



Pacific Broadband Forum 2012

Session 3

Vanuatu Country Presentation

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Alan Horne

PiRRC



Australian Government

Department of Broadband,
Communications and the Digital Economy



TRR

Telecommunication &
Radiocommunication
Regulator



The Government
of The Republic
of Vanuatu

Agenda

1. Current position of ICT and broadband
2. Progress on promoting and deploying national broadband
3. Issues and Challenges
4. Recommendations and future plans



1. Current Position

- Broadband a subset of ICT
- ICT responsibility now with PM & GCIO
- GOV ICT Policy making capability being strengthened - Technical Advisors appointed
- GOV sets Policy
- TRR advises on Policy
- Holistic approach being taken



Holistic Approach

- Government Led
 - Priority Action Agenda (PAA)
 - ICT Services Policy
 - Universal Access Policy
 - iGov programme
 - Public Private Partnership
- Regulator implementation of connectivity
 - Internet Regulatory Practice Issues
 - Consumer Protection Guideline Issued
 - Pilots
- ICT Services Policy



National ICT Services Policy

ICT For All



Millennium Goals

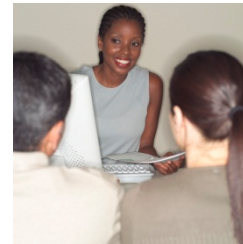
Government

Health

Telecentre



work



Protect Environment

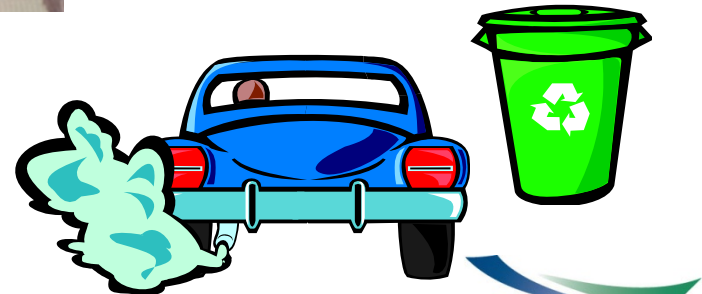
Education
Schools



Home



Security



National ICT Services Policy

- **The National ICT Vision is “ICT for all”**
- GOAL 1: Ensure accessibility and affordability of reliable access to information services to all
- GOAL 2: Ensure development of human resources & institutions in the use of ICT
- GOAL 3: Support economic growth
- GOAL 4: Support achieving a healthy educated nation
- GOAL 5: Support good governance
- GOAL 6: Support and protect our environment
- GOAL 7: Support effective security and protection of the nation and individuals



Universal Access Policy

- Telecommunications & Radiocommunications Regulations Act, 2009
- Sec 17 sets out the Universal Access Policy (UAP)
 - Minister must develop Policy for improving access to telecom services for un-served or underserved areas (*UAP Areas*)
 - The policy must be approved by the COM
 - Minister must consult with the Regulator interested parties when developing Policy.
- Sec 18 allows the Regulator to conclude contract on behalf of the Gov for the payment of subsidies for the provision of telecom services to UAP Areas.

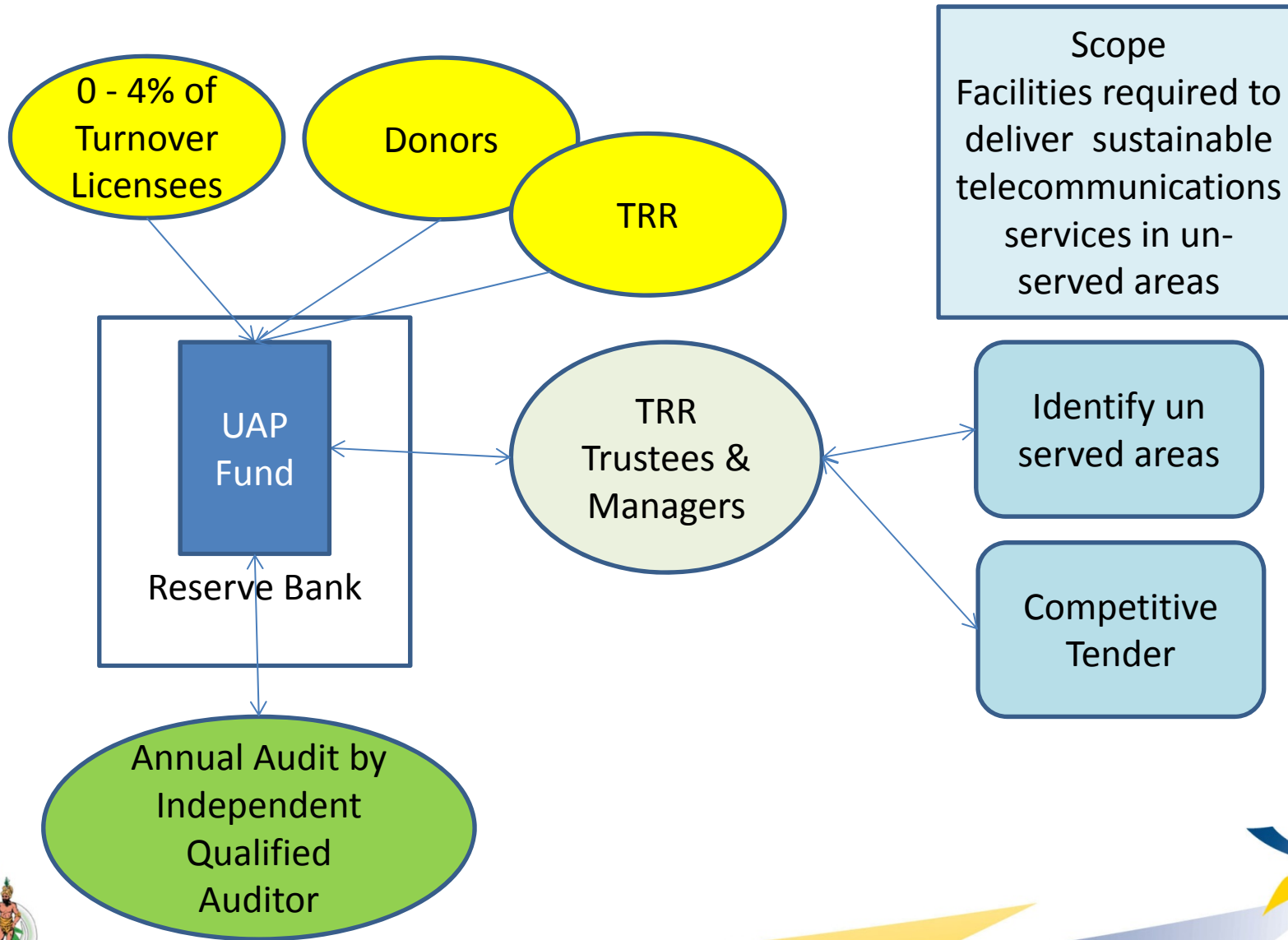


UAP Fund

- Sec 19 establishes an UAP Fund
 - To subsidize of provision telecom services in areas where there is market failure.
 - The UAP Fund must be managed by the Regulator as Trustee
- Universal Access means every person (100% of the population) can gain access to a defined ICT services.
- ICT services include:
 - Telephony (voice calls & text messages)
 - Internet (Dial-up, Broadband)
 - Radio & TV Broadcasting*



UAP Fund



Elaboration of existing Policy Universal Access

- Vision of Vanuatu Government is stated in the National ICT Policy:
“ICT for All”
- **National ICT Service Policy Goal 1:** Ensure accessibility and affordability of reliable access to information services to all
- **Objective 1** - Ensure connection of Urban and Rural Communities with reliable Voice, Data and Broadband services (greater than 512kbs);
- **Strategic Action:**
 1. Ensuring spectrum available for LTE (700 MHz) mobile & 3G
 2. Use Universal Access Policy Fund to support roll out of Broadband Internet access & Telecentres. UAP to be submitted to CoM
 3. Ensure low cost reliable international connectivity through supporting private sector initiatives and where required use UAP Fund
 4. More reliable and greater reach for national backbone connectivity



2. Progress on promoting and deploying national broadband

- Competitive BB services in Port Vila and Luganville – 20% of population
 - TVL ADSL Optical fiber in Port Vila
 - Telsat
 - Can'l
 - Digicel Wimax
 - Digicel 3G
- Rural Areas
 - Limited Wimax from TVL
 - Telsat Resorts
 - 2.5 G slow speed internet



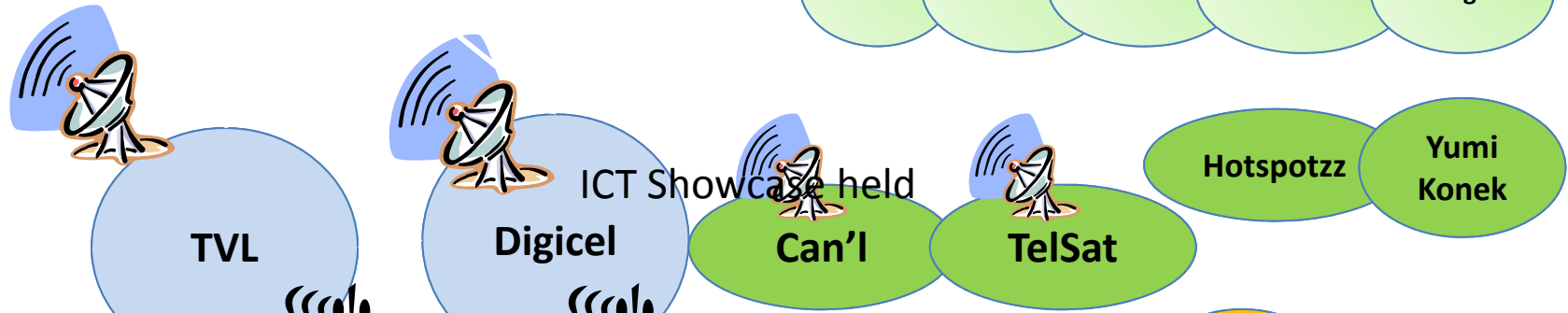
Telecoms Market

Real Choice
 Falling Prices
 Increased coverage
 Increased economic activity
 > 85% of population access to mobile



Interchange

CNS eTech Micoms Wavecom Insight



Gov V & D
 N/W

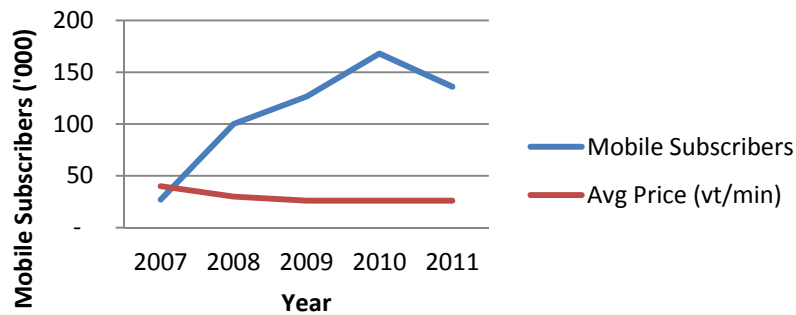
Cafes
 Hotels

SPIM

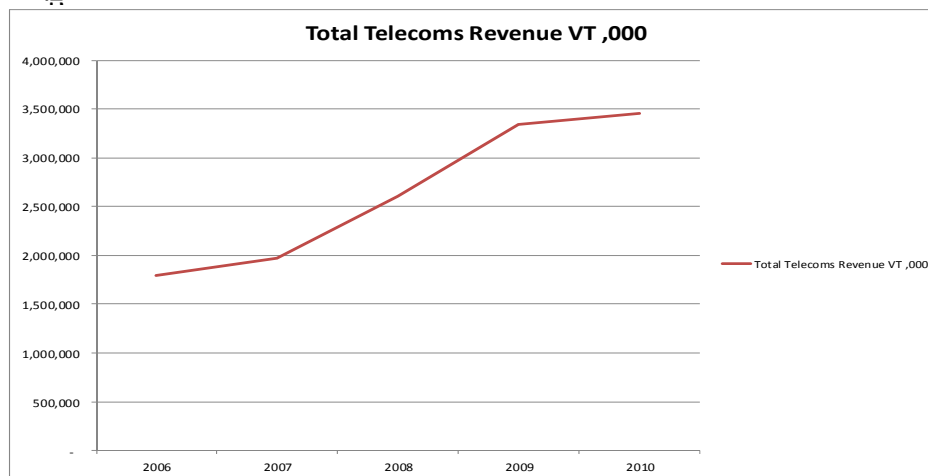
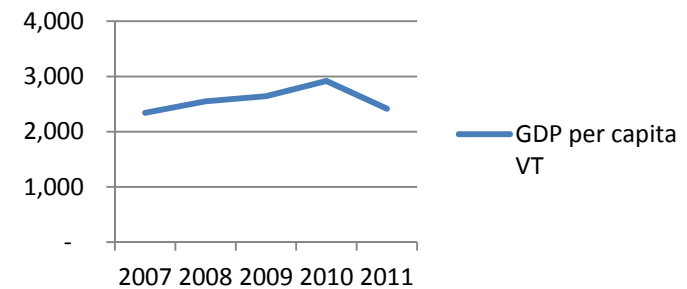


Telecommunications Market

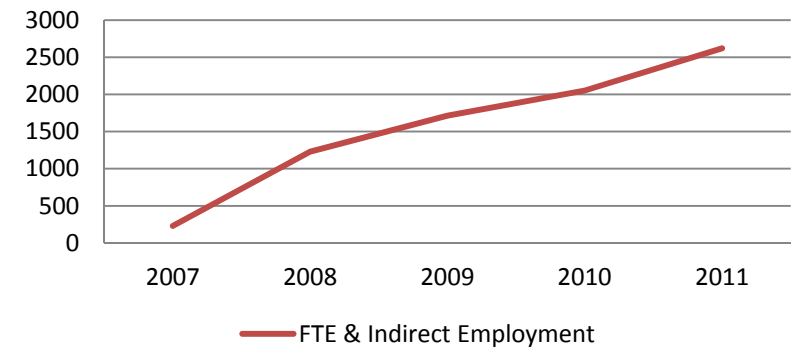
Number of Active Mobile customers & Falling Mobile retail prices from 2007 to 2011



GDP per capita VT



FTE & Indirect Employment

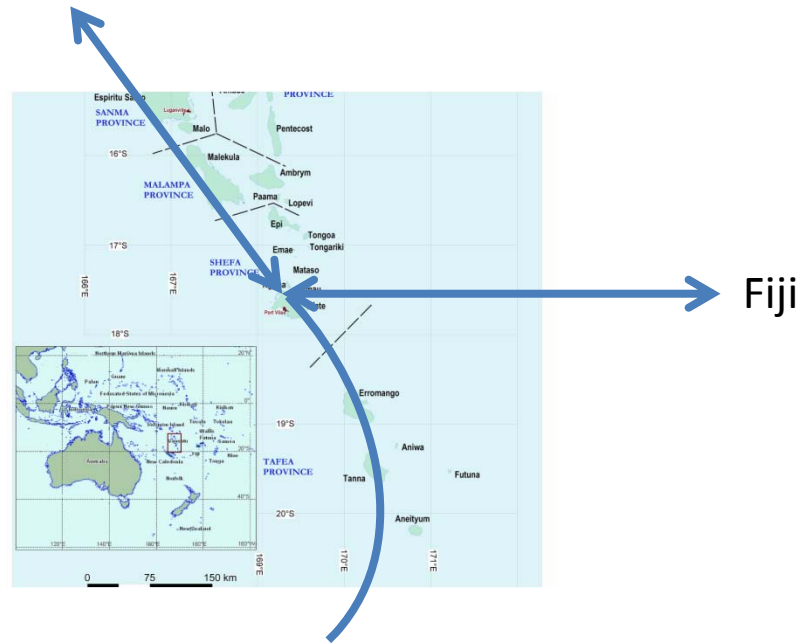


Reliable, low cost International connectivity

Optical fiber cable
Diversity
Regulation

Concessional
Funding?
Unlikely to be
competitive
Insufficient market
Strategic

Solomon Islands

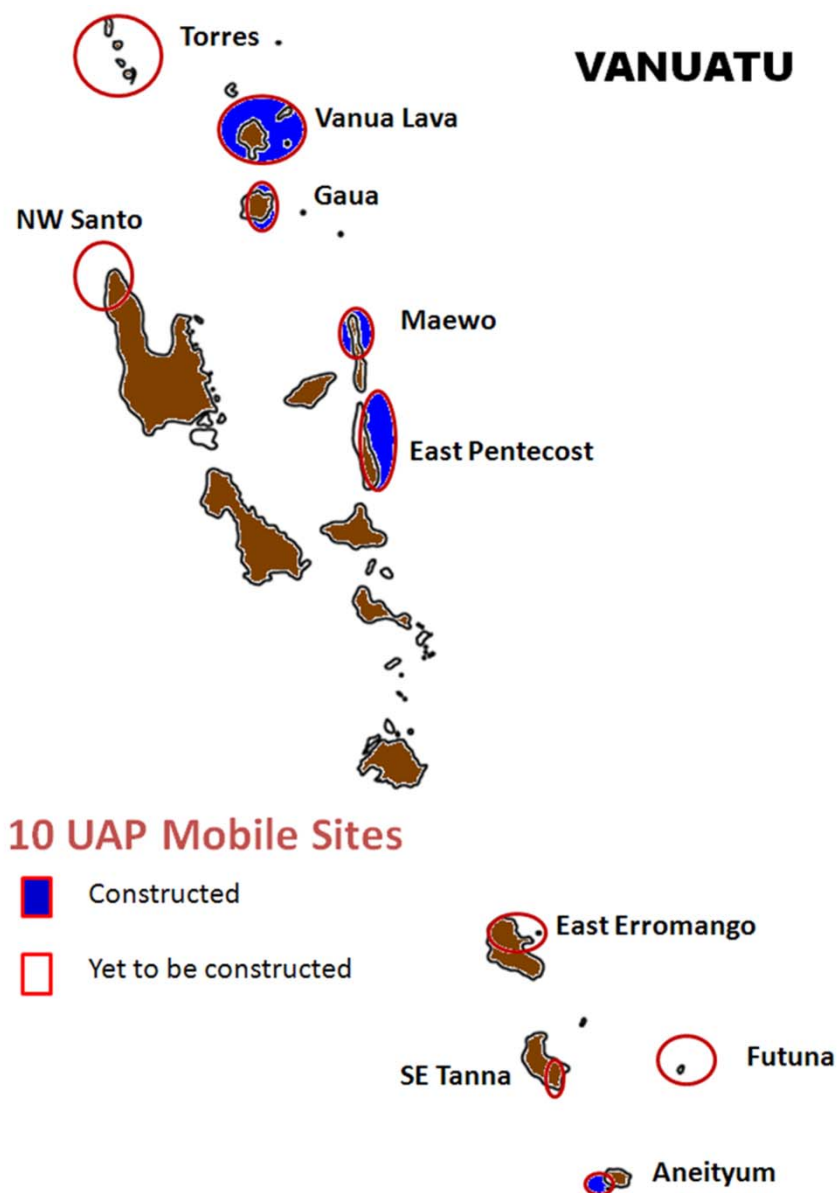


Noumea, New Caledonia



10 UAP Mobile Sites

1. Torres
2. Vanualava
3. Gaua
4. North West Santo
5. North Maewo
6. East Pentecost
7. East Erromango
8. South East Tanna
9. Futuna
10. Aneityum



UAP Broadband Pilot Project

- In 2010, the Gov selected 4 rural sites (2 High Schools & 2 Health Centers) to be recipients of the Broadband pilot project.
 - Rensarie & Melsisi High Schools
 - Nebul & South West Bay (SWB) Health Centres
- In order to use UAP funding, TRR extended the provision of Broadband Internet to the community living around the selected sites through a Public Telecentre
- Learned from International and regional experience (ICB4PAC)



Broadband Pilot Areas

Sites selected by MIPU, MOH Health & MOE



All have mobile coverage



Aims of the Pilot Project

- Test the deployment of Broadband Internet access in remote rural areas,
- Encourage the use of Internet services in remote rural areas,
- Stimulate the demand of Internet access and services in remote rural areas.



Pilot Project Deliverables

- At each Pilot areas, provision of Broadband Internet to at least:
 - 1 High School
 - 1 Health Centre
 - 1 Telecentre

- Targeted Trainings to:
 - Telecentre Manager and his/assistant
 - Aid Nurse at each Telecentre
 - Teachers & students if needed
 - Community members



Promotion of ICT

- ICT Showcase held
- Video made of showcase
- TV showings
- ICT song released
- Broadband Pilot video released
- Educational talks to:
 - schools
 - women's groups,
 - Communities
- Newspaper columns
- Talkback shows



Key Lessons learned from Pilot

- Rapid take up by school and students
- Slow take up by Medical Center
- Slow take up by general public
- Importance of Telecentre Manager
- Importance of Community Steering Group
- Importance of all stakeholders working actively
- Education, training, awareness



Plans for 2012 to 2015

- The pilot project are intended to be a test case for a country-wide Broadband Internet Access to achieve Government Policy – “ICT for All”
- Experience gained will assist in ensuring the successful implementation of a National Broadband Access Project,
- From 2012 to 2015 - National Broadband Project implemented by a mixture of commercial and UAP funding,
- Work closely together – Government, TRR and Licensees.
- Our aim is to facilitate provision of Broadband Internet to all High Schools & Health Centres.



3. Issues & Challenges

- Demand
 - Literacy, Education
 - Understanding of benefits
 - Lack of impetus from Ministries and partners
- Supply
 - Disposable income, Population density, Geography
 - Profitability, Taxation
- Getting Policy passed
- ICT Steering Group
- Operator opposition
- Development of win win approach..



Broadband Policy

- How do we get reliable high speed internet to all consumers at affordable prices?
- National
 - Competitive supply in the urban areas
 - UAP Funded projects in the uneconomic rural areas
- International
 - High unit cost competitive satellite links but readily available. Shared by many countries and users. But limited in capacity and have high latency
 - Low unit cost non competitive submarine optical fibre cable. High set up cost. Dedicated to Vanuatu



Technology Options

- National backbone
 - Three (TVL, Digicel & Gov) microwave & satellite backbone networks (some links are satellite due to distance).
 - Prone to cyclone damage.
 - Not covering all Islands
 - A national core fiber to three main centers would be desirable but uneconomic and would most probably need concessional funding
- Access to consumers
 - TVL Fibre to cabinet in Vila
 - ADSL over copper
 - Wifi, WiMax, 3G, LTE
 - Vsat, O3B



Vanuatu BB Strategy

■ International

- Diverse submarine cable to a minimum of two international Points of interconnection e.g. South Cross in Suva and Gondwana - 1, OPT, Noumea
- Satellite backup. Ideally also link to PPC1/APNG - 2, Solomon Islands to Sydney & PNG (SPIN to USA ?)

■ National backbone

- International links to Solomon's via Santo and to Noumea via Tanna.
- MOU between three existing backbone networks to share in time of failure

■ National Urban

- Competitive routes provided by Licensees using many different technologies

■ National Rural

- UAP Funded projects when required, Telecentres plus schools and hospitals
- Linked to National networks where possible by fixed line or microwave or where not possible by VSAT



4. Recommendations & Future Plans

- Quickly pass National ICT Services Policy
- Establish working ICT Steering Group
- Hold Round Table of all stakeholders
 - Objectives of Government
 - Objectives of Providers
 - Seek win win approach
- Complete identification of Under served areas
- Design phased projects which tests theories
- Break deadlock on submarine cable





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