Seabed 2030 5th SaWPaC Regional Mapping Community Meeting

12-14 July 2023, Lima, Peru

Pacific Community (SPC)

Hydrographic related activities

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SPC’s 27 Member Countries and Territories

SPC Member Map  https://youtu.be/berQERg1h3A

The Pacific Community (SPC)

27 Member Countries and Territories

600 + staff

8 Divisions

USD 100 + million annual budget
SPC’s Divisions

Climate Change and Environmental Sustainability
Educational Quality and Assessment
Fisheries, Aquaculture & Marine Ecosystems
Geoscience, Energy and Maritime
Human Rights and Social Development

Land Resources
Public Health
Statistics for Development
Integrated Programmes
The changing face of shipping and charting

Modern maritime transport

Digital navigation is now mandatory
Poor state of nautical charts

Niutao (Chart 766)
Niutao, Tuvalu

- From a 19th century sketch to high resolution data
The provision of Hydrographic Services is an international obligations under Treaty Law

Under the Safety of Life at Sea (SOLAS) Convention, Chapter V, Regulations 4 & 9, each State must ensure that:

- Maritime Safety Information (MSI) is promulgated
- Hydrographic surveys are carried out
- Appropriate nautical charts and other nautical publications are available and up to date
USS San Francisco

After collision with seamount
How do we map the seabed?

<table>
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<tr>
<th>Method</th>
<th>Description</th>
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<tr>
<td>Multibeam Echosounder</td>
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<td>Singlebeam Echosounders</td>
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<tr>
<td>Sidescan sonars</td>
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<td>LiDAR Survey</td>
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<td>Vessel</td>
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<td>Expertise</td>
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<td>Operational resources, etc.</td>
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SPC has all the required toys (~USD 1M)

- Singlebeam and Multibeam echosounders, precision GNSS, sidescan sonar, magnetometer, boomer seismic, UAV’s software, staff, etc.
Maritime boundaries

Pacific Extended Continental Shelf Project

Developing capacity to progress ECS submissions

Capacity Building Opportunities
- National or regional training
- Software training
- Attachments or online courses

Data Acquisition
- Satellite imagery/ bathymetry

Submission Consultancy Support
Dashboard Launch (Jul 2022)
Bathymetry, seismic data needs

- Ontong Java Plateau
- 2500 m isobath data acquisition
Bathymetry, seismic data needs...cont

Charlotte Bank – Ellice Rise
North Fiji Basin
Bougainville Coastal Waters

Delimiting coastal waters and building capacity for good ocean governance

Led by Papua New Guinea
- National Fisheries Authority
- National Maritime Safety Authority
Enforces national legislation (Maritime Zones Act 2015)
SPC through the DFAT funded Climate and Oceans Support Program in the Pacific produced 2022 tide prediction calendar for 24 locations in the region, including a new calendar for Ebeye, RMI.

Digital copies of the calendar can be accessed at the Pacific Ocean Portal - under the library tab. [http://oceanportal.spc.int/](http://oceanportal.spc.int/)
Hydrographic survey
Calibration and tide station installation
Malo Passage, Luganville, Vanuatu
Earliest known chart of Nova Gerusalem (Espírito Santo Island, Vanuatu) vs modern chart
Uncharted ship wreck, Lugganville

Multibeam data of SS President Coolidge
The Fisheries, Aquaculture and Marine Ecosystems (FAME) Division of SPC are investigating the potential to design and construct a specific research platform for the Pacific region to support:

- The development of regional scientific advice
- To reinforce the region's capabilities to manage its natural resources
- Potential for vessel usage sharing by regional scientific organisations
What if we do nothing?

- Legal liability for the costs of accidents as a result of inadequate charts
- Insurance companies withdrawing insurance or raising premiums
- Withdrawal of international vessels from port visits Pacific destinations
- Primary Charting Authorities withdrawing navigational charts
What are the benefits?

- Safe, reliable and affordable transport services that connect people to markets and services
- For every $1 spent on hydrography, there is an estimated **$91 return** in ongoing economic activity: **The Blue Economy**
- Hydrography also supports: protection of marine environment, national infrastructure development, coastal zone management, marine exploration, search and rescue, fisheries, maritime boundaries delimitation, defence and security, disaster management, etc.
Thank you