

Presentation for: ITU/NBTC/ADB Asia-Pacific Regional Forum on Universal Access and Service and Broadband Deployment 2015, 25 -27 March 2015, Bangkok, Thailand

Universal Access Service Developments in Vanuatu

Lloyd M. Fikiasi



The Government
of The Republic
of Vanuatu



Telecommunications &
Radiocommunications
Regulator

Brief about Vanuatu

Population:

- est. 276,573
- 75% lives in rural, 25% urban

Total land area:

- 5,000 sq.KM
- 83 islands of which around 65 are inhabited

Capital

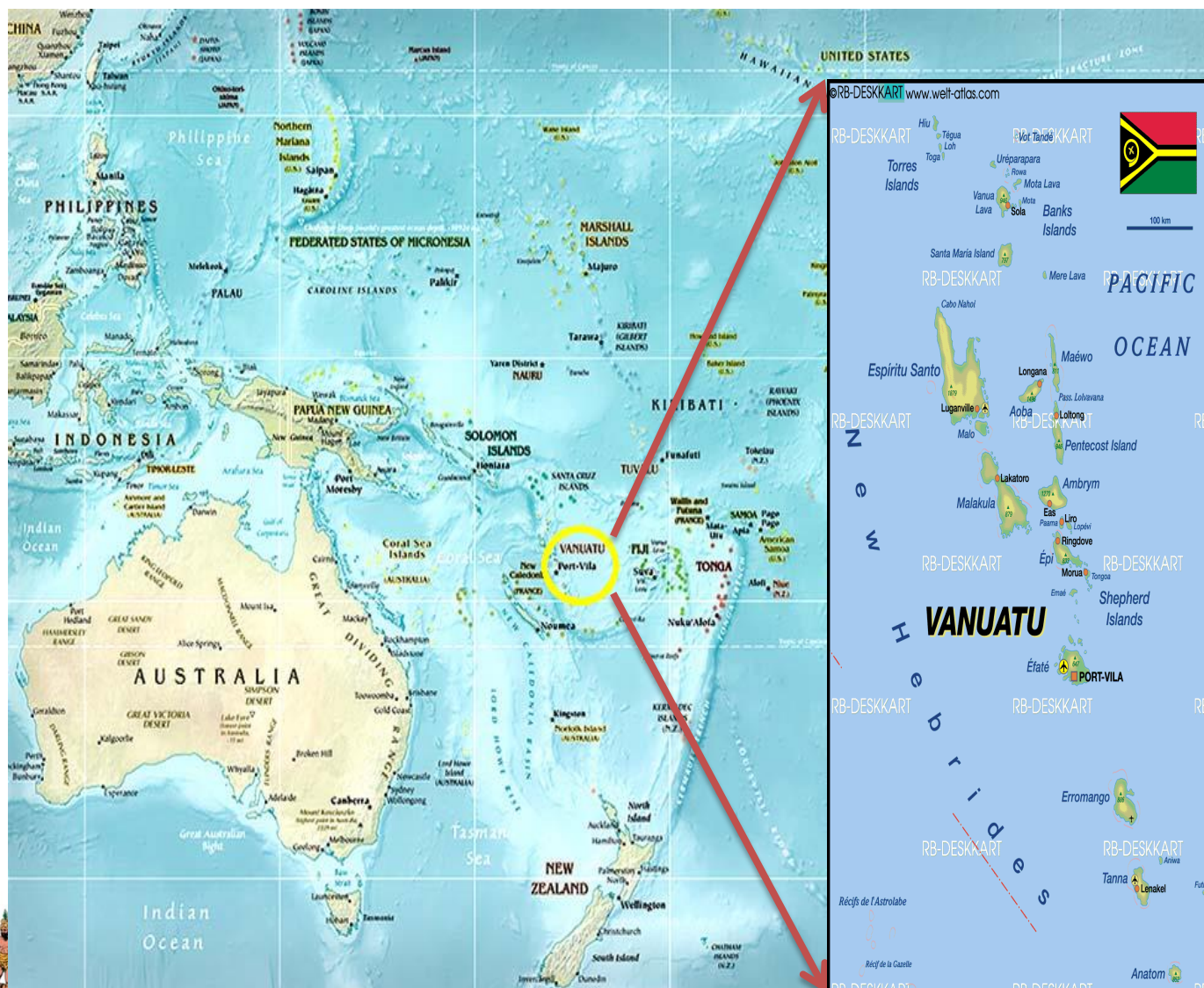
- Port Vila

Sea area

- 12,274 Sq. Km.

Languages

- 3 official language (French, English and Bislama) and approx. 163+ indigenous ethnic languages)



Telecommunications Market - overview

- Four (4) types of Licence;
 1. GURL;
 2. Radio Apparatus Licence;
 3. Spectrum Licence; and
 4. Telecom Licence
- Telecom Licence: unified Licence
- 100+ Radio Apparatus licence
- 12 spectrum licence issued
- 8 Telecom Licence (including ISPs)
- 2 Mobile operators and fixed
- 6 Exceptions issued (Gov, wholesalers, projects)



Type of services

- Mobile services (Edge, 2G, 3G);
- Internet services (mobile internet, ADSL, Fiber, wireless);
- Fixed services (landlines and Desktop fixed);
- VOIP;
- International gateway: Satellite and submarine Cable;
- 4 service providers have International Gateways (3 via Satellite and 1 via submarine Cable);
- Current Coverage 90% Voice over 63 Islands of 83 Islands;



Broadband status:

- In 2013, penetration around 14.4% (512kps, 3G service);
- Penetration mostly in urban areas;
- Some rural areas access to Edge technology and basic internet service – narrow band;
- Vsat Technology used in most remote areas in Vanuatu;
- Terrestrial links provided in areas that have mobile coverage;
- In 2014, submarine Cable in operation. Improve capacity and speed of internet, especially in Port Vila - up to 20Mbps.



Government action

In 2013 (November) Government passed 3 policies:

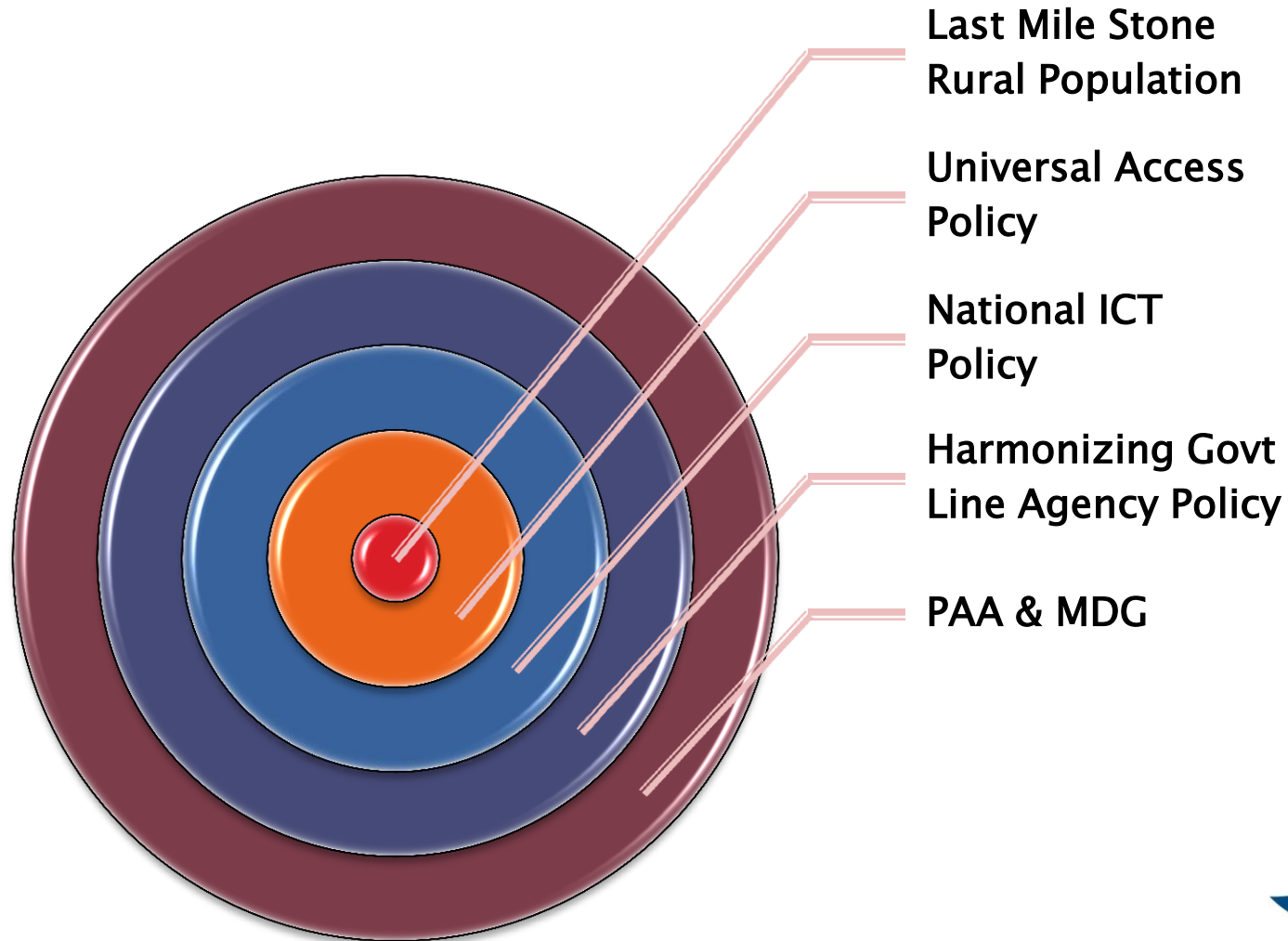
- ICT policy;
- UAP policy; and
- Cybersecurity policy

In support of the:

- Millennium Development Goals – set by UN
- Government's Priority Action Agenda (PAA) 2006 – 2015



The Last Milestone



ICT Policy



National ICT Policy

- Embraces ICT contribution to national development & the economy
- Sets Priorities, Approaches & Principles, lists expected results and time frames– outcomes & impacts, & lists strategies for its implementation (nearly 60 page document)
- Will have all Govt. Departments on-line.
- Govt (OGCIO) has signed MOU with Education Ministry for facilitation of ICT awareness & ICT access & provision through schools
- **Confirms independence of Regulator**



ICT Policy: Cont....

- Sets out eight priorities:

Priority 1

- Access to ICTs in Education:

Providing educational institutions with access to ICT infrastructure and related services (especially, the Internet) and equipment adequate to support the educational process, providing students with access to ICT devices.

- 5% of students have access to ICTs, 4% of students are computer literate, number of students per computer is 205, and only about 6% of schools have access to the Internet with only about 1% of schools accessing broadband.



Universal Access Policy (UAP)



UAP

- To extend and improve telecommunications service to areas not adequately service or unserved areas by existing services, including internet.
- Universal Access Policy is aimed at reaching the last milestone: unserved & underserved from current telecommunications operators



UAP cont...

- Specifies required level of *access to telecom's services*
 - By January 2018 98% of the Vanuatu Population will have (and continue having) access to the following telecommunications services:
 - Voice
 - Narrowband data services, including text messaging
 - Broadband internet services that enable a download speed of at least 21 Mbps & and upload speed of at least 12 Mbps



UAP cont....

- By January 2018 these services must be available at all:
 - Primary, secondary & tertiary schools, vocational training facilities as well as early childhood education facilities
 - Health facilities, including hospitals, health centers and dispensaries
 - Public offices
- The level of access to telecommunications services achieved prior to the Policy, as well as in the course of implementation of the Policy cannot be decreased



UAP cont....

- Services must be provided at geographically uniform prices
- TRR will implement and enforce the policy
- TRR will monitor achievement of UAP objectives
- Policy proposes a 'Pay' (collect a levy) or 'Play' (agree with operators on an approach that will achieve Policy objectives) approach
- Not just service provision – includes hardware and software: tablets, laptops, etc.



How do we achieve the Policy Objectives?

- Two approach:
 1. Through Industry approach (Pay or Play) – UAP policy initiative; and
 2. UAP ICT Programs/project – Government initiative



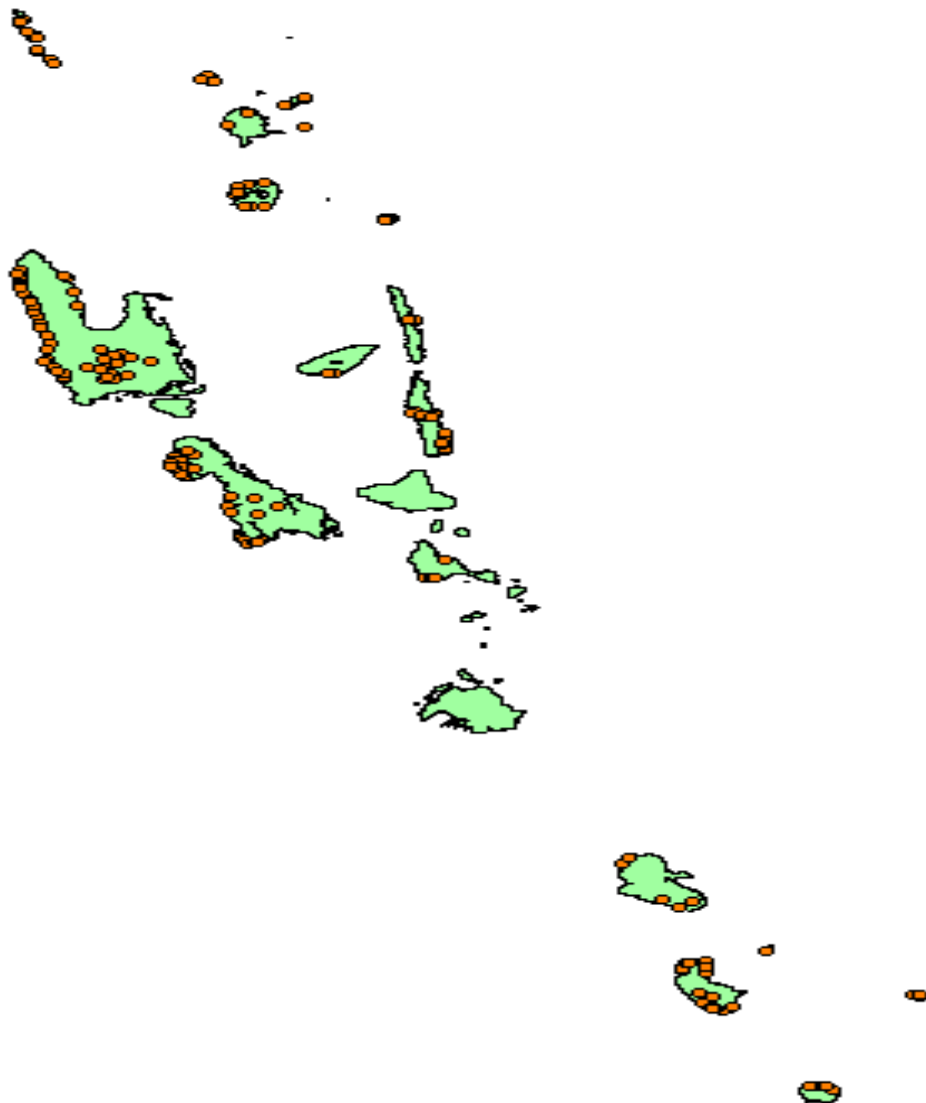
Approach 1:

UAP policy initiative –

- Regulator use its power under the TRR Act 2009 to impose UAP levy - use as “leverage”; or
- Service provider must indicate for each levy period whether they will “pay” or “play”;
- Regulator identify unserved areas- work close with service provider that choses to “play”.



Approach 1: Cont....



Unserved areas	
1	Torres Islands
2	Ureparapara
3	East Motalava
4	NW Vanua Lava
5	East Mota
6	West Gaua
7	Merelava
8	West Coast Santo
9	North Santo
10	Central Santo
11	South Ambae
12	Central Maewo
13	Central Pentecost - Melsisi
14	South East Pentecost - Bunlap
15	North West Malekula
16	West/Central Malekula
17	South West Malekula
18	Central Epi
19	North Erromango
20	South Erromango
21	Aniwa
22	North Tanna
23	South Tanna
24	Central & South Futuna
25	North Aneityum



Approach 1: Cont....

- 3 Players (2 mobile operators and a ISP) committed to provide telecommunications services in locations identify by TRR as UAP sites (voice, broadband services)
- The rest operators are “payers” who choses to pay a UAP levy into the UAP Fund as impose by the Regulator for each levy period;



Approach 1: Cont....

- Our current assessment:
 - ❑ The rollout will nearly achieve the 98% target;
 - ❑ The balance, however, to get to 98% will be likelihood of UAP subsidy;
 - ❑ Technology used must be design capacity capable to achieve 21Mbps and 12Mbps
 - ❑ All plan sites capable to upgrade to 3G+ service, capable to achieve the requirement speed of UAP;
 - ❑ 3 Players show commitment to achieve the objective of the policy;
 - ❑ Roll out plans is in the finalization stage;
 - ❑ Players plan assessed annually by the Regulator and players;



Approach 2

- Government Initiative – using UAP Fund to fund projects identify by Government, Regulator and Donor partner (AusAID):
 1. Connecting 15 Schools with Broadband internet;
 2. Providing up to 1000 tablets to 7 schools; and
 3. Provide UAP subsidy to 3 beneficiaries (entrepreneurs) to operate internet café in rural areas.
- Connecting the Community through Schools.
- Other project include APT J3 Project and ITU satellite project currently underway.



Approach 2: Cont....

- All UAP project is underway, 100% procurement completed: 15 schools selected, 7 schools for tablets (1000 tablets) and 3 beneficiary for providing rural internet café selected.
- Target date for first project to be operation before end of Q2 of 2015 – connecting Schools project, tablets and the rest follow.

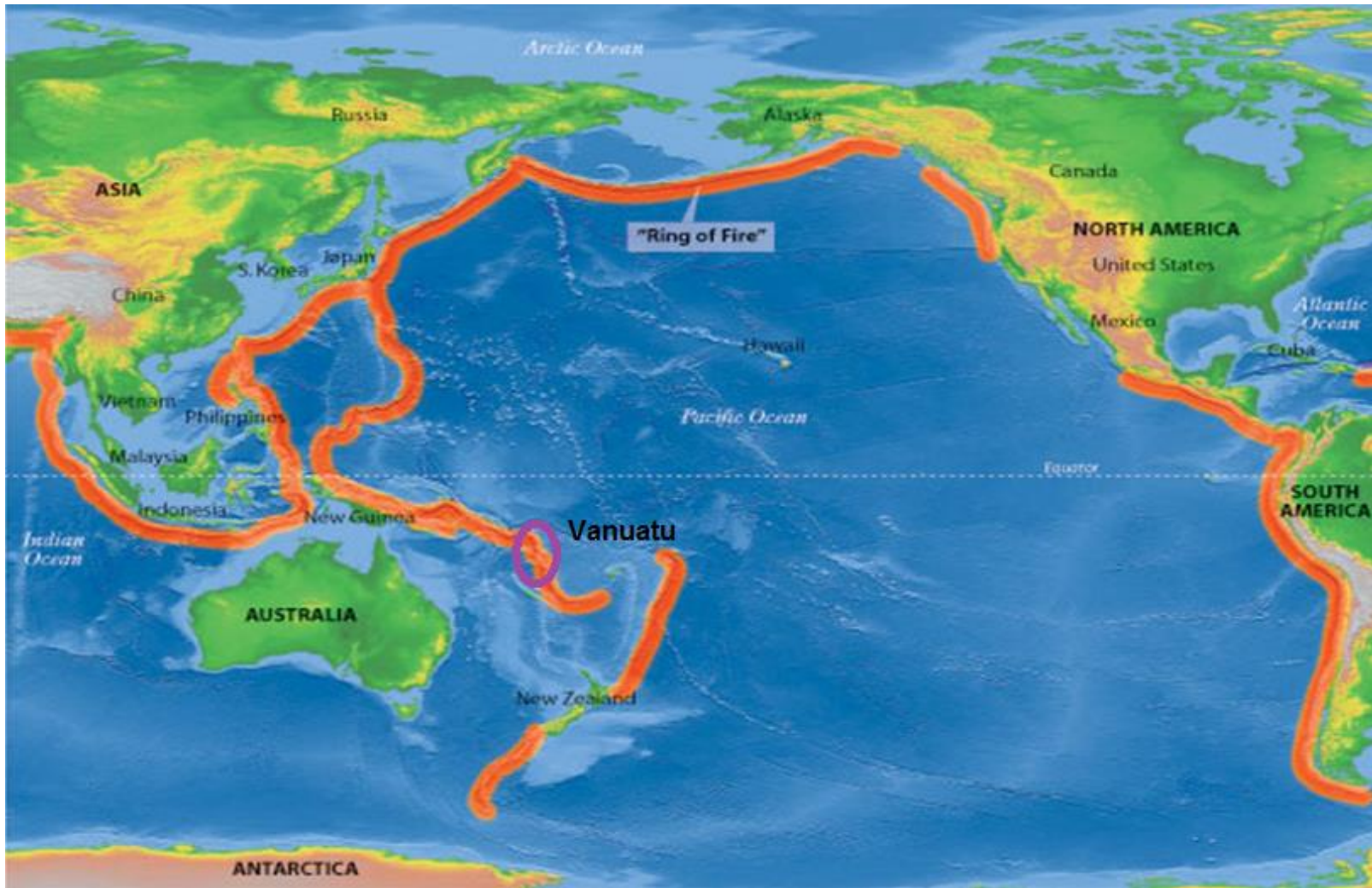


Key Challenges

- geography and topography of Vanuatu;
- International connectivity costs;
- Power availability;
- Natural disasters (earthquake, Tsunami and Cyclone)

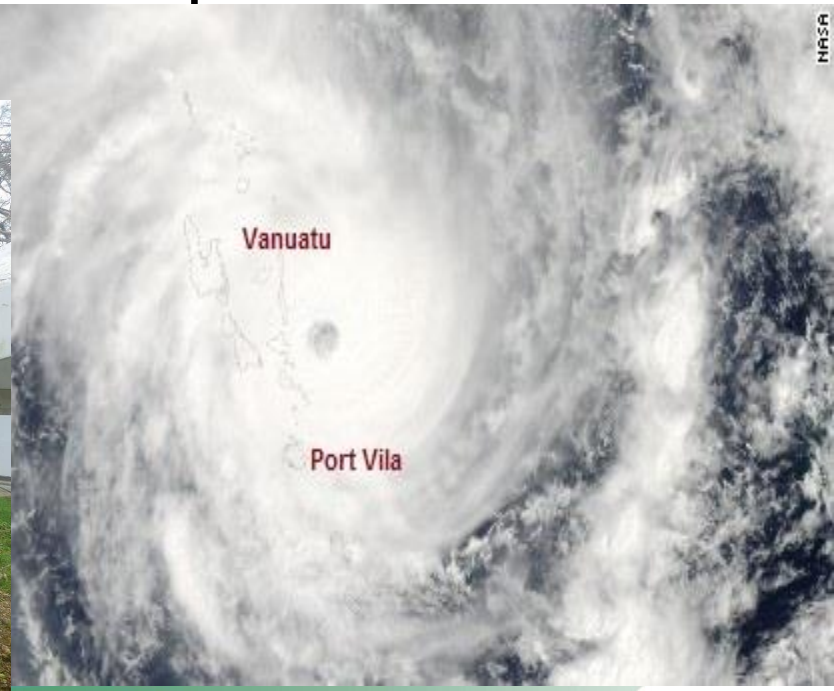


Vanuatu sits on the “Ring of fire”



Cyclone

- Category 5 – Cyclone PAM – 13th March 2015;
- 80% of network down – towers in islands damage;
- Power lines and other infrastructure damage;
- No power available for a week – partial restoration as of today





Damage to telecom infrastructure





Measures to overcome challenges

- Flexible approach by UAP policy “pay or play”;
- TRR determination of UAP speed: 2Mbps/1Mbps bare minimum to start off –
- Tax incentives, subsidy provided;
- Encourage competition light touch regulation, intervene when require, assess wholesale pricing – support of WB;
- Most tower powered by Generator and solar. Work close with Department of Energy – telecommunications take the lead
- Exempt Gov to use E-gov for backhaul and emergency purposes. Redundancy link via Satellite, put in place fall back plan, task force established by Gov, Industry, TRR, NDMO and private sector;
- E.g. Pam Cyclone – all industry work hand in hand, support from ITU satellite phones, and support from Aust. Gov, NZ gov, US, UK, China, Germany, Fiji, PNG and international organization such as Red cross, UNICEF, APT, etc.



DOWN but not OUT

- Government with the support of the industry still committed to achieve 98% coverage of:
 - i. Voice;
 - ii. Narrow band and data service; and
 - iii. Broadband internet service (21Mbps/12Mbps), to the Population of Vanuatu, by 1st January 2018.



Tankio Tumas! Thank you!

