



Pacific
Community
Communauté
du Pacifique



Pacific Geospatial and Surveying Council

12th UN-GGIM AP Plenary Meeting
Bali, Indonesia

Mr Asakaia Tabua

Pacific Geospatial & Surveying Council (PGSC)

Email: pgsc_desk@spc.int

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

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)



4th PGSC Meeting 2018– Tonga



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

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

5th PGSC Meeting 2020– Virtual



The 5th Pacific Geospatial & Surveying Council Meeting

11-12 August 2020- Open Participation

- Formal opening
- Regional updates and emerging issues

13-14 August 2020- Members Only

- PGSC business and governance

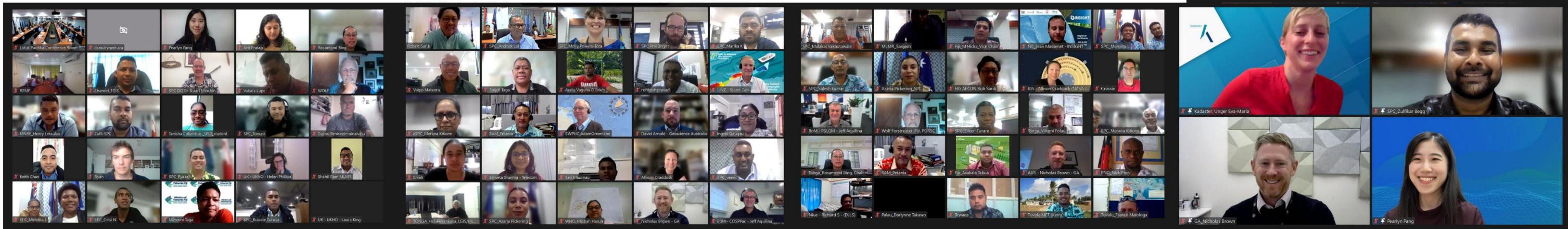
Invitations, agenda, and details to follow
Contact pgsc_desk@spc.int with queries



PGSC Plenary Session 2022

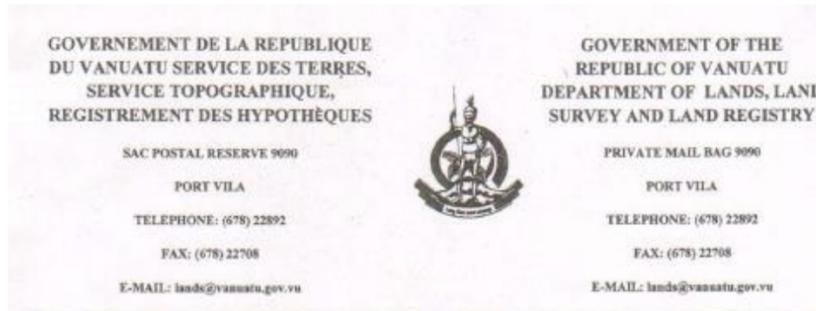


- Review of PGSC Strategy (2017 – 2027)
- Pacific Geospatial Women Network
- PGSC Working Groups
- PGSC Support and the Partnership Desk
- UN-GGIM IGIF Country Action Plan (Fiji and Tonga)



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



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 further developed.

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 activities in the region.

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.

Recommendations:

1. That the Pacific Geospatial and Surveying Council (PGSC) Charter be endorsed.
2. That Martin Sokomanu, Surveyor General is appointed as representative of Vanuatu to the Pacific Geospatial and Surveying Council. (Enclosure)
3. That your decisions on (1) and (2) above are relayed to the Secretary of the Council.

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.

Sincerely,



Endorsed by: **Ralph Regenvanu**
Minister of Lands and Natural Resources



VANUATU



MEMORANDUM

To: Permanent Secretary for Lands and Mineral Resources *M. Lotawa*
 From: Secretary to the Cabinet
 Date: 18 April 2016
 Subject: Cabinet Decision

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.

M. Lotawa (Ms)
for Secretary to the Cabinet

Enc

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

SOLOMON ISLANDS

DECISION
18 April, 2016

FSM

78. Pacific Geospatial and Surveying Council - 1/1/2686

CP(16)61

Cabinet, by Wri **KIRIBATI**

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

MARSHALL ISLANDS

Susan Kiran (Ms)
Secretary to the Cabinet

FIJI

*(b) PS Sec.
1. Pl. place a copy in Cabinet Paper/Decision file*

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

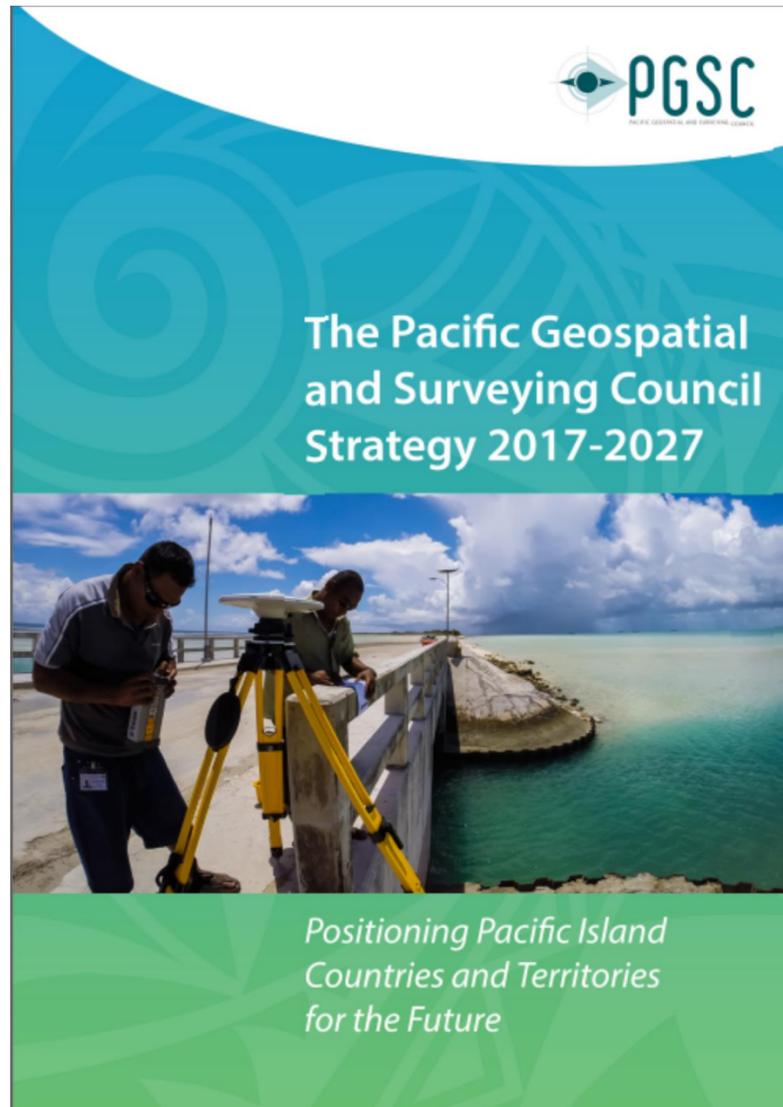


PGSC Strategy

- 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 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 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-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

10 Apr 2018 | Nuku'Alofa



MoU signed with S+SNZ April 2018



MoU signed with SSSI Aug 2019



PGSC Partnership Desk - SPC



- Geological Surveys
- Hydrography
- Oceanography
- Geospatial Data Management
- Surveying and Geospatial
- Remote Sensing
- Maritime Boundaries
- UAV Surveys
- Law and Policy
- Stakeholder engagement
- Training
- Communications Procurement
- Management
- Advocacy
- Capacity Development
- Resource Development



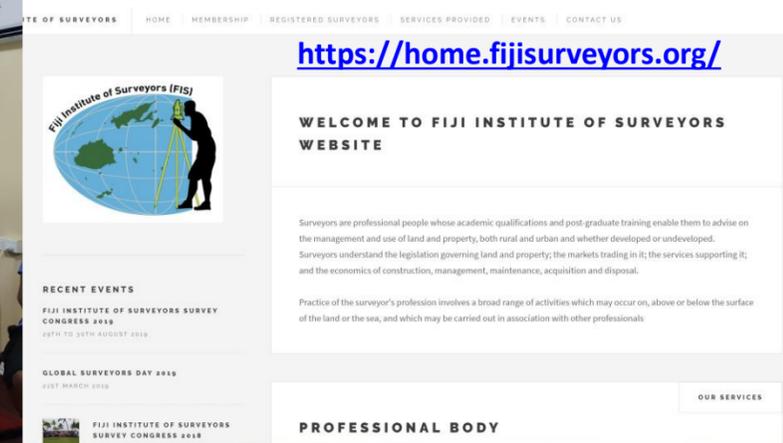
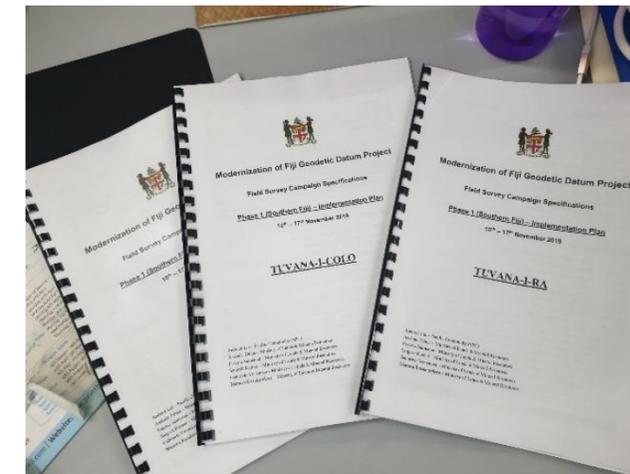
PGSC Partnership Desk receives SPC DG Award for Member Collaboration Dec 2018



Partnership and Collaboration National, Regional and International UNOOSA Workshop, Suva 2019

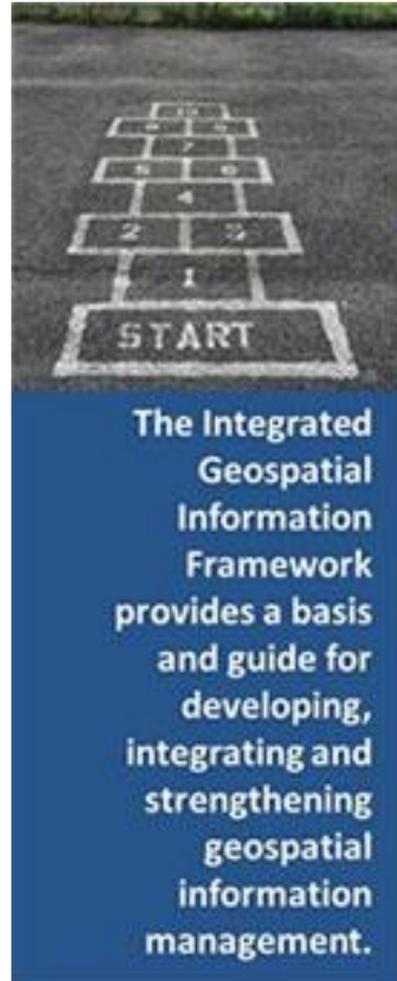
Recent Activities

- Tuvalu Geodetic Surveys, Data Processing, Analysis & Reporting
- GNSS Equipment Pool – PGSC Desk
- Geodetic Survey Operations & Data Management
- Datum Modernization – Fiji, Tuvalu, Tonga, Vanuatu, PNG (ARoB)
- GNSS Data Processing, Analysis & Reporting
- Virtual Survey Capacity Training – Survey Teams
- Fiji Institute of Surveyors Survey Congress and Website
- GNSS CORS - Fiji





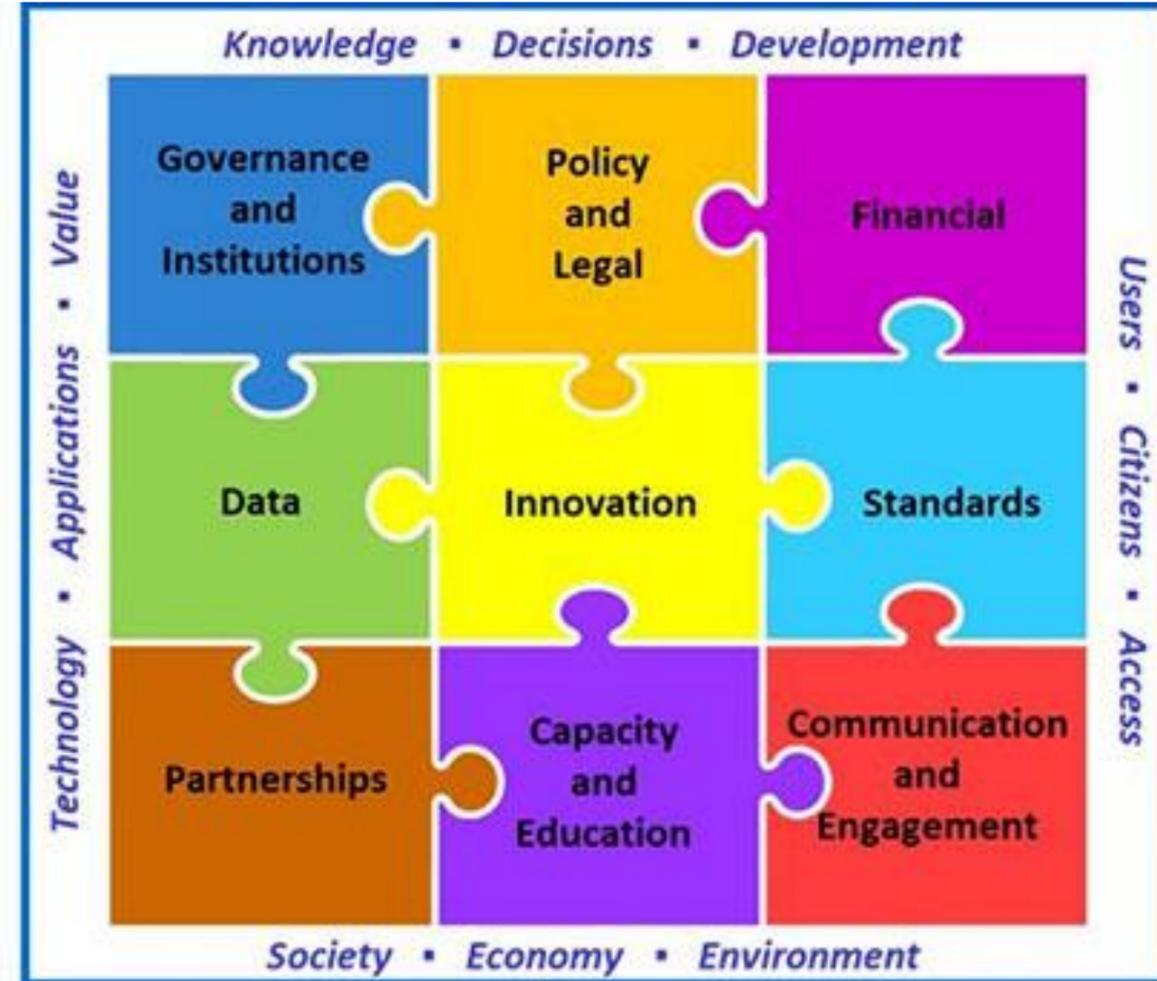
United Nations Committee of Experts on Global Geospatial Information Management



Governance →

Technology →

People →



Sub-committee on Geodesy

Expert Group on Land Administration and Management

Expert Group on Marine Geospatial Information





United Nations Committee of Experts on Global Geospatial Information Management



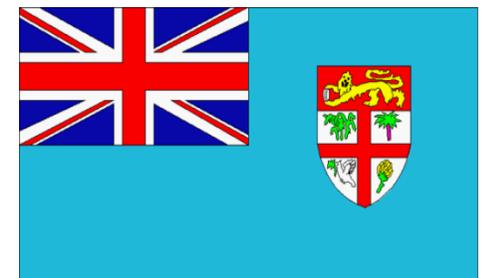
11TH TRANCHE DEVELOPMENT ACCOUNT PROJECT
STRENGTHENING GEOSPATIAL INFORMATION MANAGEMENT IN DEVELOPING COUNTRIES
TOWARDS IMPLEMENTING THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT
(PROJECT 1819D)

COUNTRY-LEVEL ACTION PLAN

ADDENDUM L

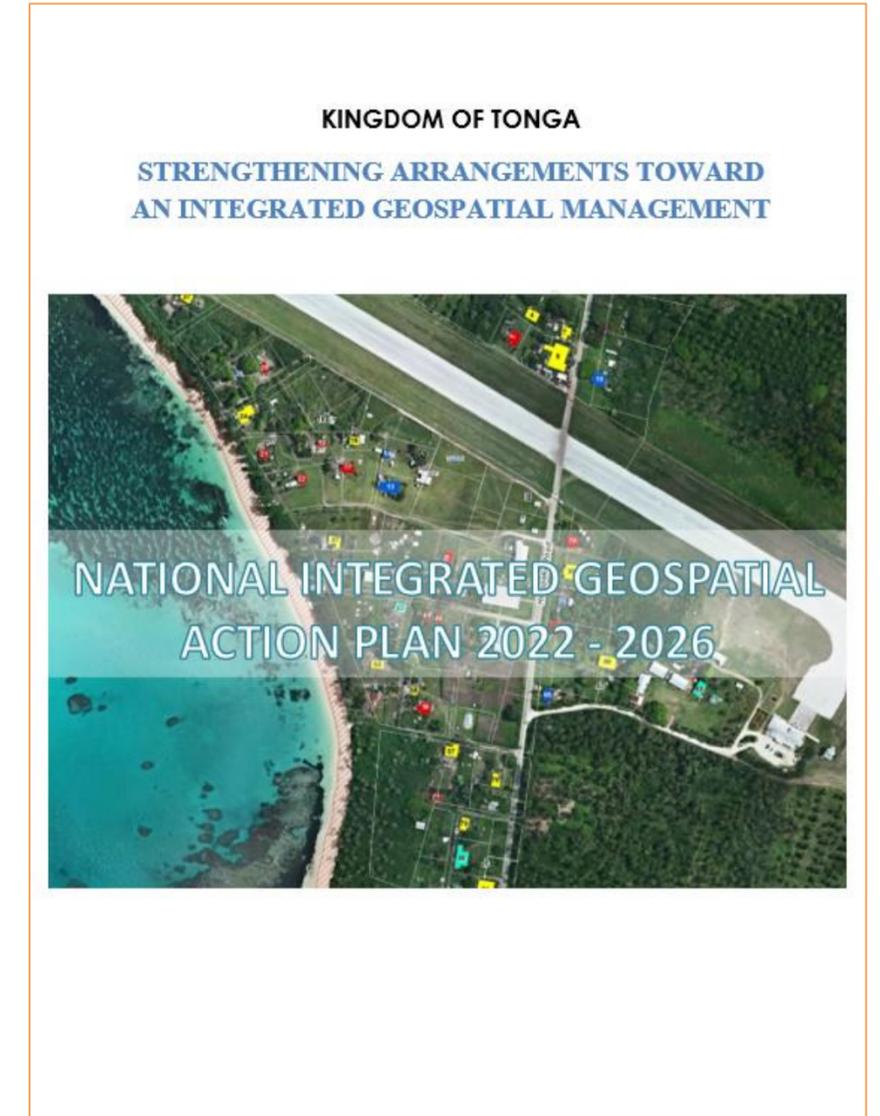
TOWARDS STRENGTHENING ARRANGEMENTS IN NATIONAL GEOSPATIAL
INFORMATION MANAGEMENT

[Republic of the Fiji Islands]





United Nations Committee of Experts on Global Geospatial Information Management

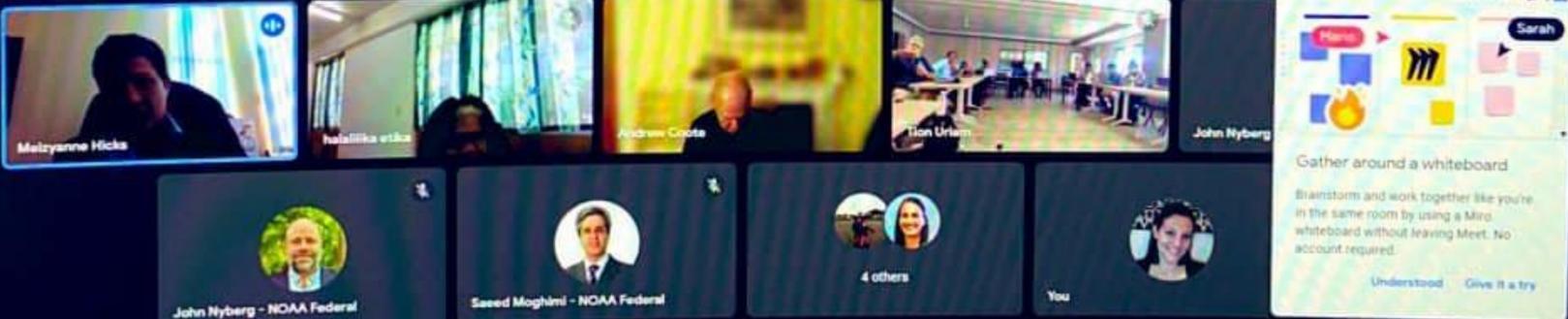


Kiribati and UN-GGIM IGIF

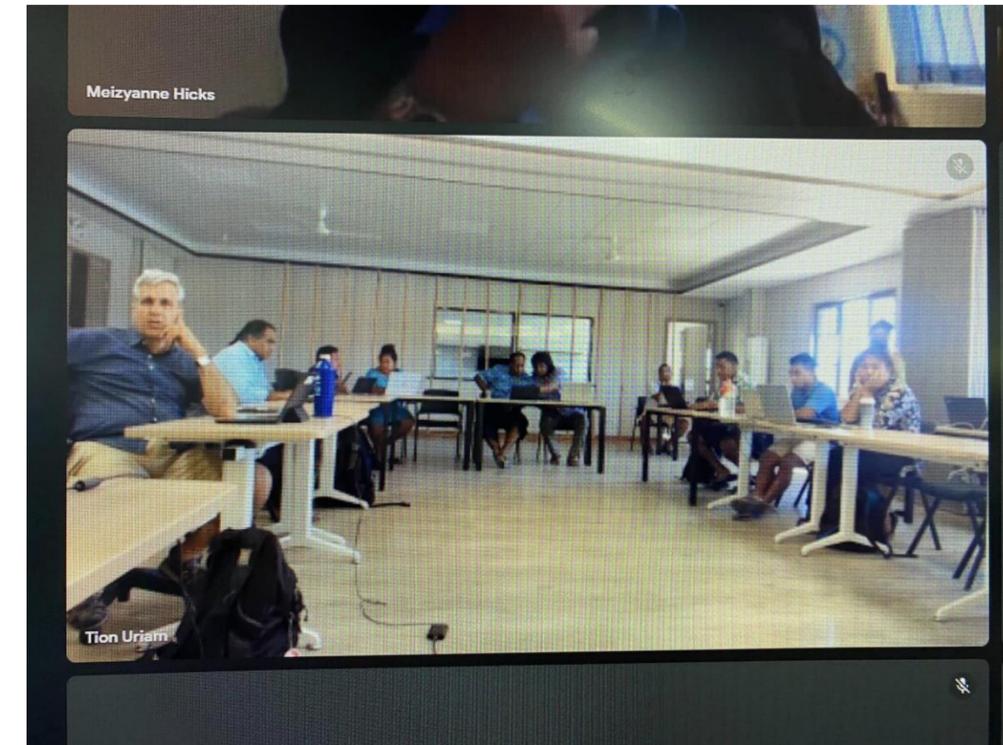
John Nyberg - NOAA Federal is presenting

Experiences

- ▶ Employing team members to work on the CAP
- ▶ Understanding what needs to be done
- ▶ Being determined
- ▶ Consultation with Stakeholders
- ▶ Approval from the highest level
- ▶ Sharing our journey with our friends in the Pacific region



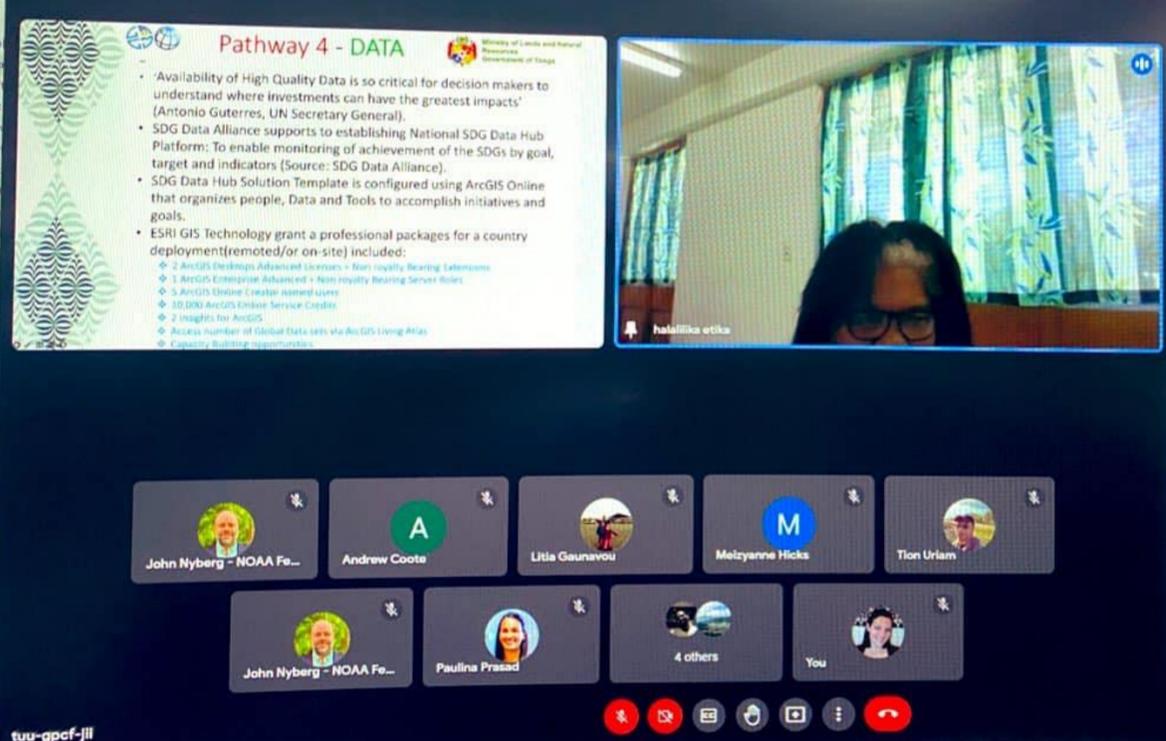
The bottom section of the slide shows a Zoom meeting interface. It includes a grid of video thumbnails for participants: Meizyanne Hicks, halalika etika, Andrew Coota, Tion Uriam, and John Nyberg. Below the grid are profile cards for John Nyberg - NOAA Federal, Saeed Moghimi - NOAA Federal, 4 others, and You. A whiteboard titled "Gather around a whiteboard" is also visible, with a description: "Brainstorm and work together like you're in the same room by using a Miro whiteboard without leaving Meet. No account required." and buttons for "Understood" and "Give it a try".



Pathway 4 - DATA

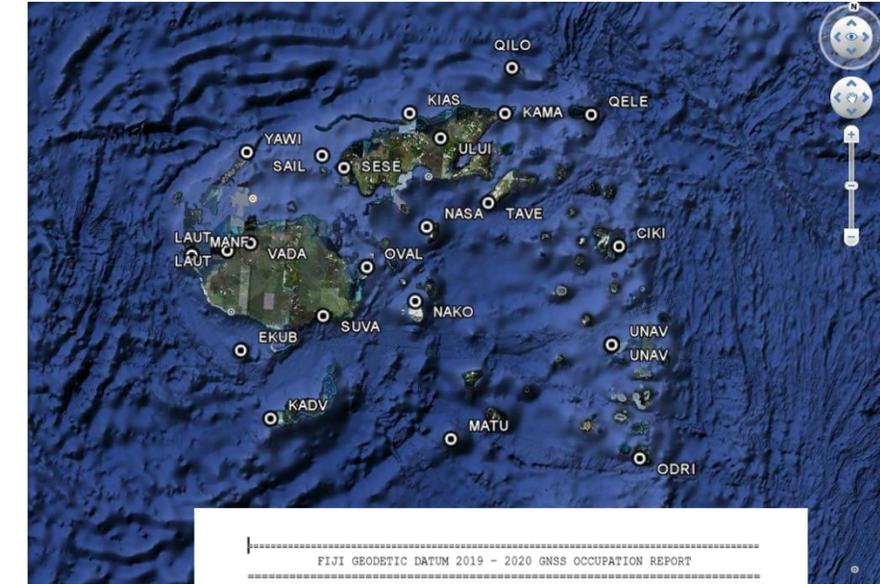
Ministry of Lands and Natural Resources
Government of Kiribati

- 'Availability of High Quality Data is so critical for decision makers to understand where investments can have the greatest impacts' (Antonio Guterres, UN Secretary General).
- SDG Data Alliance supports to establishing National SDG Data Hub Platform: To enable monitoring of achievement of the SDGs by goal, target and indicators (Source: SDG Data Alliance).
- SDG Data Hub Solution Template is configured using ArcGIS Online that organizes people, Data and Tools to accomplish initiatives and goals.
- ESRI GIS Technology grant a professional packages for a country deployment (remoted/or on-site) included:
 - ◆ 2 ArcGIS Desktops Advanced Licenses - Non-royalty Bearing Licenses
 - ◆ 1 ArcGIS Enterprise Advanced - Non-royalty Bearing Server Roles
 - ◆ 5 ArcGIS Online Creator named users
 - ◆ 10,000 ArcGIS Online Service Credits
 - ◆ 2 Insights for ArcGIS
 - ◆ Access number of Global Data sets via ArcGIS Living Atlas
 - ◆ Capacity Building opportunities



The bottom section of the slide shows a Zoom meeting interface. It includes a presentation slide titled "Pathway 4 - DATA" with a list of bullet points. Below the slide is a grid of video thumbnails for participants: John Nyberg - NOAA Fe..., Andrew Coota, Lita Gaunavou, Meizyanne Hicks, and Tion Uriam. Below the grid are profile cards for John Nyberg - NOAA Fe..., Pauline Prasad, 4 others, and You. The Zoom meeting ID "tuu-gpcf-jll" is visible in the bottom left corner.

Field Surveys & Geodetic Datum



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FIJI GEODETIC DATUM 2019 - 2020 GNSS OCCUPATION REPORT

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STATION NAME: CEVA I RA

4 CHARACTER ID: CEVA

LOCATION: CEVA I RA I SLAND

COUNTRY: FIJI

TYPE OF SURVEY MARK: 20mmx1.220mm STEEL ROD ENCASED BY 30mmx0.5mm ALUMINIUM PIPE IN SITU IN CONCRETE.

ORTHOMETRIC HEIGHT OF SURVEY MARK: _____
(MEAN SEA LEVEL DATUM)

OBSERVATION START DATE/DAY: 09/11/2019

UTC TIME: 2257hrs

OBSERVATION END DATE/DAY: 17/11/2019

UTC TIME: 0007hrs

GNSS RECEIVER TYPE: TRIMBLE

=====

MODEL: TRIMBLE R10

SERIAL NUMBER: 5333441663

FIRMWARE VERSION: 4.81

GNSS ANTENNA TYPE: TRIMBLE

=====

MODEL: TRMR10

SERIAL NUMBER: 5333441663

HEIGHT OF GNSS ANTENNA ABOVE STATION MARK: 1.643m
(VERTICAL MEASUREMENT)

DESCRIPTION OF THE POINT ON THE GNSS ANTENNA
THAT THE ANTENNA HEIGHT REFERS TO:

BOTTOM OF QUICK RELEASE

ANTENNA HEIGHT TO ARP - 1.692m

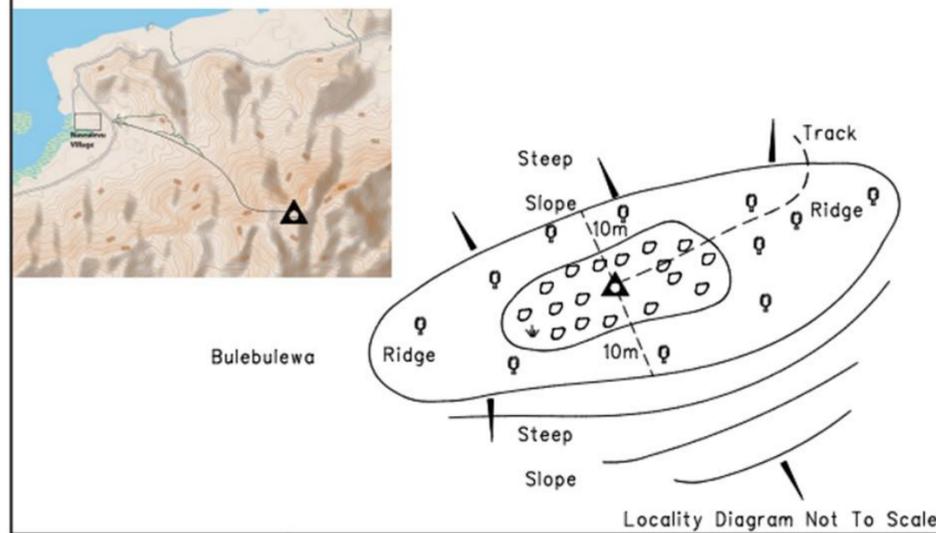
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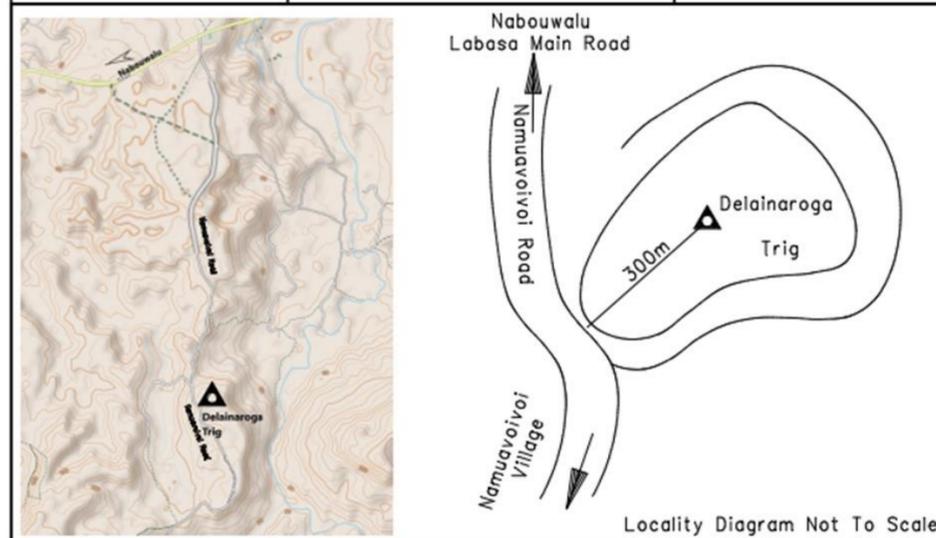
ATTACH ADDITIONAL INFORMATION AND DIAGRAMS THAT MAY BE USEFUL FOR PERSONS PROCESSING THE DATA AND ANALYSING THE RESULTS.

Geospatial Data Management

COUNTRY: FIJI ISLAND: VANUA LEVU PROVINCE: MACUATA	MINISTRY OF LANDS & MINERAL RESOURCE CONTROL SECTION	POINT ID: BULE DATE: 26-01-20 LDP: FJ133
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COUNTRY: FIJI ISLAND: VANUA LEVU PROVINCE: BUA	MINISTRY OF LANDS & MINERAL RESOURCE CONTROL SECTION	POINT ID: ROGA DATE: 26-01-20 LDP: FJ134
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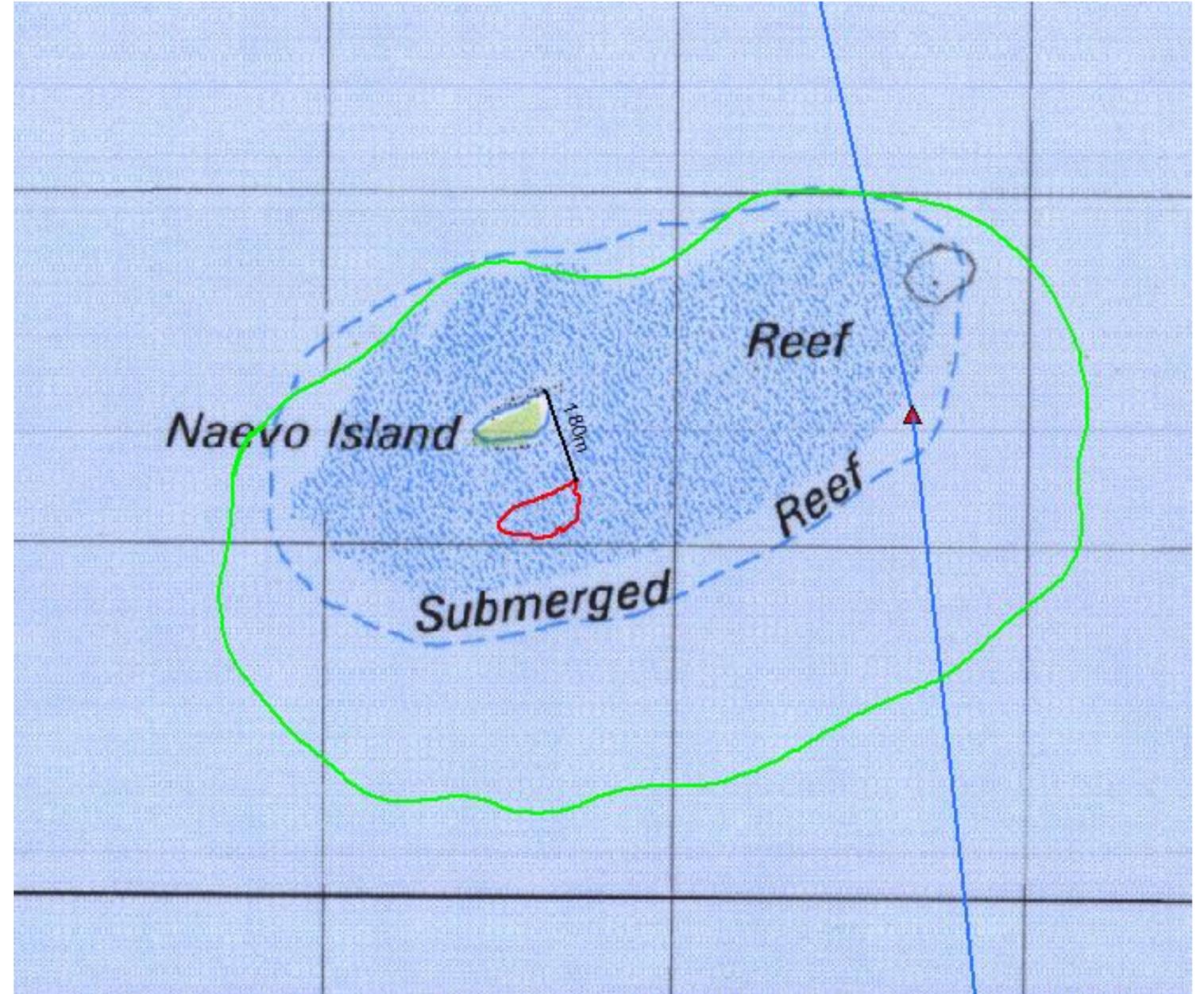
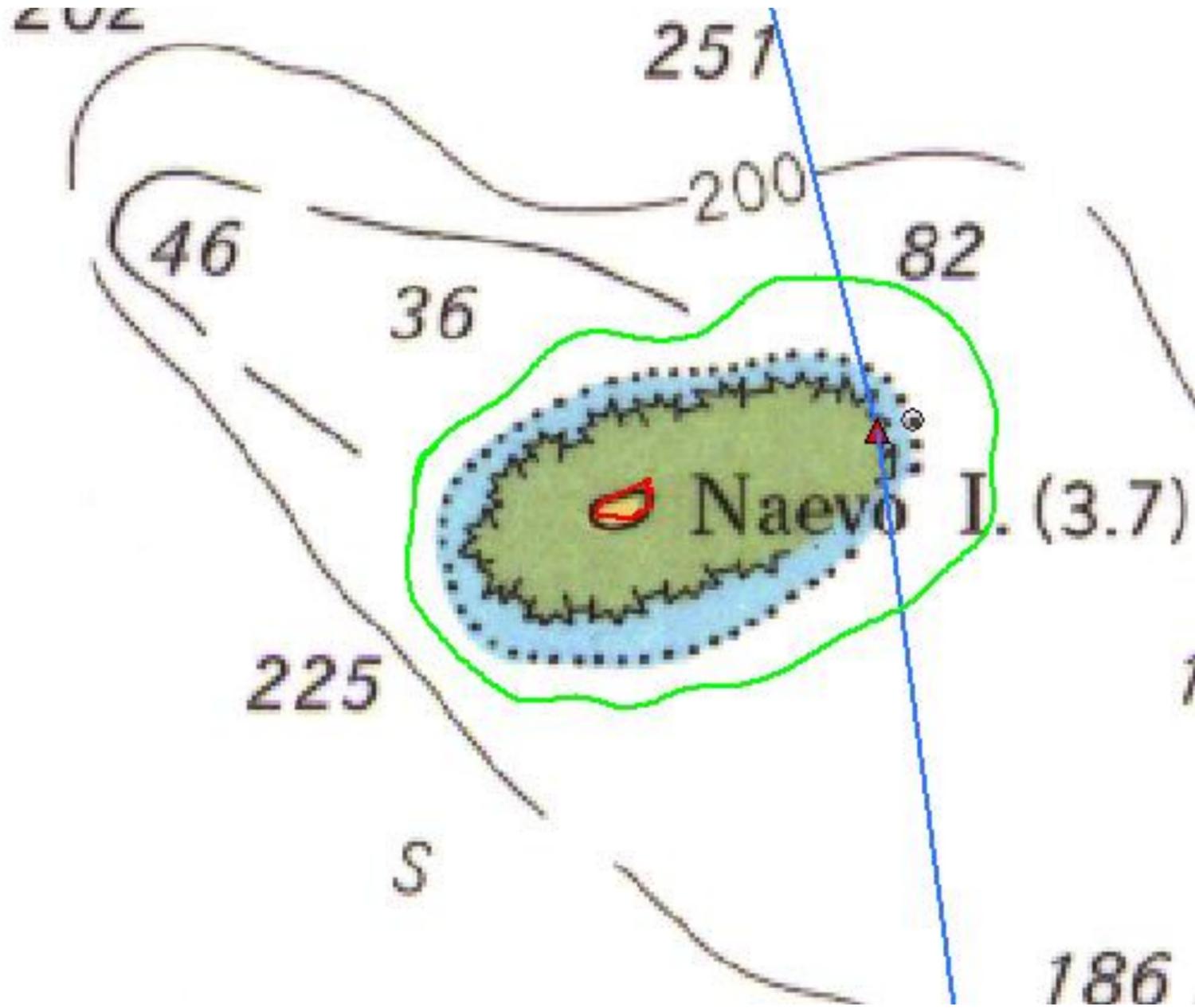


Fiji Geodetic Stations Survey Campaign Metadata

Station ID	Station Name	Occupation Period	Interval	Receiver Type	Antenna Type	Rinex Version	Vertical Ht (m)	Rinex Height	Antenna Method	Firmware	Checked By	Field Operators
LAUT	Lautoka	Continuous	1sec	SEPT POLARX5	JAVRINGANT_DM	5.2.0			ARP			GA
SUV1	Suva	Continuous	1sec	Trimble NetR5	TRM55971.00	4.19			ARP			SPC
LABC	Labasa	Continuous	1sec	VNET10T-D	HI-TARGET AT-53501	3.02			ARP	CJ00		CONTROL
NABC	Nabouwalu	Continuous	1sec	HI-TARGET VNET10T-D	HITAT53501(HITS)	3.02			ARP	CJ00		CONTROL
TAVC	Taveuni	Continuous	1sec	HI-TARGET VNET10T-D	HITAT53501(HITS)	3.02			ARP	CJ00		CONTROL
KORC	Koro	Continuous	1sec	Leica GR50	Leica AR20	3.02			ARP	4.11.606		CONTROL
LAKC	Lakeba	Continuous	1sec	Leica GR50	Leica AR20	3.02			ARP	4.11.606		CONTROL
ONOC	Ono-i-Lau	Continuous	1sec	Leica GR50	Leica AR20	3.02			ARP	4.11.606		CONTROL

Station ID	Start time	Duration	Campaign	File Name	RINEX Version	Ant Height	Ant Method	Ant Manufacturer	Ant Model
CEVA	10/11/19 1200hrs UTC	7days	Phase 1	16633153.19o 16633133.19o 16633140.19o 16633201.19o	3.02	1.692	BQR	Trimble	
BUKE	10/11/19 1200hrs UTC	7days	Phase 1	42703140.19o 42703150.19o 42703160.19o 42703170.19o 42703180.19o 42703190.19o 42703200.19o	3.02	1.934	BON	Trimble	
NAKO	10/11/19 1200hrs UTC	7days	Phase 1	NAKO3140.19o	3.02	1.625	Hook Height	Leica	
OALA	10/11/19 1200hrs UTC	7days	Phase 1	MOAL3130.19o	2.11	1.764	Hook Height	Leica	
UNAV	10/11/19 1200hrs UTC	7days	Phase 1	UNAV3140.19o UNAV3130.19o	3.02	1.74	Hook Height	Leica	
CIKI	10/11/19 1200hrs UTC	7days	Phase 1	CIKI3130.19o	3.02	1.693	Hook Height	Leica	
LULU	10/11/19 1200hrs UTC	7days	Phase 1	LULU.19o	3.02	1.707	BON	Trimble	
MTKU	10/11/19 1200hrs UTC	7days	Phase 1	MATU3130.19o	2.11	1.623	Hook Height	Leica	
OGEA	10/11/19 1200hrs UTC	7days	Phase 1	OGEA3130.19o	2.11	1.545	Hook Height	Leica	

Positioning



One Pacific One Map



24 Pacific Countries
and Territories

30 million people

42 million square
kilometres

30% of the world's
Exclusive Economic
Zones

Thank you and Vinaka