

Country Presentation: Vanuatu

Vanuatu TRR
Internet + and 5G Training Course
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Posts and Telcommunciation Beijing, P.R. China



The Government
of The Republic
of Vanuatu



Telecommunication &
Radiocommunication
Regulator

INTRODUCTION

- Archipelago consisting of 83 islands, of which 63 are inhabited.

- **Population**

- 287,692 – (2016) (www.vnsso.gov.vu)

- **Population Density**

- 18.4 persons per km² – (2011)
- That's 54.3 km² per 1000 people

- **Land Features**

- Mountainous larger islands, or small coral atolls
- Covered in dense tropical rainforests
- Prone to tropical cyclones, large earthquakes and has a number of active volcanoes

- **GDP**

- 63.99 Million USD (2014) (www.vnsso.gov.vu)
- Majority of Vanuatu's population lived in rural areas



INTRODUCTION Cont..

■ Operators Status

- Two mobile Operators
- 8 Internet providers including 2 mobile operators
- 3 exception Licensees

■ Communication Equipment

- Mobile phones/smart phones
- HF, VHF, UHF Radio
- VSAT
- Submarine cable
- Satellite Connections

■ Manufactures

- No manufactures in Vanuatu of telecommunications or ICT equipment's



STATUS OF MOBILE NETWORK

■ The Infrastructure of Mobile Network

- Tower construction costs are extremely high due to the remote and rugged terrain (towers need to be airlifted into approved sites)
- TRR is currently working on infrastructure sharing framework for Vanuatu
- Structure for mobile networks has to be cyclone rated to withstand 350km wind
- Vanuatu is on the pacific rim of fire and experiences significant geological activity through volcanic eruptions and including earthquakes of very high magnitude which can also trigger tsunamis.
- Vanuatu is the country most at risk from natural disasters in the world!
(<https://www.theguardian.com/world/2015/mar/17/vanuatu-disaster-the-island-hit-by-an-earthquake-a-volcano-then-cyclone-pam>)



GOVERNMENT POLICY FOR MOBILE NETWORK

- **Increase/Improve coverage to underserved and unserved areas**
 - Combination of operator activities and Regulator to implement Universal Access Policy (UAP) Fund projects
- **Operator Activities**
 - GOV's UAP requirement of 98% coverage by 1 January 2018 -100% funded by the operators
 - Pay or Play Approach
 - Play: Signed undertakings to rollout infrastructure in unserved/under-served areas
 - Pay: Levies go in to UAP Fund administered by TRR to assist UAP implementation and UAP Fund projects
- **UAP Funds Projects**
 - Initial focus on education
 - Delivery of school/community computer/internet labs and tablets
 - Monitor and evaluate use in the curriculum
 - Implement school and student administration/management applications (OPENVemis)
 - TRR is facilitating and supporting on opportunities in e-health and e-agriculture extension and application delivery in the rural communities



MOBILE NETWORK DESIGN AND SERVICE PLAN

■ Service of internet

- E-Government (online activities on e-Government Network)
- E-Monitoring (Operators and E-Government)
- E-health (Telemedicine)
- E-Market and Advertising
- E-Tourism
- Online bookings
- Online streaming/Online movies
- Social Media

■ Key Technologies of mobile network

- Wi max
- GSM
- 2 – 2.5G – around 92% population
- 3G+ – around 50% population coverage
- LTE – Very small areas of Port Vila and Luganville - recently introduced



MOBILE NETWORK DESIGN AND SERVICE PLAN CONT..

■ Challenges for mobile network

- Geographical Terrains
- Land ownership issues
- High Setup costs of Towers
- High Logistics costs
- Un predictable Weather (too hot or too wet)
- High Rates for internet and voice services

■ vision & development of mobile network

- reaching 98% of Population coverage by 1st January 2018 on access to broadband and voice
- provide more Educational Awareness on positive and negative impact of ICT
- Promote positive use of ICT to stimulate more demand and usage of what is available

■ Action plan to be implemented to achieve the vision, including

- The introduction of 700 Mhz for LTE Services
- First Phase of 20 UAP Computer Lab & Internet Community Center sites, next phase about to begin
- Upgrade of equipment from 2G to 3G and some to LTE
- Promote Play or pay approach – 2 main mobile operators currently playing by rolling out extra network sites.



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