Leveraging investment in broadband for national development in Vanuatu

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In Vanuatu key policy decisions have driven dramatic improvements in access to ICT infrastructure and devices
**Policy actions**

- Liberalisation of telecoms market
- Establishment of independent telecoms regulator TRR
- New Telecoms Act
- Establishment of the Office of the Chief Information Officer
- Adoption of ICT, UAP and Cybersecurity Policies
- Kacific service launch
- 0.2 broadband subscribers per 100 inhabitants
- Deployment of Government Broadband Network
- Mobile coverage to 80% of population
- Second mobile licence issued to Digicel
- TVL issued non-exclusive licence and Government divested its stake

**Market impacts**

- UAP undertaking agreements signed with all three players
- Mobile coverage to 98% of population
- 22 mobile broadband subscribers per 100 inhabitants
- International submarine cable commences operations
- Kacific service launch
Vanuatu has 98.2% population coverage with mobile and 100% satellite broadband coverage.
Significant impact of UAP on unserved areas
Internet usage lags mobile services, particularly in rural areas

Source: Vanuatu National Statistics Office, 2016 data
Less than one in four use mobile broadband in Vanuatu

Note: size of bubble represents population. Source: ITU, World Bank
Facebook usage supports this result

Source: ITU, Facebook
Mobile broadband affordability has improved but 1GB is still over 5% of income

Source: Network Strategies
Fixed broadband monthly cost for 2GB relatively low within the Pacific region

Source: Network Strategies
Top websites in Vanuatu reflect social, information and educational interests

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<tr>
<th>Rank</th>
<th>Website</th>
<th>Mins per day on site per visitor</th>
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</table>

Source: Alexa, October 2017
Business use of email and websites still developing

- Manufacturing and trades
- ICT services
- Professional services
- Hospitality

Percentage of businesses

Source: Network Strategies
Broadband financing models:

- Government finance (GBN)
- PPP (cable)
- Donor funding (UAP projects)
- Private funding (UAP obligations)
Government PPP in submarine cable creates conflicting objectives: return vs prices

| International submarine capacity wholesale price per Mbit/s per month |  
|---|---|---|
| <USD100 | USD100 to USD300 | >USD300 |
| Guam | FSM | Samoa |
| Northern Marianas | Tonga | Vanuatu |
| New Caledonia | RMI | PNG |
| French Polynesia |  |  |
| Fiji |  |  |

Source: MS Consulting Tahiti
GBN next step: customer applications

Source: Network Strategies
UAP project computer labs in 19 schools with VUV50 million donor funding

- Upfront costs mainly power and infrastructure
- Sustainability will depend on local training, commitment and support

Source: TRR
Sustainability includes model for paying data charges

Source: TRR
Telemedicine pilot achieving tangible outcome

- Maewo pilot launched in 2016 involves Government, NGO and local collaboration
- Connects nurses in primary care unit with doctors at hospital in Luganville
- Kacific satellite broadband extended to provide general Internet connectivity
- Within six months 1,250 engagements with doctors, 32 patients assisted, 6 lives saved.
Remaining barriers include:

- Lack of affordability
- Accessibility of infrastructure
- Digital literacy
- Other priorities
Where to from here?

• Further access to ICTs in education
• More multi-stakeholder and multi-sector co-ordination
• Mitigate risks in ICT development
• Capacity building and local content
• E-government applications to save on transactions costs.
The challenge now is to identify opportunities for leverage from existing broadband investments.
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