more than 20 sectors. We are known for our knowledge and innovation in such areas as fisheries science, public health, geoscience and agriculture.

The **Statistics for Development Division (SDD)** comprises 20-35 long term staff within the Pacific Community (SPC). Its key objective is for the region to meet the outcome set out in the 2022-2030 Pacific Statistics Strategic Framework:

"Highly competent and sustainable national statistics systems that meet national and international statistics needs for evidence-based policy, planning and monitoring".

The SDD is organised in three professional/technical teams. These are:

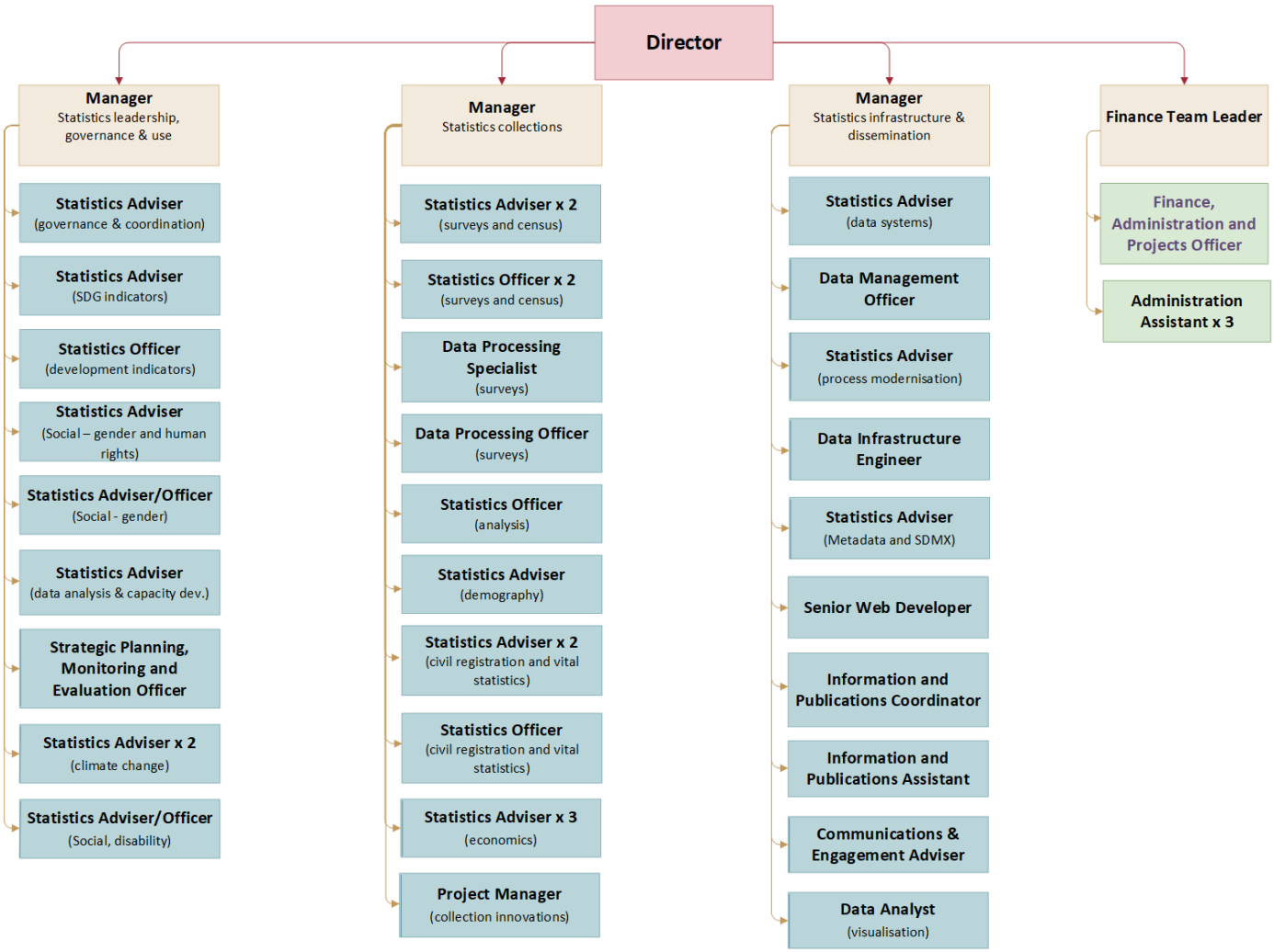
- Statistics leadership, governance and use
- Statistics collections (including census, survey and administrative data)
- Statistics infrastructure and dissemination

Each professional/technical team is led by a manager accountable for staff and other resources to deliver results against their work program. A fourth, small team is responsible for office management, finances and administrative support.

All teams work in close cooperation with each-other and support each other to meet their objectives. In addition to their work programmes, managers are held accountable for delivery against SDD's "ways of working" objectives, which may change from time to time but in late 2022 were:

- Develop a high performing Division that works as a team
- Mainstream good modern data practice
- Strengthened engagement and partnerships with donors and stakeholders
- Make the most of available resources

Statistics for Development Division organisational chart
(items with red sidebars are possible future expansion)



Key Result Areas (KRAs):

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

Jobholder is accountable for	Jobholder is successful when
KRA #1 **Data modelling and interoperability** **45%**	• Statistical datasets modelled according to the SDMX standard in collaboration with data owners, ensuring alignment with global best practices and in line with common structural metadata artifacts constituting the semantic backbone of the PDH.stat database.

	• Change requests from data owners related to data structures and referential metadata appropriately handled, ensuring compliance with the established common structural metadata artifacts. • Harmonisation actions for data structures identified and implemented, aiming to enhance interoperability and consistency across datasets within the PDH.stat database. • Services in data architecture and data modelling provided, ensuring adherence to the established standards and promoting effective data management practices and alignment with corporate, regional and global best practices. • Collaboration with other components of the Pacific Data Hub to ensure semantic interoperability and seamless integration of data and systems, notably regarding the management of topical taxonomies and mapping with metadata required by data catalogues. • Requirements for SDMX data modelling software consolidated, ensuring compatibility and optimal use of tools within the PDH.stat software ecosystem. • Support provided towards the migration of PDH.stat content to SDMX 3.0, notably leveraging its features to improve data and metadata modelling, re-use of metadata assets and semantic interoperability.
KRA #2 **Metadata management (structural and referential metadata)** **35%**	• Concepts and codelists used in PDH.stat managed, ensuring their alignment with global standards, such as SDMX content-oriented guidelines and modelling best practices. • Mappings from miscellaneous data sources to the PDH.stat data structures maintained, ensuring accurate data integration and traceability, in alignment with PDH.stat core metadata assets. • Quality and completeness of data descriptions ensured through the review of titles, addition of descriptions, and improvement of descriptive metadata, supporting both English and French languages. • Flows are in place to ensure metadata completeness, accuracy and consistency for different type of data (re-)disseminated on PDH.stat: Aggregated statistics collected from national statistical organisations, SDG data collected from UN agencies, websites of various organisations from which data is periodically harvested, data aggregated specifically for publication on PDH.stat from the Pacific Data Hub Microdata Library. • Common reference metadata structure used as a template for documenting all datasets published on the PDH.stat platform maintained. • Metadata reengineering projects supported, including the refactoring of the common geographic dimension, the extensions of the PDH.stat common reference metadata structure or the migration to SDMX 3.0. • Ensures different types of metadata are accessible to users through various channels, such as websites, publications, dashboards, data catalogue, PDH.stat Data Explorer, plugins and APIs. Promotes and supports the dissemination of statistical concepts and classifications in both human-readable and machine-usable formats. • Metadata accessibility monitored and metadata quality analyses performed feeding the periodic overall quality assessment of PDH.stat content.

	• Software requirements defined and the establishment of referential metadata management systems supported as part of the PDH.stat software ecosystem.
KRA #3 **Standardisation and data governance** **10%**	• Data architecture and data modelling standards and best practices are promoted across data-related projects and initiatives related to the Pacific Data Hub programme. • Implementation of open data principles supported within SDD and the region, ensuring transparency, accessibility, and usability of data. • Data governance initiatives supported, notably in the areas of master data management practices, shared metadata repositories, and data/metadata inventories and typologies. • Actively participates in SDMX standards and guidelines development, contributing expertise and insights to shape the future of data standardisation and interoperability. • Contributions made to the rationalisation of inter-agency data exchange in the Pacific region by leveraging the SDMX standard and facilitating interoperability with other statistical systems. • Requirements defined for corporate and regional metadata registries to be setup as part of the PDH.stat infrastructure, ensuring compatibility with standardisation efforts and long-term sustainability.
KRA #4 **External support and partnership** **10%**	• Strong collaborations with external stakeholders is established, particularly National Statistical Organisations (NSOs), to understand their needs and requirements around statistical data architecture. • Expert guidance and support provided to member NSOs in data modelling and metadata management, ensuring alignment with regional and global standards and best practices. • Collaborate with NSOs to identify and address data interoperability challenges, facilitating seamless data exchange within the PDH.stat platform and other statistical systems. • Training and capacity-building sessions provided on data modelling, data governance, and metadata management for NSO staff and relevant stakeholders. • NSOs supported in implementing open data principles and best practices for transparency, accessibility, and usability of data. • Feedback and insights gathered from NSOs to inform the continuous improvement of the Pacific Data Hub data architecture, data governance, and standardisation efforts.

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):

- Developing statistical datasets in the PDH.stat involves handling complex data requirements and accommodating data owners' preferences, while adhering to best practices. Managing change

requests related to data structures and metadata requires navigating through complexities arising from potential inconsistencies and ensuring seamless integration within the existing data architecture.

- Harmonising data structures to enhance interoperability and consistency across datasets presents challenges in reconciling variations in data structures, resolving data mapping issues, and ensuring compatibility between metadata from different sources and systems and integration into PDH.stat data model.
- Structural metadata authoring and SDMX modelling, reference metadata authoring, and data/metadata publication tasks rely on a multitude of software, some of which are not fully mature or meeting requirements, gaps needing in some cases to be filled with workaround solutions.

Functional Relationships & Relationship Skills:

Key internal and/or external contacts	Nature of the contact most typical
Internal	
Data owners	Understand data requirements, gather data inputs, and ensure alignment with data modelling and interoperability standards. Regular communication to address data structure and metadata-related inquiries, provide guidance on modelling and metadata quality, and ensure compliance with PDH.stat semantic interoperability standards.
Data users (analysts, visualisation specialists, Web developers)	Engagement and consultation to understand data and metadata needs, provide support in accessing and utilising content from the PDH.stat platform. Regular communication to gather feedback, address metadata-related queries, and provide guidance on access to structural and referential metadata associated with datasets published in PDH.stat for use in the context of data analysis and statistical dissemination.
.STAT team	Collaborate with the PDH.stat team on various aspects, including data management, statistical IT, and process modernisation. Exchange knowledge and insights related to the PDH.stat data and metadata models and PDH.stat platform's functionalities, discuss system enhancements or bug fixes, provide feedback on user experiences, and contribute to the overall improvement of the PDH.stat platform.
IT staff managing other PDH components	Regular communication to align data modelling requirements, address technical dependencies, and ensure effective data and metadata flows across different PDH components.
Corporate data governance	Contribution to corporate data governance policies, standards, and best practices. Seek guidance and provide inputs regarding data modelling and metadata management standards, data governance principles, data inventories and metadata registries.

External	
Data providers	Regular communication with external data providers to ensure seamless data/metadata integration and interoperability. Collaborate on data modelling efforts, aligning data structures with standards at different levels, and addressing challenges related to data formats and schema mapping.
National Statistical Offices (NSOs)	Work closely with NGOs in the Pacific to establish robust metadata management practices. Collaborate on the development and implementation of structural and referential metadata standards, ensuring accurate data integration, traceability, and adherence to best practices in data and metadata management.
OECD (maintainers of .Stat Suite)	Maintain an active relationship with the OECD, the maintainers of the .Stat Suite. Collaborate on metadata related features of the .Stat Suite, notably regarding availability of structural and referential metadata on different channels (GUI and API), accessibility in both human-readable and machine-usable formats, and requirements regarding metadata authoring and management.
Other Members of the Statistical Information System Collaboration Community (SIS-CC)	Participate in the SIS-CC community to exchange knowledge and experiences with other statistical professionals. Engage in discussions and collaborative initiatives related to data modelling, metadata management, and standardisation. Contribute to the development and implementation of data governance practices that promote consistency and interoperability within the statistical community.

Level of Delegation:

Routine Expenditure Budget: *None*

Budget Sign off Authority without requiring approval from direct supervisor: *50 €*

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:
• Master degree or higher in computer science, data science, statistics, or a related field,	• Project management certification

Knowledge/Experience

Essential:	Desirable:
• At least 10 years of working experience related to data modelling and metadata management, ideally in the context of statistical organisations. • Experience in master data management, operating metadata registries or setting up corporate-level semantic assets. • Good knowledge of open data principles, practices and tools • Excellent communication and collaboration skills.	• Experience with SDMX standards and tools. • Knowledge of data governance and standardisation principles and practices. • Familiarity with scripting languages (e.g. Python) • Experience in data integration, transformation, and ETL processes. • Experience in project management. • Understanding of statistical concepts and methodologies. • Good knowledge of the Pacific • If anglophone, a working knowledge of French. If francophone, a working knowledge of English. • A Pacific Island language

Key Skills/Attributes/Job Specific Competencies

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

Expert level	• Expert knowledge of SDMX (Statistical Data and Metadata Exchange) standard and best practices. • Proficiency in developing and maintaining data structures and semantic assets. Experience in managing concepts, codelists, and mappings in line with global standards. • Ability to handle complex change requests and ensure compliance with established standards. • In-depth knowledge of metadata management, including structural and referential metadata. • Ability to provide technical guidance and support to stakeholders on data modelling and metadata practices.
Advanced level	• Strong understanding of data architecture and data governance principles. • Expertise in software requirements definition and evaluation for data modelling tools. • Strong analytical and problem-solving skills in resolving data mapping and integration challenges. • Understanding of data governance and standardisation practices. • Communication and professional networking skills • Strategic influencing and stakeholder engagement with ability to work in a multi-cultural and gender-sensitive environment.

	• A flexible approach and a willingness to assist with other tasks within SDD and SPC • A high level of interpersonal skills, and proven ability to work in a team environment, and where required, lead and motivate others
Working knowledge	• Data integration, transformation, and ETL processes • Use of programming languages such as Python and SQL. • Project management • Contractor management skills
Awareness	• Knowledge of statistical concepts and methodologies. • SPC Regulations and Policies

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 demeanour
- 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.