



Capacity Development in the Pacific Region

Pacific Geospatial & Surveying Council

SPC Partnership Desk

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What is the PGSC?

Pacific Geospatial and Surveying Council

- Independent regional body advancing geospatial and surveying standards and capacity
- Established in the margins of the Pacific GIS/RS User Conference in November 2014
- Governed by the **PGSC Charter** endorsed by 11 Pacific Island governments
- Implementing and monitoring progress against the **PGSC Strategy (2017-2027)**
- Supported by **PGSC Partnership Desk – Pacific Community (SPC)**

The Pacific Geospatial and Surveying Council and the Partnership Desk brings together regional experts, practitioners, and heads of surveying, geospatial information management, and hydrography to report progress against the PGSC Strategy (2017–2027), conduct council business, identify key actions for working groups to progress, and provide a platform to raise regional issues and concerns related to geospatial and surveying capacity development, policy, technical standards, technology, and resourcing.



Pacific Geospatial and Surveying Council



Chair Ms Rosamond Bing, CEO - Ministry of Lands and Natural Resources (Tonga)

Vice-Chair Ms Meizyanne Hicks, Director Geospatial - Ministry of Lands and Mineral Resources (Fiji)





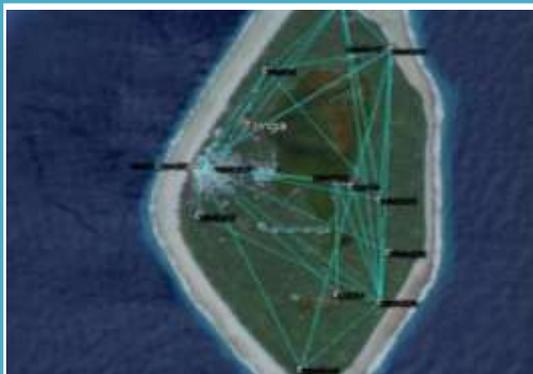
PGSC Strategy 2017 - 2027

The long-term goal of the strategy is that Pacific Island survey and geospatial services are sufficiently resourced to respond to member country needs and geospatial requirements for sustainable development and is supported by the four priority areas for action (goals) identified in the Strategy and one of the goals that is aligned to capacity building is: -

Goal 2: Adopting a modern Geodetic Reference Frame (GRF) and improving the technology underpinning geospatial systems and applications

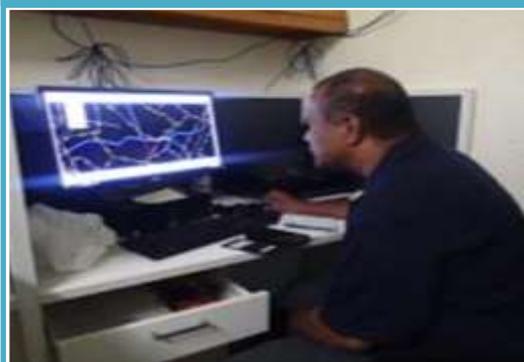
PGSC Working Groups

Positioning



Supporting countries to modernise their Geodetic Reference Frames and align to the Global model

Geospatial Policy & Data Management



Supporting countries to develop policies and tools for improved geospatial information and data management

Capacity Building



Supporting countries to build existing and future capacity through expanded professional development and educational opportunities



Strategic Partnerships

- Support from AU-DFAT, NZ-MFAT, UN-GGIM.
- **Training and capacity support** from Geoscience Australia, LINZ, UN-GGIM, FIG, UKHO, USP, UNOOSA, NOAA, SPC
- **Equipment and infrastructure** support from GA, SPC
- **MoU** signed with S+SNZ (2018) and SSSi (2019)
- Links with key global and regional frameworks:
 - SDGs, UN-GGIM Roadmap, Sendai Framework, SAMOA Pathway, FRDP, FIG Suva Statement and Christchurch Declaration

Pacific and New Zealand surveying and geospatial professionals join forces for capacity development



MoU signed with S+SNZ April 2018



MoU signed with SSSi Aug 2019





Global Geodetic Reference Frame

The UN-GGIM Roadmap...

In February 2015 the UN General Assembly adopted the resolution “A Global Geodetic Reference Frame for Sustainable Development” - the first resolution recognizing the importance of a globally-coordinated approach to geodesy.

As per UN Resolution A/69/L.53

In the Pacific...Australia, Fiji, New Zealand, Papua New Guinea, Samoa, Solomon Islands, Tuvalu, Vanuatu

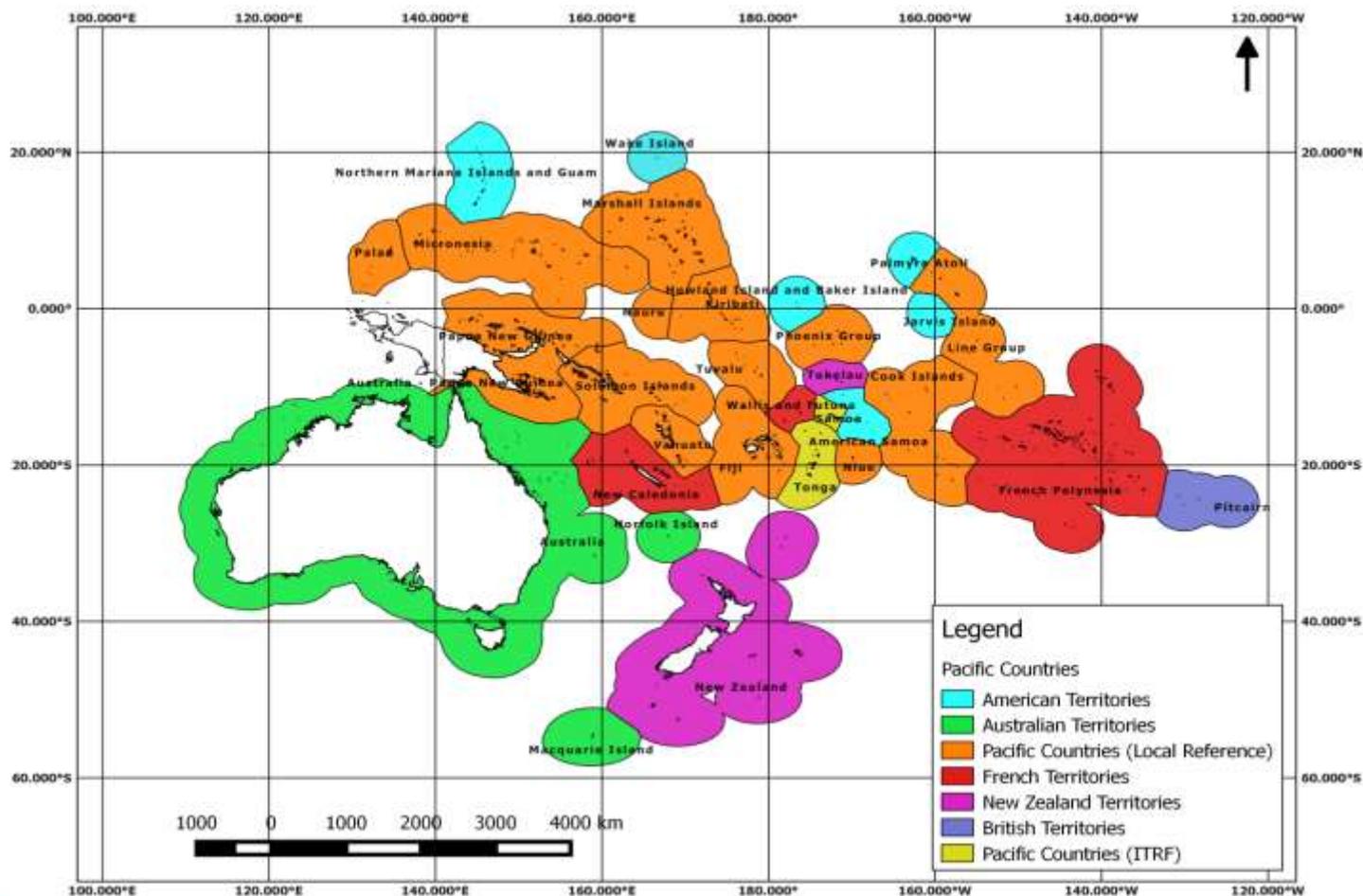


UN-GGIM
UNITED NATIONS INITIATIVE ON
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT



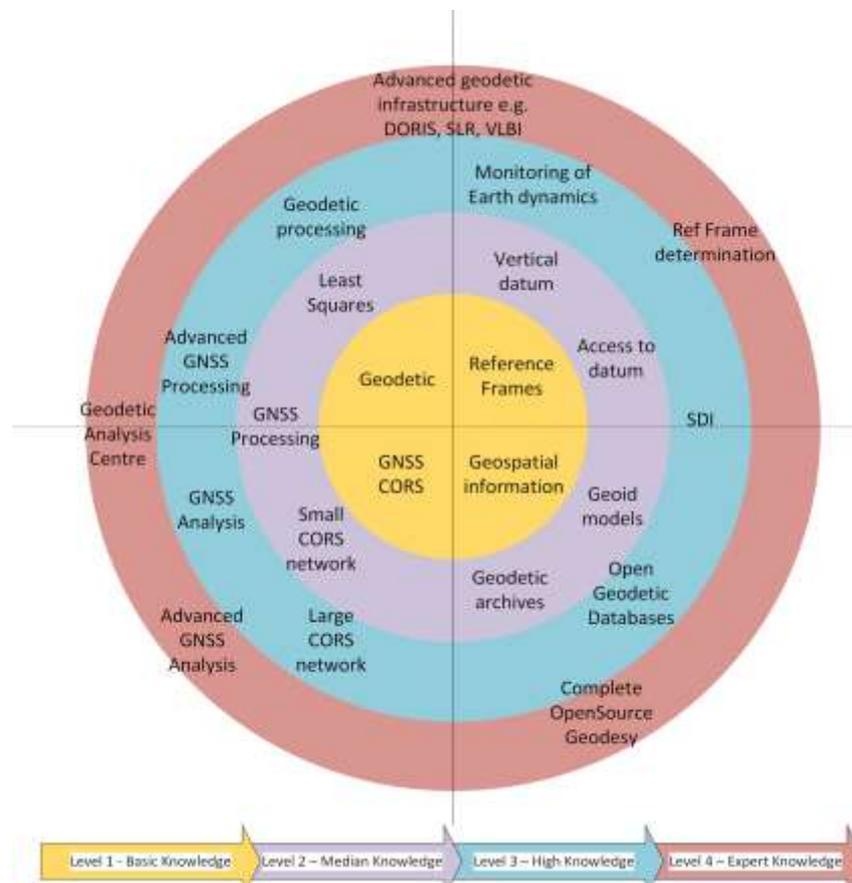


Geodetic Reference Frame - Pacific



Geodetic Reference Frame - Pacific

- Modernise Geodetic Reference Frame
- Define the geodetic infrastructure aligned to Global Geodetic Reference Frame (GGRF)
- Compatible with IGS and positioning technology
- Near real time positioning for disaster risks and hazards
- Monitoring Earth dynamics
- Enhance geospatial capacity and capability





Pacific Sea Level & Geodetic Monitoring Project

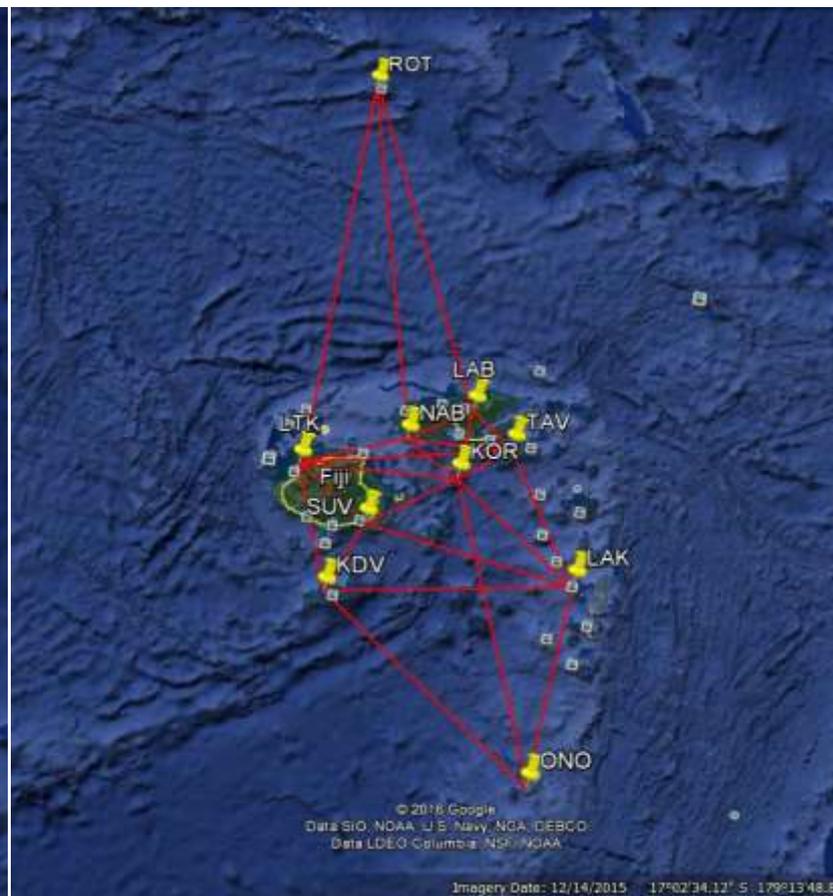


GNSS COR Station

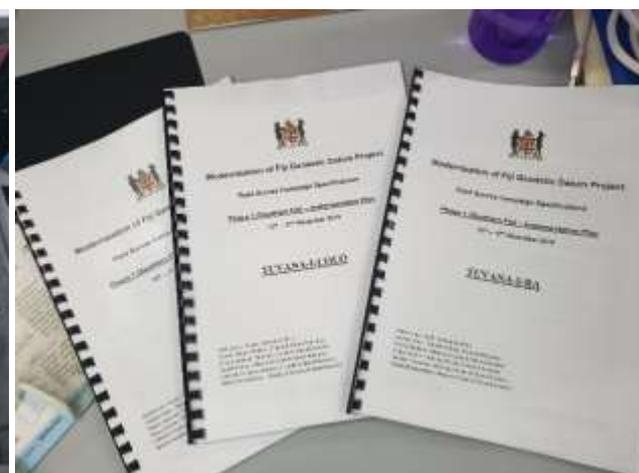


Tide Gauge Station

The Geodetic Infrastructure



Geodetic Networks – National & Local



Geodetic Survey Operation Training & Skills

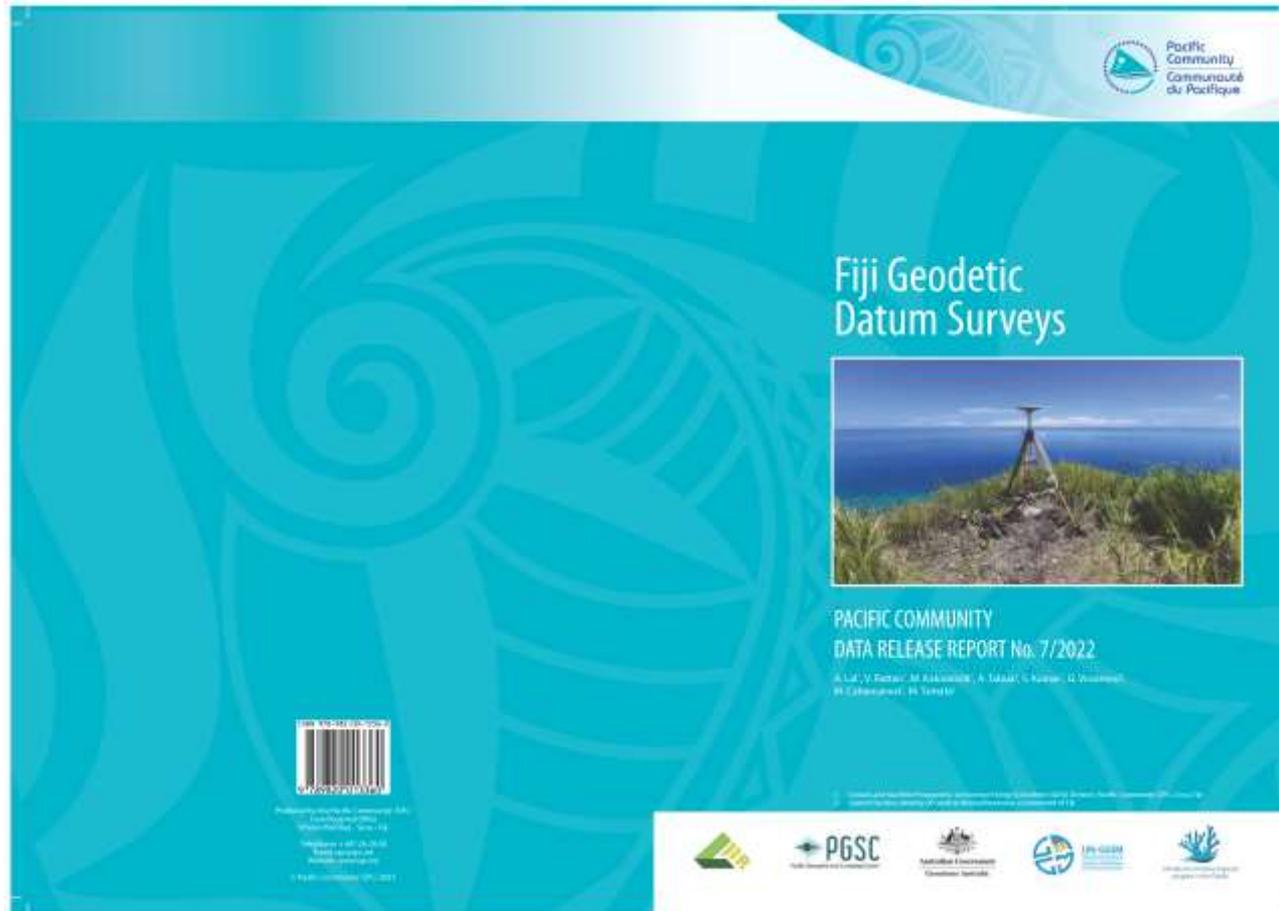


Geodetic Survey Data & Info Handling Capacity

- **Data Storage Capacity**
- **Data Downloading**
- **Data Conversion**
- **Data format & structure**
- **GNSS Survey Data Occupation Summary**
- **Locality Diagrams**
- **Field Survey Sheets**
- **Data Sources (old survey info)**
- **Check and verify meta data**



Geodetic Data Release Report





Benefits

- Operational Capacity
- Data Processing & Analysis Capacity
- Data Storage
- Data Sharing
- Data Downloading
- Data Conversions
- GNSS CORS maintenance and infrastructure
- Data accessibility



Workplan – Geospatial Reference System

- Survey Data Processing and Analysis
- Survey Results
- Transformation Parameters
- Transformation Tools
- GNSS CORS infrastructure maintenance plan
- Data Sharing and management
- Capacity Building & Advocacy
- Monitoring GNSS CORS
- Definitions – Vertical Reference Frame
- Definitions – Global Geodetic Reference Frame
- Cadastral and Topographical datasets (geospatial data transformations)
- Further collaboration efforts and partnerships



Capacity Development in the Pacific Regionin progress

Positioning Pacific Island Countries and Territories for the Future



THANK YOU

