





Pacific Geospatial and Surveying Council

UN-GGIM International Seminar on Effective and Integrated Marine Geospatial InformationManagement

Session 6; Partnerships, capacity development and advocacy for integrated marine geospatial information 12 May 2022, Singapore.

Andrick Lal - Pacific Community (SPC)

Pacific Geospatial & Surveying Council (PGSC) Partnership Desk

Email: andrickl@spc.int and pgsc_desk@spc.int

http://pgsc.gem.spc.int/



Blue Pacific

22 Countries and Territories

10 million people

28 million square kilometres

20% of the world's EEZs



What is the PGSC?

- The 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 (GEM Division SPC)





Pacific Geospatial and Surveying Council 2018





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 Charter

- Drafted by committee in 2014 at inaugural PGSC meeting
- Endorsed by 11 Pacific Governments at Ministerial Level in 2015-2016
- Endorsed by Fiji at Cabinet Level in 2016

GOVERNEMENT DE LA REPUBLIQUE DU VANUATU SERVICE DES TERRES, SERVICE TOPOGRAPHIQUE, REGISTREMENT DES HYPOTHÈQUES

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REPUBLIC OF VANUATU DEPARTMENT OF LANDS, LAND SURVEY AND LAND REGISTRY

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29th April 2015

HON. RALPH REGENVANU MINISTER OF LANDS & NATURAL RESOURCES

Re: Seeking Endorsement of Pacific Geospatial and Surveying Council Charter

Dear Hon, Minister,

As geospatial technology has improved over the last few decades, Pacific governments have come to rely more and more upon accurate mapping to inform decision-making around the issues of coastal development, natural resource management, disaster risk reduction and climate change adaptation. In order to continue to improve these services, it is critical that our regional geospatial resources are

At last year's Geographic Information Systems/ Remote Sensing Conference in Suva (November 23-27), lands and ocean survey representatives from across the Pacific gathered to discuss and outline a strategy for advancing geospatial information and improving collaboration and coordination of

One of the key outcomes of this meeting was the resolution to establish a regional body of surveyors- the Pacific Geospatial and Surveying Council (PGSC). The purpose of such a regional body is to address regional challenges, such as training and capacity building, as well as to further development and standardisation of geospatial information gathering, dissemination, and application. This resolution has been a long time in the making and was, in fact, one of the recommendations from the Pacific FIG (International Surveyors Federation) Symposium in 2013, in a document called 'The Suva Statement on Spatially Responsible Governance.'

Honorable Minister, a copy of the proposed PGSC Charter is attached for your review and endorsement

- 1. That the Pacific Geospatial and Surveying Council (PGSC) Charter is endorsed
- 2. That Martin Sokomanu, Surveyor General is appointed as representative from the Republic of Vanuatu to the Pacific Geospatial and Surveying Council. (PGSC)
- 3. That your decisions on (1) and (2) above are relayed to the SPC Geoscience Secretariat.

Please feel free to contact me with any concerns, questions or suggestions regarding this document. I look forward to your positive response and appreciate the opportunity to represent Vanuatu as we lead this important regional initiative.





MEMORANDUM

Permanent Secretary for Lands and Mineral Resources 77

Secretary to the Cabinet From:

Date: 18 April 2016

Cabinet Decision Subject:

Enclosed please find Cabinet Decision No.78 on the subject of Pacific Geospatial and Surveying Council for insertion in File No. 1/1/2686 or in an appropriate file.

Please acknowledge receipt

for Secretary to the Cabinet

Enc

To:

CP (2016): Written Opinion 13/04/16

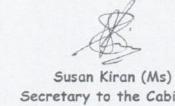
CABINET DECISION Wednesday 13th April, 2016

Pacific Geospatial and Surveying Council - 1/1/2686

CP(16)61

Cabinet, by Written Opinion:

(i) agreed that Fiji endorse the Pacific Geospatial and Surveying Council Charter, and become a member of the Pacific Geospatial and Surveying Council.





Secretary to the Cabinet

PGSC Charter

Outlines

- Membership

- Core Member (countries lands & survey, geospatial, hydrographic professionals)
- Observer (organisation, institution)
- Expert Contributor

- Meetings

- Every 1-2 years

- Working Groups

- May be established to address technical issue or conduct specific activity
- Responsibilities of Chair/ Vice Chair
- Administration & Governance
 - Governed by members







VISION

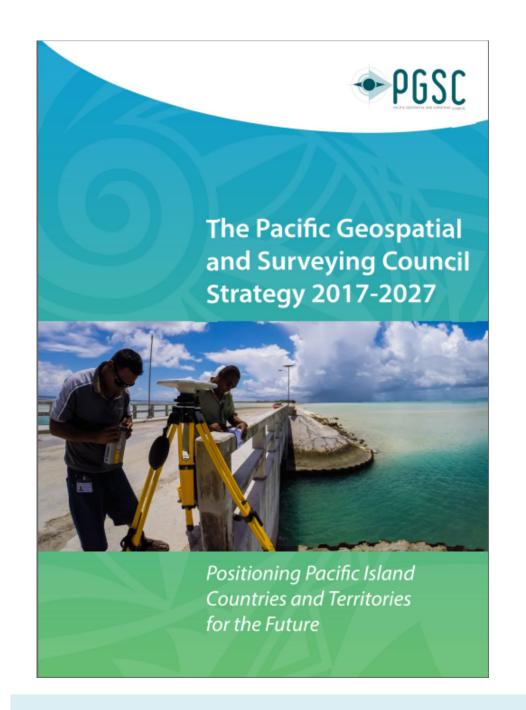
Sustainable development in the Pacific enabled by world class geospatial information and surveying services





PGSC Strategy







The late Prime Minister, Hon. Samiuela 'Akilisi Pōhiva launched the world's first regional strategy for surveying & geospatial development on 10 April 2018 in Nuku'alofa, Tonga

Also pictured, the Australian High Commissioner, New Zealand High Commissioner, Japanese Consulate, UNGGIM, and the Pacific Community (PGSC Partnership Desk)

PGSC Strategy

- Workshopped and developed collaboratively at the 2015 PGSC Meeting
- Drafted by the PGSC Strategy
 Drafting Committee
- Edited and reviewed by MEL consultants
- Content endorsed by the PGSC in November 2016
- Officially launched at PGSC meeting in April 2018









PGSC Working Groups

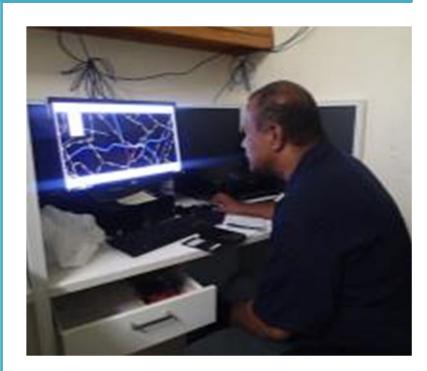


Positioning



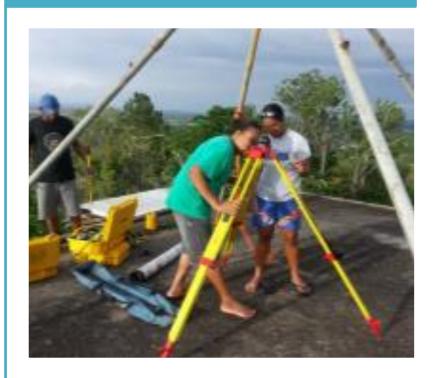
Supporting countries to modernise their Geodetic Reference Frames and align to the Global model

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

- Donor support from AU-DFAT, NZ-MFAT, UN-GGIM
- Training and capacity support from Geoscience Australia, LINZ, UN-GGIM, UN-GGIM-AP, FIG, UKHO, USP, UNOOSA, 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

0 Apr 2018 | Nuku'Alofa



MoU signed with S+SNZ April 2018



PGSC Partnership Desk - SPC

- Surveying and Geospatial
- Remote Sensing
- Drone Operations
- Maritime Boundaries
- Geology
- Hydrography
- Oceanography
- Law and Policy
- Stakeholder engagement
- Training
- Communications
- Procurement
- Management
- Advocacy
- Capacity Development
- Resource Development





PGSC Partnership Desk receives
SPC DG Award for Member
Collaboration Dec 2018







More Recent Activities

Tuvalu Geodetic Surveys - Nine (9) atolls (2016-2019)

GA donates GNSS equipment to PGSC Desk (2019)

Pre-campaign GNSS Operational Training for Fiji Lands (2019)

Survey team support for Fiji Geodetic Modernization Campaign (2019-2020)

GNSS Data Processing & Analysis – Tonga Survey Office (2019)

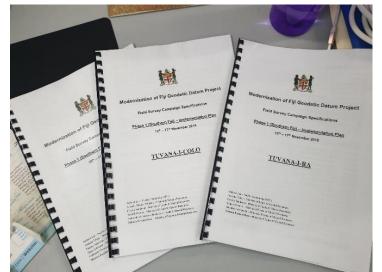
Virtual AUSPOS Training – Tuvalu Survey Team (2020)

Fiji Institute of Surveyors Website (2019)

Tuvalu Geodetic Surveys Data Processing, Analysis and Reporting (2020-2021)

Fiji Geodetic Surveys Campaign Survey Data Compilation, Data Processing and Analysis (2020-2021)















Surveyors are professional people whose academic qualifications and post-graduate training enable them to advise on the management and use of land and property, both rural and urban and whether developed or undeveloped.

Surveyors understand the legislation governing land and property; the markets trading in it; the services supporting it; and the economics of construction, management, maintenance, acquisition and disposal.

of the land or the sea, and which may be carried out in association with other professionals

II AUGUST 2019

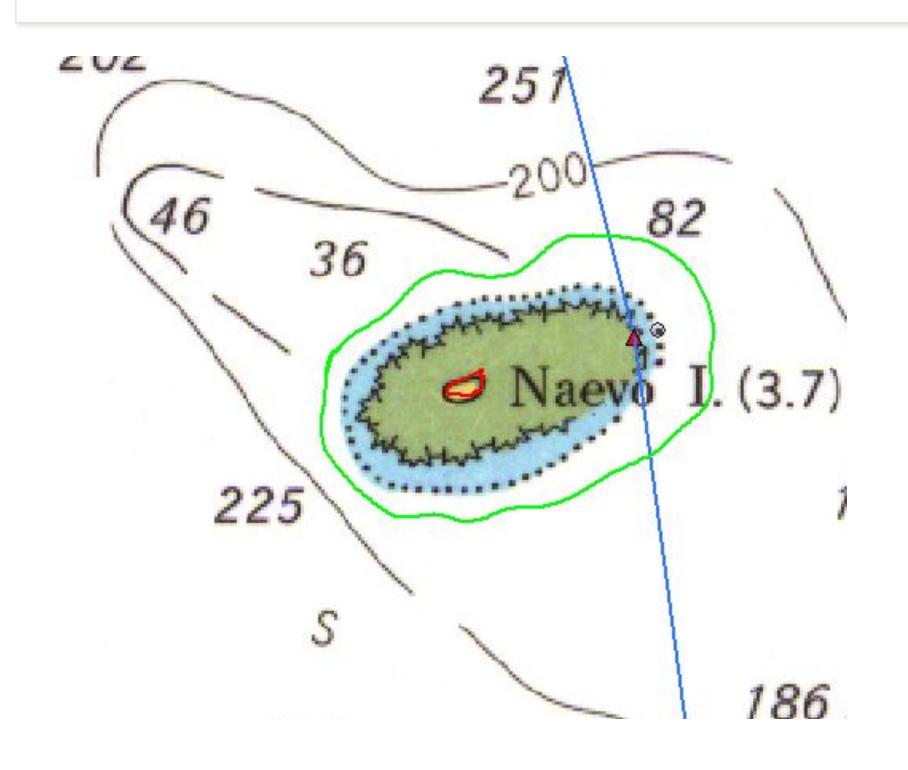
TITUTE OF SURVEYORS CONGRESS 2018

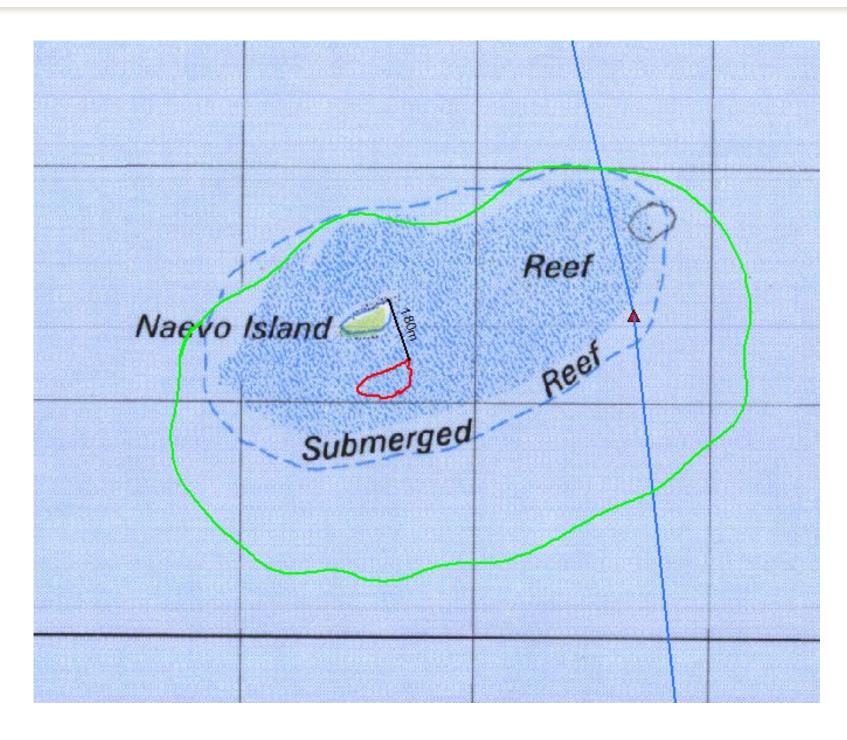
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Positioning

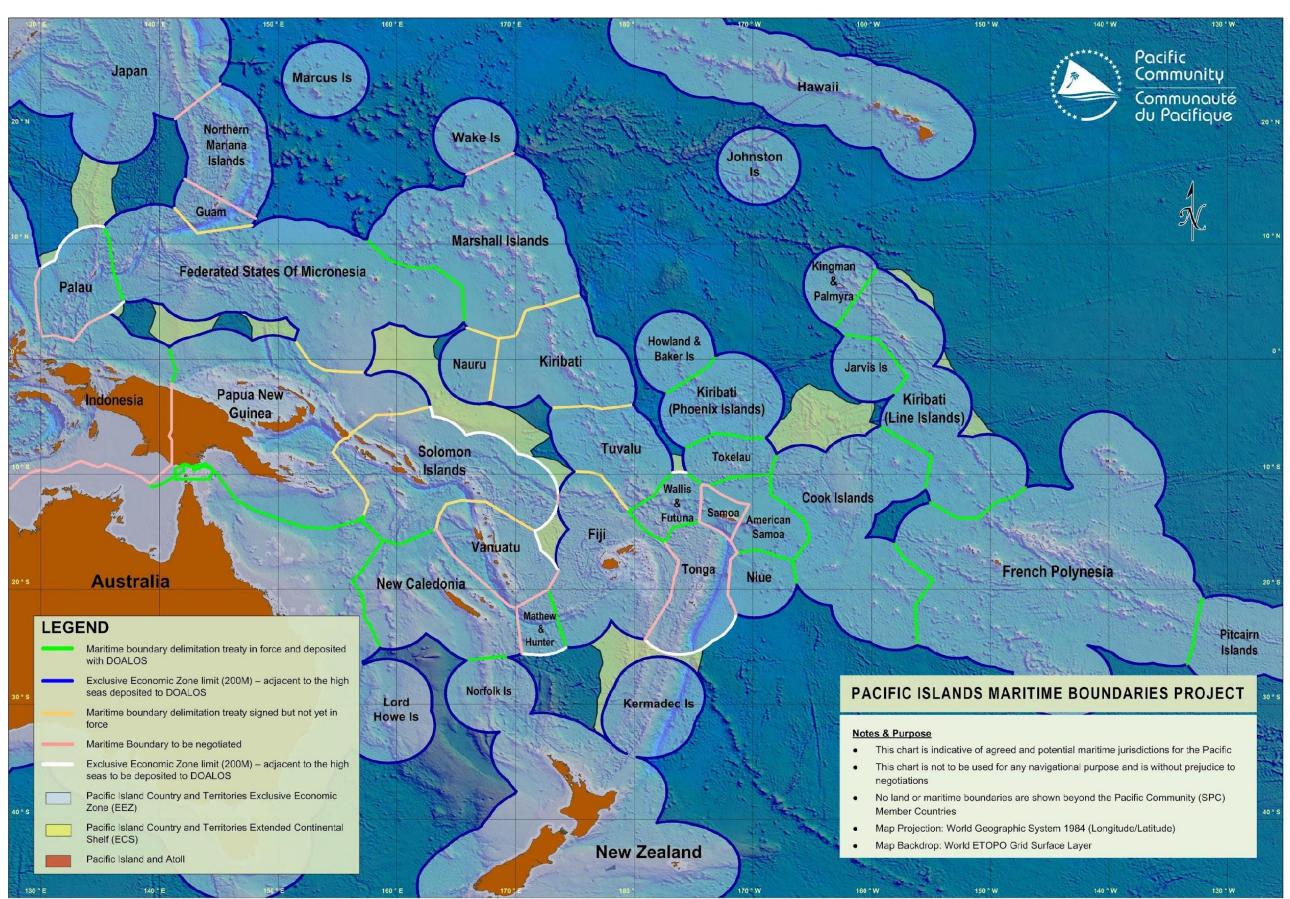






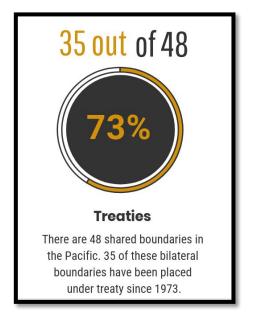
Pacific Maritime Boundaries













19

Number of treaties signed through the decades 15 12.5 10 7.5 5 2.5 Progress

The number of treaties signed has increased in response to strengthened regional cooperation

nt Paper Size: ISO A

Copyright © Oceans and Maritime Programme – Geoscience, Energy & Maritime Division, Pacific Community (December, 2019)

Pacific Maritime Boundaries - Consortium















































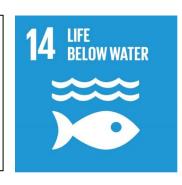






FRAMEWORK FOR A PACIFIC OCEANSCAPE

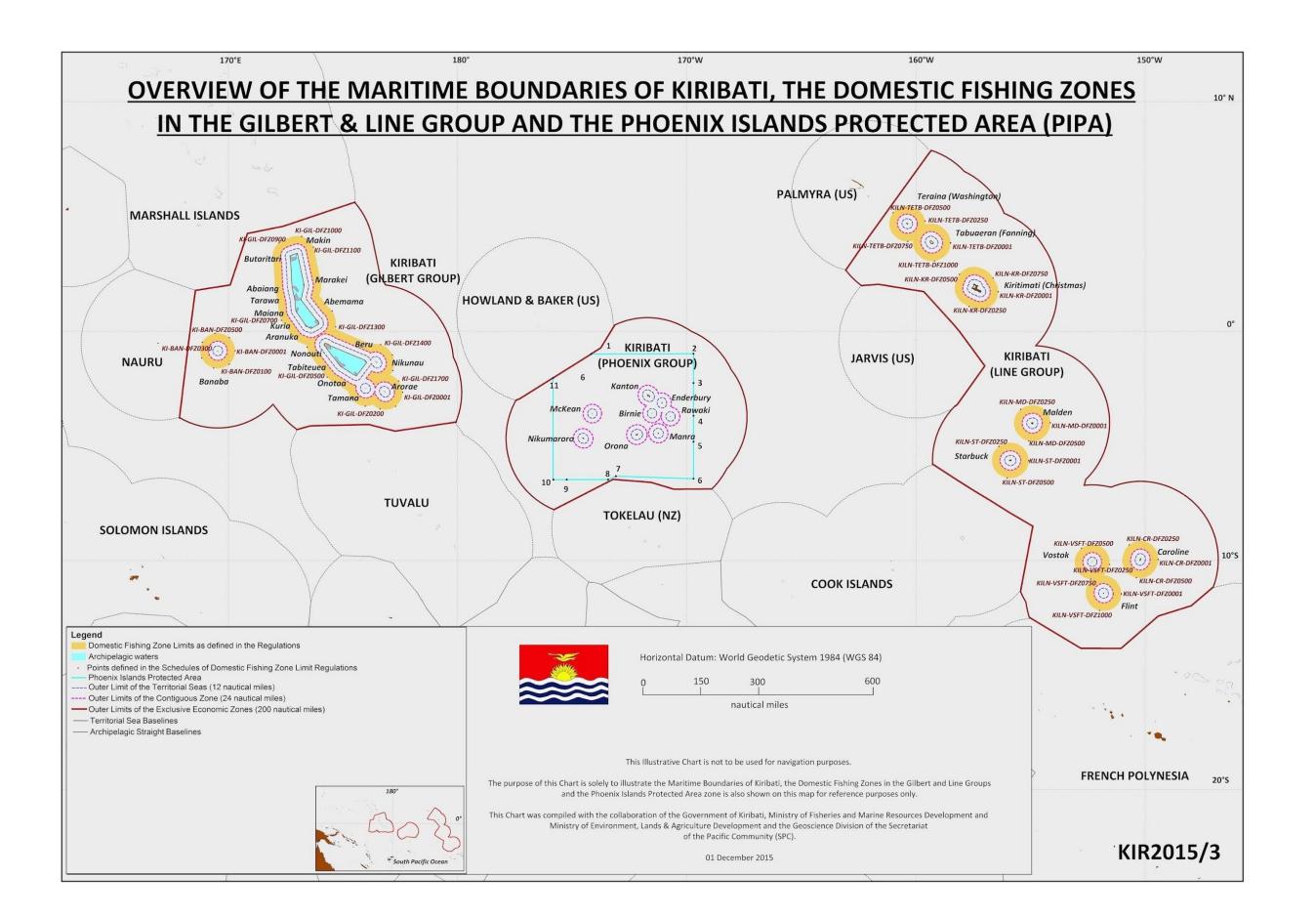
Priority 1



TARGET 14.C
Implement
international law:
UN Convention on the
Law of the Sea

Maritime Boundaries Data Sets





- PIRMBIS Database
- Data Hub
- Dashboard
- SPC & FFA SLA VMS
- S121 & S122

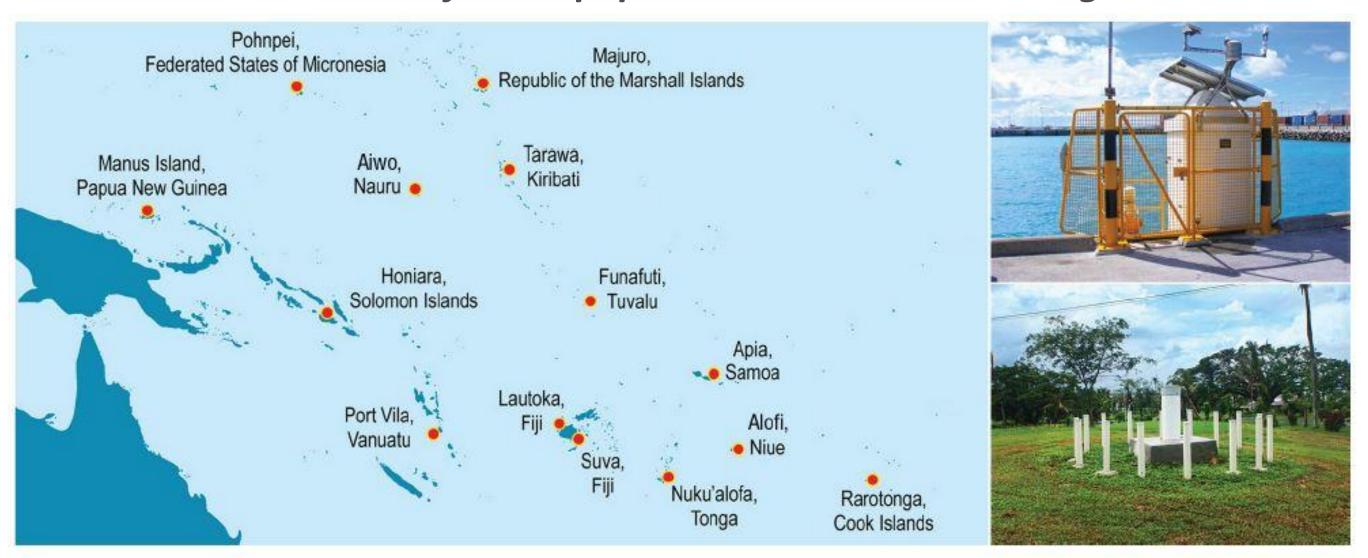
Pacific Sea Level & Geodetic Monitoring



<u>Earth Monitoring</u>: Permanent GNSS monument with continuously operating reference station

<u>Sea Level Monitoring</u>: Permanent SEAFRAME station with continuous monitoring of instantaneous sea level

Co-Location of this equipment at 13 sites in the region



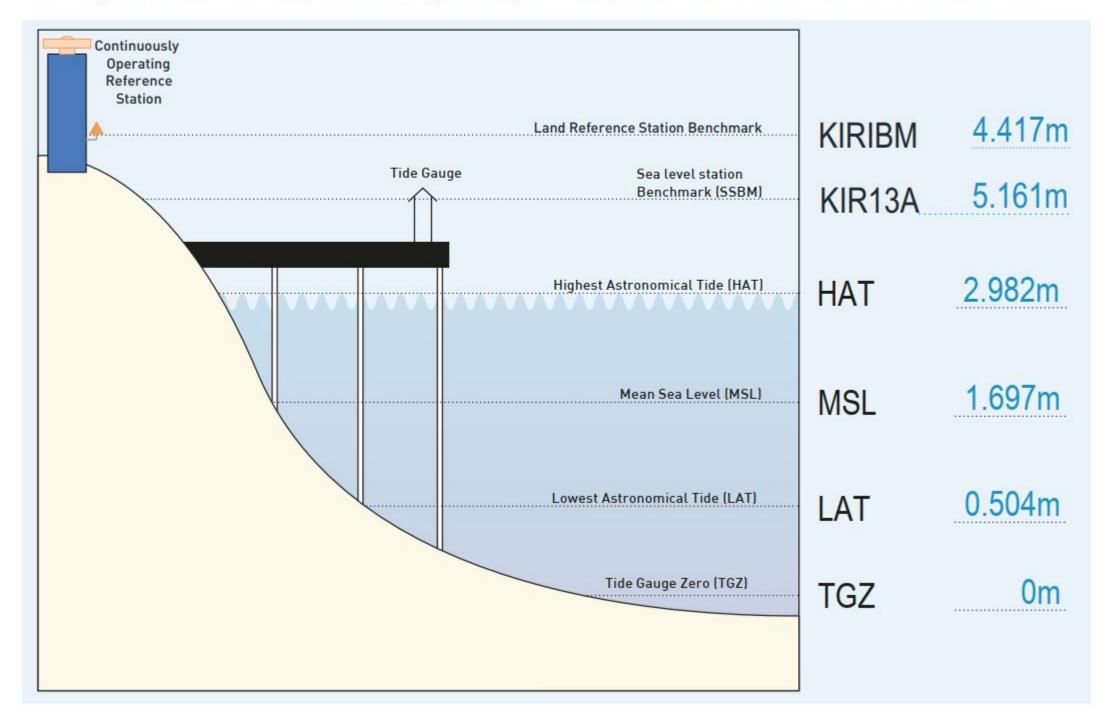
Pacific Sea Level & Geodetic Monitoring



Connecting Land to Sea

Betio

The diagram below shows the predicted heights of key tide components based on averages of the data available.



Pacific Geospatial and Surveying Council 2020

The Pacific Geospatial and Surveying Council 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.







Invita







The Pacific Geospatial and Surveying Counce that provides a forum for Pacific Island geos and address regional challenges.

In November 2014, a group of Pacific region margins of the annual Pacific Geospatial Info Conference in Suva, Fiji. It was at this meeting











g adaptation, diseaser risk reduction, transport, land ownership, health, and agriculture to name a few.

The SFG is the principal scientific and technical organisation in the Pacific region, proudly supporting for the principal scientific and technical organisation in the Pacific region, proudly supporting for the SFG condicts Survey Feam deliver professional advice and services to the PFCEs. This primarily involves provision of Instrumentation, orasite technical guidancer surgeries on a proper on animones, processing and management of geodetic data; geodetic datum and positioning in matters; GNSS base stations; GNSS measurements for survey control, monitoring, cadasted or geospatial matters; GNSS base stations; GNSS measurements for survey control, monitoring, cadasted or geospatial monitoring surveys, including assisting with tide gauge measurements for the Pacific Sci. Level & Monitoring Project in th

with tide gauge measurements for the partice Sea Leed & Monitoring Project in the Pacific Sca. Leed & Monitoring Project in the Pacific Sca. Leed & Monitoring Project in Sca. Leed & Leed & Leed & Leed & Leed Scraigle 2017-5027. The responsibilities of regional surveyors and geospatial managers frequently correspond to broader initiatives, which all contribute toward achievement of United Nations Sastalizable Development Goals. The PUSC relies upon collaboration, and is an important contributor towards seatching positioning and geospatial information and proposed and proposed in management.





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and webnars on identified geodetic or geospatial topies and challenges. Recently, in August 2020, the 5th Pselfic Geospatial and Surveying Control of the 100 pt. 100 pt. 100 pt. 100 pt. 100 pt. the 111 to 14th and 25th August 2020, and was hosted by the SPC in Surve, Fiji. There were almost 200 attendees each day, to participant in virtual panel discussions on presentations from international experience produces and produces of the 100 pt. 10



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Pacific Geospatial & Surveying Council Facebook Page

https://www.facebook.com/groups/3998884766792177/





Emerging Opportunities



- Develop & maintain operationalisation of the IGIF through country action plan
- Digital Earth Pacific
- Global Geodetic Centre of Excellence Affiliation
- Adopt, align and enhance Global Geodetic Reference Frame in the region
- Maintain the Partnership Desk at SPC
- Establish pool of experts for capacity in expertise and skills





Thank you and Vinaka