Multi-partnership Cable Connectivity in the Pacific

Regional Meeting for Asia Pacific Least Developed Countries
‘A Focus on Broadband Connectivity’

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One Pacific Submarine Cable Consortium
Internet is a ‘Basic Need’ like water & electricity

Individual islands trying to bridge the “Digital Divide” @US$20m+ per project – not leveraging group procurement - economies of scale (cost sharing)

Dreaming about fast (low latency), reliable, affordable internet using Satellite - expensive and limited

Restoration (back up/resilience) is critical in order to develop the Digital economy;

Solution: Island nations, to form consortium in order procure (capex & opex) more cost effectively in order to access the digital economy!
Pacific Cables

New Caledonia ~US$60M
ASH ~US$27M

HONOTUA ~US$72M

Vanuatu ~US$28M
TONGA ~US$20M

TONGA ~US$20M

TUAMOTU ~US$25M

MANATUA ~US$55M

SX NEXT/HAWAIKI ~US$20M/POP


~50 Tb CAPACITY

Over US$310M Invested

Less than 1% Utilisation

Vanuatu ~US$28M
TONGA ~US$20M

~US$27M

~US$72M
### 2016 – 2032 CAPACITY FORECAST

#### 40% Annual Growth

Internet capacity growth **DOUBLES** every two years.

<table>
<thead>
<tr>
<th>Demand Gbps</th>
<th>2016</th>
<th>2018</th>
<th>2020</th>
<th>2022</th>
<th>2024</th>
<th>2026</th>
<th>2028</th>
<th>2030</th>
<th>2032</th>
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</thead>
<tbody>
<tr>
<td>American Samoa</td>
<td>0.9</td>
<td>1.8</td>
<td>3.5</td>
<td>6.8</td>
<td>13</td>
<td>24</td>
<td>44</td>
<td>81</td>
<td>150</td>
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<tr>
<td>Cook Islands</td>
<td>0.6</td>
<td>1.3</td>
<td>2.4</td>
<td>4.7</td>
<td>8.8</td>
<td>16</td>
<td>30</td>
<td>56</td>
<td>103</td>
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<tr>
<td>French Polynesia</td>
<td>15</td>
<td>35</td>
<td>70</td>
<td>140</td>
<td>276</td>
<td>545</td>
<td>1076</td>
<td>2124</td>
<td>4193</td>
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<tr>
<td>Niue</td>
<td>0.025</td>
<td>0.05</td>
<td>0.1</td>
<td>0.2</td>
<td>0.4</td>
<td>0.8</td>
<td>1.6</td>
<td>3.2</td>
<td>6.4</td>
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<td>0.8</td>
<td>1.6</td>
<td>3.2</td>
<td>6.4</td>
</tr>
<tr>
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<td>1.3</td>
<td>2.4</td>
<td>4.7</td>
<td>8.8</td>
<td>16</td>
<td>30</td>
<td>56</td>
<td>103</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>0.015</td>
<td>0.03</td>
<td>0.06</td>
<td>0.12</td>
<td>0.24</td>
<td>0.5</td>
<td>1</td>
<td>1.9</td>
<td>3.8</td>
</tr>
<tr>
<td>Wallis &amp; Futuna</td>
<td>0.3</td>
<td>0.5</td>
<td>1.0</td>
<td>1.9</td>
<td>3.5</td>
<td>6.6</td>
<td>12</td>
<td>22</td>
<td>43</td>
</tr>
<tr>
<td>Polynesia Total</td>
<td>18</td>
<td>41</td>
<td>82</td>
<td>163</td>
<td>320</td>
<td>625</td>
<td>1226</td>
<td>2403</td>
<td>4711</td>
</tr>
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</table>

**Restoration**

20 Gbps = US$20M
## Case Study: Buying power of Polynesian nations

<table>
<thead>
<tr>
<th>Forecasted Budget</th>
<th>American Samoa</th>
<th>Cook Islands</th>
<th>French Polynesia</th>
<th>Niue</th>
<th>Samoa</th>
<th>Tonga</th>
<th>Tuvalu</th>
<th>Wallis &amp; Futuna</th>
<th>US$17M</th>
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<tbody>
<tr>
<td>Capacity [Gb]</td>
<td>4</td>
<td>2</td>
<td>10</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>3</td>
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</table>

### Trans-Pacific Cable Capacity

<table>
<thead>
<tr>
<th>Capacity</th>
<th>US$</th>
<th>Eff.Rate</th>
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</thead>
<tbody>
<tr>
<td>1 Gb/s</td>
<td>US$650k</td>
<td>$65.00</td>
</tr>
<tr>
<td>100 Gb/s (One Pacific)</td>
<td>US$17M</td>
<td>$1.70</td>
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</tbody>
</table>

Trans-Pacific cable cost US$65 will not support a digital economy.
One Pacific Submarine Cable strategy

**Build Regional Mesh**
- Stimulate ICT through Digital Transformation creating economic growth and social prosperity

**Aggregation**
- Increased buying power – CAPEX and OPEX cost optimization

**Content**
- Pacific based Micro-datacenters sharing education and e-Government content via One Pacific Intranet - reducing expensive international capacity via transpacific cables - leveraging ‘unlimited’ trans-regional (smaller submarine cables)
Leaders endorse “One Pacific submarine cable consortium” Strategy.

*TBA – MCIT leaders meeting (proposed) in Nadi Monday 4 December 17*

PIFs member countries to nominate executing agency to engage 1P Consortium on behalf of member nations for the **One Pacific Submarine Consortium - Project Steering Group (PSG)**


Develop cost sharing MOU – Executed PITA meeting 2018 held in Hawaii during PTC18
Post 1P MOU - Next steps

Phase 1

6 party execute – 1PC MOU consortium model for One Pacific consortium cable (combine EMC & TTS into ‘One Pacific’ project)

Define the consortium committees (PDT and PSG)

Develop cost sharing MOU

Phase 2

Develop the C&MA and landing party agreement

Develop, consolidate and issue the tender documents and process consistent with ADB/WB/NZMFAT procurement process

Supplier Evaluation, selection and contract forming

Supply contract signing
Thank you