Palau Telecomm Landscape
&
Fiber Optic Cable Project

Pacific Update Conference
19 July 2016
Suva, Fiji
Current Legal & Regulatory Framework

- The Telecommunications Legal and Regulatory Framework in Palau is a highly disaggregated patchwork of multiple legal instruments:
  - Treaty – Compact of Free Association
  - Legislative – Statutes and regulations for telecom and business matters
  - Executive – Presidential Policy directives
  - Contract – RUS Loan agreements (mortgage, note, pledge, contract)
  - Corporate – The self-regulation by PNCC embodied in its tariff and standard operating procedures
Gaps in Current Legal and Regulatory Framework

- **Discrimination** - Entry into the market for telecommunications services in Palau is theoretically “open,” in that a general business license and investment board approval in the case of foreigners are all that is required, but the various PNCC exemptions is an asymmetric regulatory regime that favors PNCC.

- **Lack of Transparency** – PNCC obligations to report to the OEK and the President are limited and it has no obligation to report to any Executive Branch agency; nor is it obligated to publish its company information, only to make it available for inspection upon request.

- **PNCC Exemption** – The complete exemption from radio regulation is a significant gap, given the increasing importance of wireless networks for meeting access/service objectives and delivering voice, data, and Internet services to subscribers in the market generally.

- **Interconnection** – Title 15 makes no provision for the regulator to impose interconnection obligations between and among operators.
Proposed New & Modern Framework

- Independent Regulator-Establish an autonomous independent regulatory body in Palau, reporting to the OEK, with a stand-alone budget and primarily self-financing.

- Consultation & Dispute Resolution Mechanism-Fair, transparent, and efficient regulatory processes are critical tools in the regulator’s arsenal to ensure that its oversight and administrative regulation of the sector inspires public trust.

- The UAF is to be funded from contributions from all licensed service providers; usually a proportion of net annual sales.
Proposed New & Modern Framework

• Licensing- Five types of licenses used to license telecommunications network operators and service providers: individual licenses, class licenses, registrations, notifications, and open entry

• Numbering- a key commercial enabler that is key competitive factor for the telecommunications market with central role played by regulators in the coordination of telephone numbers for interconnected operators

• Management of Radio Frequency Assignments- to assign adequate assignments of radio frequencies for all wireless services needed
Proposed New & Modern Framework

- Interconnection & Access Regulations: Impose obligation to all service providers.

- Retail Price Regulation: Do not regulate retail prices; rely on competition to bring prices down (adjusted by quality) or at least not to increase.

- Competition Policy: Regulator needs authority to impose safeguards to prevent anti-competitive practices
## Comparison of cable options

<table>
<thead>
<tr>
<th></th>
<th>Option 1</th>
<th>Option 2</th>
<th>PYG (recycled and new)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAPACITY</strong></td>
<td>2.5Gbps to Palau</td>
<td>100Gbps</td>
<td>100Gbps</td>
</tr>
<tr>
<td><strong>CAPITAL EXPENDITURES (est.)</strong></td>
<td>$20.5Million</td>
<td>$19.5Million</td>
<td>$24 Million (new)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$18 Million (recycled)</td>
</tr>
<tr>
<td><strong>OPERATING COSTS (est.)</strong></td>
<td>$0.9Million</td>
<td>$1.0Million</td>
<td>$1.7Million</td>
</tr>
<tr>
<td><strong>EXECUTION RISK</strong></td>
<td>High; patch work of firm; consortium members not as good reputation as those in Option 2</td>
<td>Low; very reputable and solid consortium partners</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>REGULATORY RISK</strong></td>
<td>Very high; need FCC approval – Huawei may lead to no approval or delays</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>
The Submarine Cable
Desirable characteristics of cable options

**Capacity**
- Enough capacity to accommodate Palau’s demand for next 20 years

**CAPEX**
- Lower capital expenditures than alternatives

**OPEX**
- Lower operating expenses than alternatives

**Execution risk**
- Low execution risk based on consortium members reputation and solid finances

**Regulatory risk**
- Low regulatory risk based on ease of FCC approval for Guam cable landing
## Ranking of options

<table>
<thead>
<tr>
<th></th>
<th>Option 1</th>
<th>Option 2</th>
<th>PYG New cable</th>
<th>PYG Recycled</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAPACITY</strong></td>
<td>Inadequate</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td><strong>CAPITAL EXPENDITURES (est.)</strong></td>
<td>Medium</td>
<td>High</td>
<td>Low</td>
<td>Medium (recycled cable)</td>
</tr>
<tr>
<td><strong>OPERATING COSTS (est.)</strong></td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td><strong>EXECUTION RISK</strong></td>
<td>Low</td>
<td>High</td>
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<td>Low</td>
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*Note: High = most preferred; Low = least preferred*
Future Palau Submarine Cable
Future Cable Company in Palau

- Will own and operate the Palau assets on the cable system
- Will receive 100% revenue from sale of wholesale capacity
- Will repay loan to lender
- Initially 100% government owned; shares held by SOE BSCC
- BSCC by law will be allowed to sell shares to private investors not to exceed on aggregate 49% after first 10 years of operation
Desirable governance characteristics of future cable company

- No one or two service providers shall control the board of directors
- Efficient operation and maintenance
- Sale of wholesale cable capacity based on open access principles (non-discrimination, transparent and cost-based) even if new telecom law not passed
To prevent submarine cable abuse monopoly position

<table>
<thead>
<tr>
<th>Modern Telecom Law</th>
<th>Effective Regulation</th>
<th>Governance in Submarine cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mandate cable to sell capacity under open access principles</td>
<td>• Independent competent regulator with power to enforce open access regulations</td>
<td>• No single telecom service provider should control the board</td>
</tr>
<tr>
<td>• Non-discrimination</td>
<td></td>
<td>• Board with incentive on having a well functioning cable company</td>
</tr>
<tr>
<td>• Transparency</td>
<td></td>
<td></td>
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<tr>
<td>• Cost based</td>
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</tbody>
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### Rank of Public, Private, Mixed?

<table>
<thead>
<tr>
<th>Desirable characteristics of future Palau submarine cable</th>
<th>100% Private</th>
<th>100% Public</th>
<th>Public/Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>No one or two service providers shall control the board of directors</td>
<td>Low</td>
<td>High</td>
<td>High (with limits)</td>
</tr>
<tr>
<td>Efficient operation and maintenance</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Sale of wholesale cable capacity based on open access principles (non-discrimination, transparent and cost-based) even if new telecom law not passed</td>
<td>Low</td>
<td>High</td>
<td>High</td>
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Conclusion

- Present proposed Telecomm Framework legislation to OEK later this year or early next year
- Cable RFS next end-2017
- Effective and efficient cable company, BSCC, before or after passage of framework legislation with clear regulations on open access
- SOE Legislation to complement operation

Thank you