



# ANNUAL REPORT 2012

**VISION** A COMMUNICATIONS ENVIRONMENT THAT ENRICHES THE  
SOCIAL, CULTURAL, CUSTOMS AND COMMERCIAL FABRIC OF VANUATU



Section 11 of the Telecommunications and Radiocommunications Regulation Act 2009 specifies that an Annual Report must be provided by TRR as follows:

**11 Annual report**

- (1) The Regulator must provide to the Minister an annual report including, but not limited to:
  - (a) a summary of the activities of the Regulator; and
  - (b) such financial statements and auditor's reports as are required by this Act or other law; and
  - (c) a list of all entries and deletions to the Register in the preceding year; and
  - (d) a summary of material litigation involving the Regulator; and
  - (e) a list of consultants and advisors retained by the Regulator and a description of the matters in relation to which they have consulted or advised.
- (2) A contravention of subsection (1) is deemed to be a serious breach of duty by the Regulator.
- (3) The annual report provided to the Minister pursuant to subsection (1) must be made available to the public on the website.

This report is provided to achieve that objective.

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## MESSAGE FROM THE TELECOMMUNICATIONS AND RADIOCOMMUNICATIONS REGULATOR



You may ask why Information & Communication Technologies (ICT's) are important and what does the Telecommunications and Radiocommunications Regulator (TRR) actually do?

Facing that first question and shaping our role to meet that challenge has been a large part of our work at TRR this year. This year, 2012, has been a period during which we have had a major focus on the consumer: the customers of telecommunications service provision in Vanuatu.

While TRR has a forward looking vision, to understand the importance of ICT in our lives we also need to look back to where we have come from. Although we have only had widespread mobile phone use in this country for about 5 years, we can no longer imagine life without a mobile phone now. We understand the importance of communication tools to support doing business in Vanuatu. Similarly, our connection with families throughout our vast island geography is held together by the vital GSM system that keeps us linked. The same benefits to both business and consumers will be seen as Vanuatu expands access to, and use of, the internet. The internet provides a limitless source of information and

connects us to the wider world for little cost. These technologies, along with other information and communication applications, are commonly referred to as ICT; and fall under the responsibility of TRR to regulate in Vanuatu.

Our vision at TRR is to support a communications environment that enriches the social, cultural, customs and commercial fabric of Vanuatu.

The decision in 2011 to place the ICT portfolio under the office of the Prime Minister (PM) has highlighted and indicated the clear need for separation of roles between Government and the Regulator. This separation between politicians making policy, operators providing service and the independent Regulator (TRR), assists to avoid conflicts of interest, and ensures decisions are made independently and for the good of the consumers and Vanuatu as a whole. Under the PM's leadership, and with the support of the newly formed Office of the Chief Information Officer (OGCIO) and the Telecoms Operators, we will collaboratively take Vanuatu forward and focus on a single vision of achieving *ICT for All*.

To support this vision, Vanuatu needs a healthy competitive ICT market. Accordingly, we recognise the leadership of the CEOs of each of the Telecom Companies in leading their teams, provision of service to consumers and in their shareholders investing in Vanuatu.

The establishment of TRR's Consumer Advisory and Business Advisory Groups (CAG and BAG) in 2012, was critical to achieving clear and necessary communication and feedback between the users of telecommunication services and the providers of this service. TRR established these business and consumer groups and chaired their meetings during the year.

Earlier this year TRR was proud to organise an ICT showcase on behalf of the Minister responsible for Telecommunications. This event raised the awareness of the benefits of ICT to the general public and business, and was well supported by industry in Port Vila. In addition, TRR was privileged to participate in presentations on ICT made to Parliamentarians. Through a range of mechanisms in place at TRR, along with the encouragement of MPs to engage in the widespread adoption of ICT in schools, health and agriculture, TRR has actively promoted and supported the government's adoption of Millennium Goals.

Any competitive market needs a referee. TRR is that referee. Our road map has seen us develop a set of rules (Decisions, Guidelines and Regulations) to encourage fair competition and protect consumers. We have developed a capable Ni-Vanuatu team at TRR to regulate the market. During the year we made a decision on dominance and responded to a variety of complaints and issues. Only by having a fair telecommunications market environment will we continue to enjoy choice from a sustainable competitive market.

The work of the Regulator has been supported by a grant from AusAID and the World Bank. Their ongoing support is valued and recognised, as well as important, to ensure we build on the sound base we have created.

Looking to the future, we will continue to provide a regulatory service that we aim to be exemplary. We continue to assist the government in the roll out of communication services to unserved areas and underserved areas of Vanuatu, and we will mediate and regulate where required. Through these mechanisms we are seeking to build a better communications environment for the people of Vanuatu.

On the 30th of November 2012, we farewelled Mr. Alan Horne, the Regulator who led TRR with enthusiasm and energy for the previous 26 months. Alan was instrumental in the development of the TRR office, and was a visionary who motivated and stimulated ICT development in Vanuatu.

As the new Regulator I, Ronald Box -commencing on 1 December 2012, wish to recognise Alan's achievements, his drive and his success in taking TRR forward and commit to providing a regulatory environment in Vanuatu that is fair, independent, consistent and transparent to all.

It gives me great pleasure to introduce this fifth Annual Report of the Vanuatu Telecommunications and Radiocommunications Regulator (TRR).

TRR presents this Annual Report, prepared in accordance with section 11 of the Telecommunications and Radiocommunications Regulation Act No. 30 of 2009 ("the Act").

The work of the Regulator has been supported by a grant from AusAID and the World Bank.



## 2.0 CORPORATE PROFILE



### 2.1 ROLE

TRR was established under the Telecommunications and Radiocommunications Regulation Act No. 30 of 2009 (the “Act”) as a separate and independent regulatory body to regulate the telecommunications sector of Vanuatu. Its overall responsibility is to safe-guard consumers and to achieve the objectives of the Act: which are to facilitate the development of the telecoms sector and manage radio-frequency spectrum in order to promote national social and economic development.

TRR issues licences authorising:

- Service providers to provide telecommunications services to end users in Vanuatu.
- A person to operate a radio communications device.
- A service provider to use spectrum.

TRR oversees compliance of service providers with their obligations as set out in their licence(s).

In particular, such compliance includes consumer

related matters associated with, among other things, fair dealing practices of charging, invoicing, false and misleading claims, confidentiality of customer information, customer complaints, terms and quality of service. TRR has a key role in facilitating a competitive environment that is sustainable and the service providers are operating fairly in this liberalised market environment.

The Regulator must, at all times, act independently and impartially in performing its responsibilities, functions, duties and powers as set out in the Act and other laws of Vanuatu.

All full time staff in the Office of TRR, other than the Regulator, are Vanuatu nationals and all have signed contracts agreeing to be independent from political activities and influences.

TRR recognises that the Vanuatu Government has set an excellent example in the region by the establishment of the independent regulator and the opening up of the telecommunications market.

TRR oversees compliance of service providers with their obligations as set out in their licence

## 2.2 VISION, MISSION & VALUES

Our vision, mission and values are:

### VISION

A communications environment that enriches the social, cultural, customs and commercial fabric of Vanuatu.

### MISSION

To develop a competition led market for the provision of innovative information and communications services, available to all, which: encourages sustainable, economically efficient investment; respects the interests of consumers; fosters ecologically friendly initiatives; and supports the social, cultural, customs and commercial welfare of the Vanuatu.

To continue to build as an exemplar regulator within the region through thought leadership and to be the employer of choice by: investing in our people to develop a professional, passionate team; transparency and fairness in operations; and adherence to quality assurance.

### VALUES

**Inspiring** Our imagination, clarity of thought and clear leadership stimulates innovative thinking that meets the needs of tomorrow.

**Commitment** Our drive and determination to achieve excellence, our discipline in the execution of our duties, our focus on the development of our team, and our sense of responsibility instil passion for the development of Vanuatu.

**Respect** Our respect for each other is ensured by listening, collaborating and having consideration for each other, the public and licensees we work for, the rule of law, confidentiality, intellectual property, customs, environment, and future generations.

**Balanced** Our evidence based approach to decision making and our adaptability ensure that we remain proportionate, consistent, fair and just.

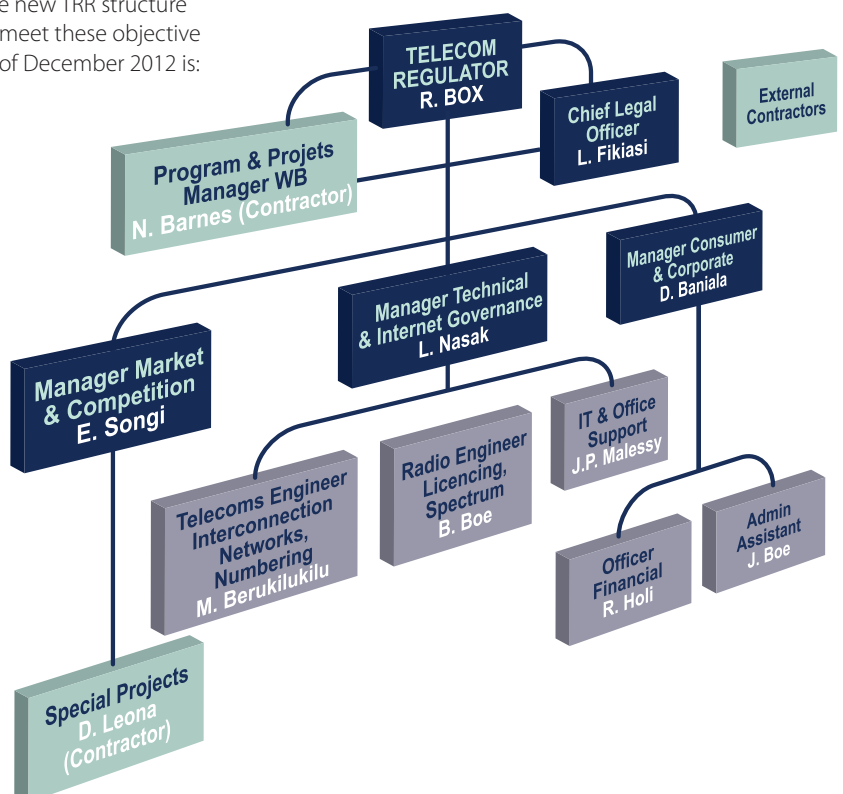
**Transparency** Our open and inclusive approach to regulation ensures that we are held responsible, and our actions and decisions are understood.

## 2.3 THE TRR TEAM

When the new Regulator, Ronald Box, commenced, he reviewed the existing structure and decided that a revised arrangement was necessary to ensure that the TRR Management structure was appropriate, relevant and would assist achievement of TRR objectives, meet TRR's obligations under the Act and would ensure TRR's operational objectives, within available budget and staff resources, could be fulfilled.

An Australian national with a broad telecommunications experience, Ronald Box joined TRR on the 1st of December 2012, as the new Regulator. Ron's prior roles included: the inaugural CEO of the Telecommunications Authority of Fiji (TAF), a consultant for the International Telecommunication Union (ITU), the Asia Pacific Telecommunity (APT), and organisations in the Asia Pacific region, a 3 year secondment from the Australian Government to the United Nations Asia Pacific Telecommunity (APT) based in Thailand, and over 19 years with the Australian Communications and Media Authority (ACMA).

The new TRR structure to meet these objective as of December 2012 is:



## 2.4 KEY TRR ACTIVITIES

TRR's identified key areas of focus in 2012 included, Sustainable Competitive Environment; Consumer Education, Awareness and Protection; Internet Management; Quality of Service measurements; and Universal Access.

TRR's role includes making decisions and the establishment of Guidelines and Regulations, as well as responding to queries and requests for Investigation or Rulings. As such, the work of TRR is both forward looking (Making Decisions, preparing Guidelines and Regulations) and reactive (responding to requests from consumers or operators).

During 2012, TRR developed the following instruments to assist the industry and consumers:

1. Advertising Guideline for Telecommunications services.
2. Spectrum Planning, Allocation and Assignment Practices.
3. Terms of Reference of Consumer and Business Advisory Groups.
4. Consumer Protection Guidelines.
5. Reference Interconnection Offer (RIO) Notice.
6. National Numbering Plan & Procedures.
7. Opening-up of 16X Short Code Range for Government and NGO public Information Services.
8. Quality of Service Guidelines.
9. A Consultation Paper on Future Arrangements of the .vu country code Top Level Domain (ccTLD) Management.
10. Radio Apparatus License & Spectrum Licence (Fees) Regulation.

These are available on TRR's website at [www.trr.vu](http://www.trr.vu).

## 2.5 THE WORK PLAN

TRR has a 3 year work plan which is regularly updated. The work plan can be viewed at [www.trr.vu](http://www.trr.vu). Key projects from that work plan are outlined in sections 4 to 9 of this report.

## 2.6 DONOR FUNDING & SUPPORT

The Government of Vanuatu received a grant in 2009 from the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA), collectively known as the World Bank. The grant funds were provided by Australia, acting through the Australian Agency for International Development (AusAID), under the Pacific Region Infrastructure Facility.

This grant funds defined projects with the objective of facilitating the transfer of legal, regulatory and technical expertise to support the establishment of fully-functional oversight

institutions for telecommunications and ICT in Vanuatu. As such, TRR is fulfilling the operational and financial management of the grant funds and reporting processes.

By mid-2012, the majority of the grant funds were committed and an extension to this grant was sought. The Vanuatu Government formally requested additional funds from the World Bank. It is anticipated that the funding support of AusAID will continue to operate through the World Bank Grant program for an extended period of 3 years from early 2013.

"AusAID has been proud to have supported the Government of Vanuatu's reform agenda for ICT since its earliest days, a key part of which has been the establishment of an independent telecommunications regulator. Building up an institution from scratch is a challenge at the best of times, let alone during a period of major changes to industry competition, government policy and institutional change. What has been particularly pleasing is to have been able to maintain that support to the point where clear responsibilities now in place between the Regulator, industry and Government. As a result the sector has been able to not only preserve the early gains from increased competition but is now well positioned to develop and implement policies that harness the potential of the next generation of technologies. TRR continues to grow and mature as an institution, and the strong support it enjoys from Government Ministers through to consumers is testament to the quality of its staff and leadership since its inception. In our and many others view the TRR has now reached a point where it is a benchmark for how a regulator should operate in a small island developing state context, and not just for the ICT sector."

*Simon Cramp, Director | Governance for Growth Program–Vanuatu | AusAID*



**Australian Government**  
**AusAID**





Team Building Event

## 2.7 TRAINING & CAPACITY BUILDING

Team building and skills development was a key focus for TRR staff during 2012. Understanding how to operate well as a team and what makes a team stronger, has helped us to be more efficient and focused to achieve required outputs.

Training included 3 modules that introduced team dynamics, personalities, and the role of a leader. This has developed team competence and the ability of staff to cope with change; such as introduction of the new Regulator. By addressing team norms and objectives, TRR has competently integrated new staff in understanding the organisation's objectives.

The training has also improved staff delegation and leadership skills, and assisted in an understanding of the important need, to listen and understand

the big picture, and to complement each other's strengths and weaknesses.

TRR staff have also benefited from overseas training and capacity building experience through attendance at important training events through fellowship funding. This included advanced Next Generation Network (NGN) regulation training, Internet related training, Internet Governance Capacity Building Programme, the Asia Pacific Telecommunity's 5th Policy and Regulatory Forum for the Pacific, Asia Pacific Network Information Centres's training on Internet Protocol Version 6, International Telecommunications Union's online course on Future Internet, and Pacific Island Chapter of Internet Society's annual PacINET 2012 conference.

The training has also improved staff delegation and leadership skills



Lloyd Fikiasi presenting at ITU World Telecom, 2012 in Dubai

## 2.8 REGIONAL AND INTERNATIONAL FORUMS & CONFERENCES

TRR staff attended a number of international telecommunications and regulators forums and conferences during 2012.

These regional meetings provide a vital opportunity for TRR staff to gain experience of the international challenges facing other telecommunications regulatory bodies, technology advances, and how they are being addressed by the global community. They also provide an opportunity to build a network of contacts in the industry that, in turn, can support and assist a smaller regulatory team such as TRR's. These events also developed capacity building skills and

assisted staff by challenging their understanding and providing them positioning internationally.

TRR took the opportunity to demonstrate its knowledge by leading international discussions and chairing panel sessions. Most notably, these included Lloyd Fikiasi, TRR's Chief Legal Officer, who lead cybersecurity legislations development, and Alan Horne, who was the chairperson for a panel session on Small Islands Developing states Challenges at ITU World Telecom, 2012 in Dubai.

These opportunities have raised the profile of Vanuatu and its skillsets to an international audience.



## 3.0 WORKING WITH GOVERNMENT



*Members of parliament listening to the ICT in parliament awareness talk by South Pacific Community (SPC), OGCIO and TRR.*

### 3.1 MINISTER RESPONSIBLE FOR TELECOMMUNICATIONS

A key issue for TRR is working successfully and cooperatively with industry and having clear guidance from, and reporting arrangements to, the Minister responsible for Telecommunications.

The Telecommunications portfolio was transferred from the Ministry of Infrastructure

and Public Utilities to the Prime Minister's office in March 2012. As such, TRR reports to the Minister responsible for Telecommunications which is the Honourable Prime Minister, Honourable Sato Kilman Livtunvanu.

### 3.2 THE OFFICE OF THE CHIEF INFORMATION OFFICER (OGCIO)

The office of the Government Chief Information Office (OGCIO) was established in accordance with the Council of Ministers COM decision 109/2011. The OGCIO is responsible for IGOV initiative leadership, overall inter-agency and cross-level co-ordination, policy and strategy development to the National ICT steering Committee and, advice on i-Government expenditure and planning.

The OGCIO reports directly to the Prime Minister, who is also the Minister responsible for ICT and Telecommunications.

Importantly, although TRR and the OGCIO co-operate closely, each office operates independently.

TRR and the OGCIO held a number of meetings together, and also, with the Minister responsible for Telecommunications during 2012 to facilitate achievement of desired goals.

For a short period during 2012, TRR provided office space for some of the OGCIO's consultants. TRR continued to dialogue and collaborate with OGCIO on issues such as the national ICT day, development of Cybercrime Legislation, the Vanuatu Internet Exchange Point (VIXP), ICT in Parliament, the Universal Access Policy (UAP) Rensarie Broadband Pilot Project, in development of Regulations, monitoring of Emergency numbers and many other ICT issues.

Prompt and effective response to national emergencies is a must

### 3.3 NATIONAL EMERGENCY RESPONSE GROUP

Prompt and effective response to national emergencies is a must. To assist this, TRR continued to facilitate emergency service stakeholders meetings. Emergency service stakeholders comprise representatives from the Government, the private sector and industry. Chaired by the Director General of the Ministry of Internal Affairs, stakeholders agreed to form the National Emergency Response Service Coordinating Group (NERG), whose vision is the creation of a centralised national emergency operation Centre (NEOC), to be accessed through a single emergency short code number so that in an emergency situation, only a single short code number is dialled. This alleviates the need to memorise several emergency numbers for the different emergency agencies.

A considerable amount of work is required along with appropriate funding to realise this vision, and the concept will need to be supported by

government, the private sector, industry and donor agencies.

Because it will take several years to establish a fully functional NEOC, the NERG agreed that in the interim, individual short code numbers should be assigned to existing emergency services, replacing the current 5-digit numbers. The emergency service short code numbers, which can be accessed free of charge, are; 111 for the Police, 112 for the Hospital, 113 for the Fire Service, 114 for Maritime and 115 for the Pro-Medical Ambulance service.

Awareness programs were conducted to educate the public on the use of the short codes. There has been a marked improvement in the handling of emergency calls however, more awareness is required on the public's use of the short code numbers and training for emergency service operators is required to further improve response times.

TRR is working closely with the Government in the development of cybersecurity policy and a Cybercrime Act for Vanuatu

### 3.4 TRR INVOLVEMENT IN THE DEVELOPMENT OF A CYBERSECURITY POLICY AND CYBERCRIME LEGISLATION

The revolutionary phenomena of the internet and the related explosion of access to information via it, is relatively new to Vanuatu. While the benefits of this borderless ecosystem is recognised and has grown exponentially, the Internet has also become an irresistible magnet for criminal behaviour. Cyber criminals<sup>1</sup> or hackers<sup>2</sup> have become increasingly inventive and gravitate to jurisdictions which offer them most protection because of out-dated and/or non-harmonised legal regimes and law enforcement agencies which do not have the skills and resources to monitor Internet traffic, investigate complaints, to prosecute or invoke an intervention that may be warranted. The global and borderless nature of the Internet enables criminals to co-operate and co-ordinate their activities and distribute their assets over several jurisdictions with relative impunity.

TRR is working closely with the Government, through the Minister responsible for Telecommunications and the OGCIO in the development of Cybersecurity Policy and a Cybercrime Act for Vanuatu. Whilst policy

development is the responsibility of the Government, TRR has assisted actively with cybersecurity initiatives.

TRR initially took the lead and coordinated with key stakeholders to form a working group called the Cybercrime Working Group (CWG). This included representatives from the State Law Office, Public Prosecutor, Customs, Police Force, OGCIO and PM's Office. TRR provided input and regulatory viewpoints into the CWG towards the implementation of a Cybersecurity Policy and a Cybercrime Act.

During the year, the OGCIO recruited its ICT Policy Advisor who expedited the formation of a formal Government appointed Cybersecurity Policy Working Group Committee (CPWGC) in November 2012. Its terms of reference were specified by the Minister responsible for Telecommunications. The CWG has been superseded by the CPWGC, tasked with developing a cybersecurity policy and cybercrime Act by mid-2013. Given these developments TRR now provides a strong supporting role on these issues.

1. People who are caught and convicted of computer crimes such as breaking into computers or computer networks  
2. People with computer savvy who use a computer(s) to interfere with other computer network systems.



ICT Day video link with Dr Amadou Toure

### 3.5 VANUATU ICT SHOWCASE ON THE WORLD TELECOMMUNICATIONS AND INFORMATION SOCIETY DAY 2012

At the request of the Minister responsible for Telecommunications, TRR organised a Showcase to support awareness on the benefits of ICT products and applications to the people of Vanuatu. The event supported the World Telecommunication and Information Society Day which is celebrated each year on 17 May.

The ICT Showcase combined two main objectives:

1. *Promotion of the benefits of ICT:* Demonstrating the practical application of ICT in a way that is relevant to Vanuatu consumers and businesses, with a particular focus on youth. The event gave exhibitors a significant promotional platform through the opportunity to display practical applications of ICT and demonstrate how ICT tools and devices have a positive impact on their work and lives.
2. *Promotion of Women and Girls in ICT:* The ITU celebrates Women and Girls in ICT on the fourth Thursday of April annually. The 2012 celebration fell on the 26th of April but Vanuatu decided to cover this important theme on 18th May. In conjunction with the ICT showcase, a selected group of women and girls had approximately 10 minutes each to share their success stories and outline the benefits that ICT had provided to them in achieving their goals and aspirations.

Key deliverables achieved through the ICT showcase were:

1. The Honourable Prime Minister and his staff actively participated. The Prime Minister led the parade, the opening showcase speech and visited each exhibitors booth;
2. Thirty companies drawn from across a wide range of industries covering Telecom operators, Government line agencies, retailers, NGOs, private companies, took part and were able to showcase their products and services;
3. Sufficient funding was collected through contributions from Corporate Sponsors and exhibitors to cover the majority of the cost incurred;
4. Over 400 people took part in the ICT awareness questionnaire competition;
5. Around 3000 people attended the ICT Showcase, visited the booths, and took part in the activities of the day;
6. Significant publicity was generated through the press, TV and Radio, and a documentary film was produced to mark this celebration. The documentary was screened on National Television Blong Vanuatu (TBV), and distributed on DVD.

The event was seen as a successful and significant start to the long term objectives of promoting the uptake of ICT throughout Vanuatu.

The ICT Showcase combined two main objectives: promotion of the benefits of ICT and promotion of women and girls in ICT





### 3.6 VANUATU INTERNET EXCHANGE POINT

TRR worked with the Government to establish the Vanuatu Internet Exchange Point (VIX). A VIX Working Group was established and meetings and discussions were facilitated by TRR. A memorandum of understanding was signed on the 10th of December 2012 by the Government, via OGCIO, Digicel Vanuatu Ltd, Can'l Vanuatu Ltd, SPIM and Telsat Vanuatu Ltd, to establish peering agreements and route their local traffic to the VIX instead of going over the costly international satellite links.

Benefits of the VIX include cost savings for ISPs by keeping local traffic within Vanuatu, faster speed or latency for local traffic, generating a local Internet economy through introduction to the market of new local content and service providers who depend on high speed and high capacity services.

The VIX is the first such exchange point in the Pacific Region and is a mark of successful industry cooperation in Vanuatu.

## 4.0 TELECOMMUNICATIONS COMPETITION AND MARKET ACTIVITIES

### 4.1 MARKET DEVELOPMENTS

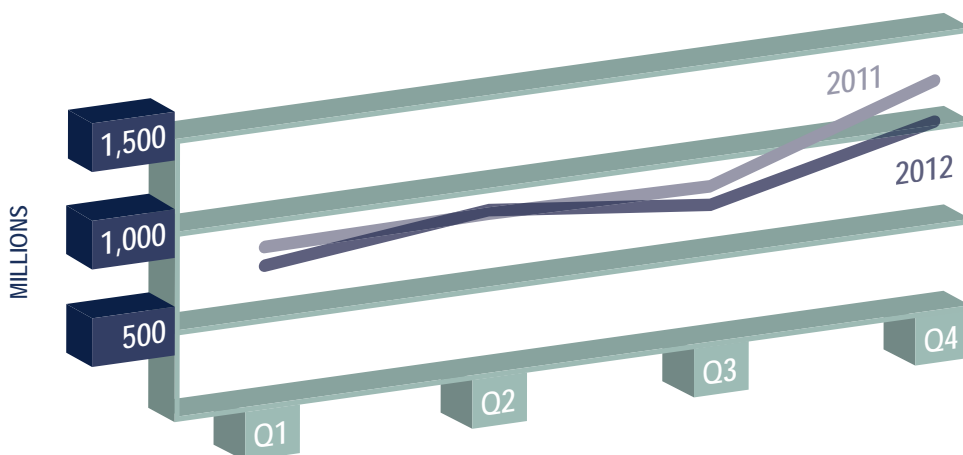
Vanuatu mobile subscriber numbers are estimated to be around 150,000 in 2012. Anecdotal indications are that the total count has declined slightly (possibly indicating reduced dual subscriptions TVL/Digicel). Mobile network coverage of Digicel is estimated at more than 90% of the population and TVL coverage at around 70%, but growing as TVL commissions the additional 8 base stations required under the Universal Access Policy (UAP) 2009. Present coverage is estimated at around 92% population. Internet access subscriptions are growing. Anecdotal indications show 23% growth by in mid-2012, although subscription rates remain very low. Fixed lined subscriptions are declining from year to year, due to converged and other

alternative means of communications within the two urban centres, rural and remote areas.

In June 2012, Digicel and TVL signed an Interconnection Agreement for wholesale interconnection between both parties. As a result there was a 25% decrease in interconnect costs between the two operators<sup>3</sup>. However, standard tariffs offered by both operators remain constant between 2011 and 2012. Both operators continue to offer discounted, promotional offers to the telecommunications end users of Vanuatu, and consumers are being offered reasonably affordable services. However, it is important for the costs of telecommunications services to consumers to continue to be driven downward.

#### TELECOM QUARTERLY REVENUE BY OPERATORS 2011 & 2012

Source: Telecommunications & Radiocommunications Regulator Vanuatu



Telecommunications Revenue has declined by 7% comparing the quarter ending September 2012 with the quarter ending September 2011 in the traditional revenue line. There is now increased usage of social media; the current statistics showing 8,660 as at December 2012. The number

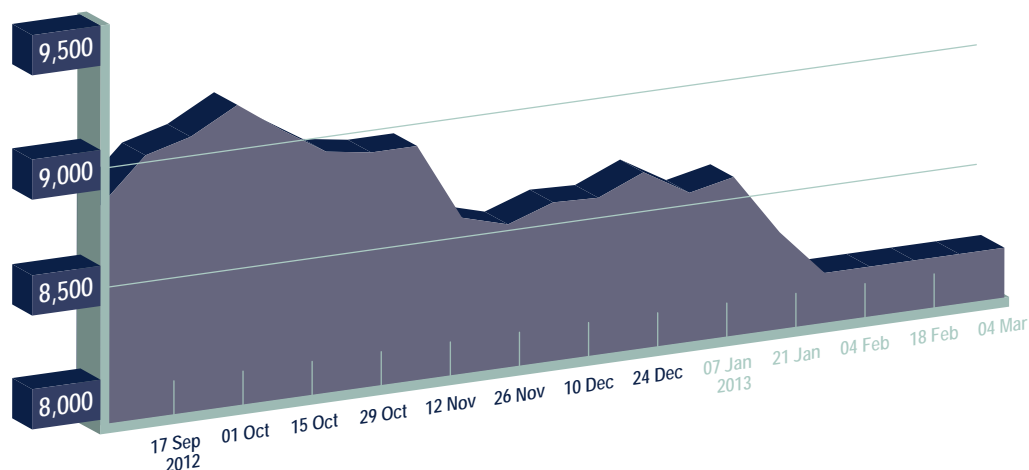
of social media users peaked at 9,220 at the eve of the Vanuatu General Election then declined back to 8,660 by December 2012<sup>4</sup>. Social networking statistics show that Facebook penetration in Vanuatu is 3.94% of the country's population and 45.48% in relation to number of Internet users.

3. [http://www.trr.vu/index.php?option=com\\_content&view=category&layout=blog&id=33&Itemid=16&lang=en](http://www.trr.vu/index.php?option=com_content&view=category&layout=blog&id=33&Itemid=16&lang=en)

4. <http://www.socialbakers.com/facebook-statistics/vanuatu>

## USERS AND DEMOGRAPHY FOR THE VANUATU ISLANDS

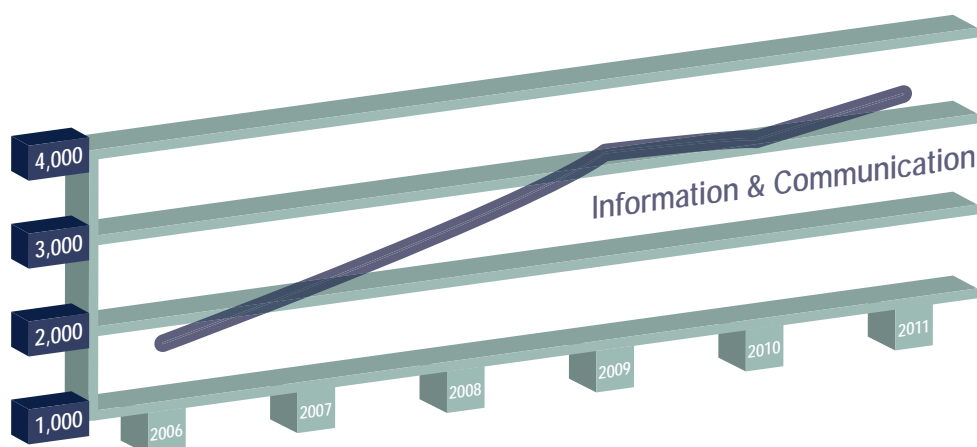
Source: <http://www.socialbakers.com/facebook-statistics/vanuatu>



Both Operators are actively encouraging use of social media and web based applications for their smart phone users, and laptop dongles (GSM Modems). This means the telecommunications market has become more dynamic compared with early 2008.

## CONSTANT PRICES GDP BY SERVICES (2006 BASE YEAR)

Source: <http://www.socialbakers.com/facebook-statistics/vanuatu>



The GDP service sector grew by 3.6% for the year ended 2011. The ICT sector grew by 7.3% in 2011<sup>5</sup>. GDP contribution by the ICT sector in 2011 is 6% compared to 5% in 2010<sup>6</sup>.

TVL upgraded its core network, particularly its switch systems for installation of additional ADSL equipment, and launched 3G mobile broadband. Digicel launched its 3G+ mobile broadband service in Port Vila and Luganville, having upgraded some of its base stations in 2012<sup>7</sup>.

Currently all GSM 2.5G sites around Vanuatu have GPRS/Edge Technology complementing the 92%

Voice coverage. Digicel has launched three rural 3G+ sites. Uptake of mobile internet for TVL and Digicel is evident but slow due to the relatively high cost of the services and latency issues.

Of the twelve licensees, including Internet Service Providers (ISPs), TVL, Digicel, Telsat, Can'l, Incite, SPIM and Interchange are active. Interchange, is understood to have a focus on wholesale access through a proposed new submarine cable due to arrive in Vanuatu in December 2013. The other licensees are either not yet operating, or are only providing services on a very limited scale.

5. Vanuatu National Statistics office, Gross Domestic Product (GDP) of 2010 / 2011, <http://www.vnsso.gov.vu/>  
 6. Vanuatu National Statistics Office, Gross Domestic Product (GDP) of 2010/2011, <http://www.vnsso.gov.vu/>  
 7. [www.digicelvanuatu.com](http://www.digicelvanuatu.com)



## 4.2 REGISTRY OF OPERATORS

| No. | Licensee                       | Issue Date | Licence Type               | Scope of Licence  | Restrictions    | Term of Licence |
|-----|--------------------------------|------------|----------------------------|---|-----------------|-----------------|
| 1   | Digicel Vanuatu Ltd            | 14 Mar 08  | Telecommunications         | Provide International Telecommunication Services to end users in Vanuatu, and to persons outside Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities  | No Broadcasting | 15 Years        |
| 1A  | Digicel Vanuatu Ltd            | 22 Sep 09  | Telecommunications (Amend) | Provision of Telecommunications Services to end users in Vanuatu  |                 | 15 Years        |
| 2   | Telecom Vanuatu Ltd            | 11 Mar 08  | Telecommunications         | Provide International Telecommunication Services to end users in Vanuatu, and to persons outside Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities  | No Broadcasting | 15 Years        |
| 3   | Telsat Broadband Ltd           | 22 Sep 09  | Telecommunications         | Provide Internet-related telecommunications services to end users in Vanuatu<br>Provide Internet-related International telecommunications services to end users in Vanuatu and persons outside of Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities | No Broadcasting | 15 Years        |
| 4   | Computer Network Services      | 20 Jan 10  | Telecommunications         | Provide Internet-related telecommunications services to end users in Vanuatu<br>Provide Internet-related International telecommunications services to end users in Vanuatu and persons outside of Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities | No Broadcasting | 15 Years        |
| 5   | e-Tech                         | 21 May 10  | Telecommunications         | Provide Internet-related telecommunications services to end users in Vanuatu<br>Provide Internet-related International telecommunications services to end users in Vanuatu and persons outside of Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities | No Broadcasting | 15 Years        |
| 6   | Hot Spotzz Ltd                 | 22 Sep 10  | Telecommunications         | Provide Internet-related telecommunications services to end users in Vanuatu<br>Provide Internet-related International telecommunications services to end users in Vanuatu and persons outside of Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities | No Broadcasting | 15 Years        |
| 7   | Incite Technology at Work      | 30 Sep 10  | Telecommunications         | Provide Internet-related telecommunications services to end users in Vanuatu<br>Provide Internet-related International telecommunications services to end users in Vanuatu and persons outside of Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities | No Broadcasting | 15 Years        |
| 8   | SPIM Ltd                       | 01 Apr 11  | Telecommunications         | Provision of Telecommunications Services to end users in Vanuatu<br>Provide International Telecommunication Services to end users in Vanuatu, and to persons outside Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities                              | No Broadcasting | 15 Years        |
| 9   | Yumi Koneck:Project for VRDTCA | 22 Sep 09  | Telecommunications         | Provide Internet-related telecommunications services to end users in Vanuatu<br>Provide Internet-related International telecommunications services to end users in Vanuatu and persons outside of Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities | No Broadcasting | 15 Years        |

## 4.2 REGISTRY OF OPERATORS (continued)

| No. | Licensee                          | Issue Date | Licence Type                       | Scope of Licence   | Restrictions                                 | Term of Licence               |
|-----|-----------------------------------|------------|------------------------------------|--|--|-------------------------------|
| 10  | Wavecom Ltd                       | 22 Sep 09  | Telecommunications                 | Provide Internet-related telecommunications services to end users in Vanuatu<br>Provide Internet-related International telecommunications services to end users in Vanuatu and persons outside of Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities  | No Broadcasting                              | 15 Years                      |
| 11  | Interchange Ltd                   | 22 Sep 09  | Telecommunications                 | Provide Internet-related telecommunications services to end users in Vanuatu<br>Provide Internet-related International telecommunications services to end users in Vanuatu and persons outside of Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities<br>Able to Land and Operate Submarine Cable        | No Broadcasting                              | 15 Years                      |
| 12  | Can'l Holdings Ltd                | 22 Sep 09  | Telecommunications                 | Provision of Telecommunications Services to end users in Vanuatu<br>Provide International Telecommunication Services to end users in Vanuatu, and to persons outside Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities   | No Broadcasting                              | 15 Years                      |
| 13  | Government Voice and Data Network | 29 Aug 11  | Exemption Telecom Licence (Sec 14) | Make available Its Network to TVL for TVL to provide as a Carrier's Carrier on short-term and stand-by services basis<br>Providing Network as a form of emergency backup for providing 20 Mbit/s circuit to TVL<br>Provide same services upon request from other operators on the same terms and conditions as provided to TVL | No Telecommunications Services to the Public | Regulator may revoke any time |
| 14  | MICOMS LTD                        | 20 Jan 10  | Telecommunications Licence         | Provision of Telecommunications Services to end users in Vanuatu<br>Provide International Telecommunication Services to end users in Vanuatu, and to persons outside Vanuatu<br>Licence to Operate and Construct Telecommunications Facilities   | No Broadcasting                              | 15 Years                      |

## 4.3 NATIONAL TELECOM GEOGRAPHICAL INFORMATION SYSTEMS (NTG)

Through TRR's National Telecom Geographical and Information System (NTG) database project, a database is being populated to produce and maintain telecommunications services with reference to geographical and demographical information available in Vanuatu. These maps enable telecommunications services to be overlaid on a map of the country and then viewed in relation to geographic, population, and government information, such as location of schools, villages and population density.

This information will provide valuable input to various commercial and policy decisions; including defining uneconomic areas for provision of telecommunications services related to the Government's Universal Access Policy. It will also be very useful in analysing service coverage to support requests such as increased access for spectrum or other regulated resources and communicating existing Broadband Internet coverage in order to support the Government achieving its Millennium Development Goals in Health and Education.

The NTG will be used to maintain maps that have been populated with broadband internet coverage, GSM mobile coverage, underground fixed line services (copper and fiber optic cable), overlaid with spatial information of villages, population density, schools, medical health centres, roads, wharfs and airstrips.

A key element of this project has been the collection of relevant data from operators and government agencies. To date, data has been collected on mobile telecommunications networks, demographic data on population statistics, school statistics, Vanuatu health centres and rural training locations. Spatial data on Vanuatu resources was obtained from the Lands Department. This included Vanuatu islands, roads, contours, villages, airways and anchorages. To complete the project, TRR will collect information on the underground network of copper and fiber optic cables. This will occur in 2013.

A key element of this project has been the collection of relevant data from operators and government agencies

## 5.0 LEGAL AND LITIGATION

### 5.1 LITIGATION INVOLVING THE REGULATOR

#### CIVIL CASE NO. 24 OF 2012

This is a case between the former Regulator, Mr. Alan Horne, and the former Minister responsible for Telecommunications; the late Honourable Harry Iarais Iauko. This case came about after the Minister issued a suspension notice ("Notice") on 13th February 2012 to Mr. Horne. The Notice purported and relied upon allegations that the Regulator failed to fulfil, or respect the Minister's statutory duties, functions, powers and responsibilities under the Act.

The Regulator then filed on 6 March 2012 a Judicial Review Claim against The Minister claiming, inter alia that; (i) the Notice was incorrect (ii) the Notice sought to interfere with and incorrectly decide claims arising in pending Court Civil Case no.152 of 2011.

On the 8th of March 2012, the Prime Minister intervened and revoked the Notice. Further, he transferred the Telecommunications portfolio from the Ministry of Infrastructure and Public Utilities to his Ministry; the Prime Minister's Office. The State Law Office, on behalf of the Minister and the Regulator, then withdrew the case; since the Prime Minister revoked the Notice. Both parties bore their own legal cost.

#### CIVIL CASE NO.152 OF 2011

This is a Judicial Review claim brought by Digicel against the Regulator in 2011 and it continued in 2012. In this case, Digicel alleged that the Regulator acted ultra-vires for conducting a cost modelling exercise to determine the interconnection rates. In its draft Decision 02 of 2011, the Regulator proposed new interconnection termination rates for fixed services and mobile services, based on cost modelling undertaken by the Regulator in 2011.

The Court again heard the case in June 2012 in regards to Rule 17.8 of the Civil Procedure Rules, and a decision is still pending before the Court.

8. This is a requirement under the civil procedure rules (court rule) for all Judicial Review claim file to Court, to test the merit of the claim, before the Court can hear the substance of the claim.

## 5.2 DECISIONS AND ORDERS MADE BY TRR IN 2012

In 2012, TRR issued various Decisions and Orders to enforce the Act, Licences and various instruments made under the Act, and to ensure the Act and Licences are monitored and complied with at all times by Licensees.

During the year, TRR issued the following Orders and Decisions:

### ORDERS

*Order 1 required Digicel and TVL to Produce Information according to TRR's formal request:*

In compliance with section 8 of the Act, TRR issued this Order requesting TVL and Digicel to provide required information and Data to the Regulator. The provision of this information and data will assist the Regulator to review Digicel's dominance position (after Digicel sought for such review) in the market for wholesale and retail mobile telecommunications services, and assist TRR's determination of whether Digicel is dominant in the market for retail fixed-line telecommunications services. This order was issued on the 8th of March 2012.

*Order 2 required Information from Licensees:*

The Regulator issued this Order on the 27th of March 2012 to all licensees to provide required specific information as provided in their respective Licences. This order was made to ensure the Regulator receives quarterly information and data from Licensees to monitor the trend of the market.

*Order 3 authorised TVL and Digicel to Divulge end user Information of persons who cause nuisance and annoyance calls to the national Short Code Emergency Numbers to Police:*

In exercising its powers under the Act, the Regulator issued this Order on the 17th of July 2012, in accordance with section 40 of the Act. This Order requested TVL and Digicel to disclose numbers calling emergency short code numbers. The Regulator, together with the Police, signed a Memorandum of Understanding to work in partnership to track down nuisance callers who call emergency short code numbers and hide his/her number, and investigate such callers as appropriate.

*Order 4 was a Designation Order on Dominance review for Digicel:*

Under section 21 of the Act, the Regulator has the power to designate an Order when required. This Order was made after the Regulator reviewed Digicel's dominance position as per clause 10.3 of its Licence; where Digicel enjoys a position of economic strength or controls an essential facility, affording it the power to behave to an appreciable extent independently of competitors or consumers on both market for retail mobile services and the wholesale market for termination of calls on Digicel's network in Vanuatu. This Designation Order was issued on the 16th of July 2012.

### DECISIONS

*Decision 1 Notifying TVL and Digicel to produce a RIO under section 27 of the Act*

On the 6th of February 2012, the Regulator made this Decision in exercising its powers and duties provided under section 27(1) of the Act. In this Decision the Regulator notified TVL and Digicel to be the nominated service provider to propose their terms and conditions of their Reference Interconnection Offer (RIO) for the provision of their interconnection services.

*Decision 2 to amend the National Numbering Plan*

In exercising its powers and duties under the Act, the Regulator made this Decision on the 28th of September 2012, to amend the National Numbering Plan after consulting with Licensees

and stakeholders. The National Numbering Plan provides rules for the allocation of numbers to Licensees and various services provided in the sector.

*Decision 3 was to authorise TVL and Digicel send an SMS to, and/or block the end-users causing annoying calls through use of Emergency Service Short Codes*

This Decision was issued on the 15th of October 2012, to discourage callers abusing and causing nuisance to emergency services through calling short code numbers, TRR exercised its powers under the Act and made this decision to protect the emergency short codes numbers from callers making nuisance or annoying calls to be an offence under the Telecommunications Act (Cap 206).

## 6.0 TELECOMMUNICATIONS AND RADIOCOMMUNICATIONS ENGINEERING

### 6.1 NATIONAL NUMBERING PLAN AND PROCEDURES

In June 2012, TRR published a National Numbering Plan and Procedures providing a procedural framework for the telecommunications sector, and to ensure that numbers are allocated in an efficient and non-discriminatory manner. The National Numbering Plan and Procedures is aligned with various ITU-T Recommendations; especially ITU-T Recommendation E.164 and international best practices in the sector.

This document outlines the management, administration, and governance of the National Numbering Plan of Vanuatu and describes TRR's role in it as per the Act, and pursuant to all Telecommunications Licenses issued to operators and service providers.

Other numbering developments in 2012 included:

- Finalising an amendment to the National Numbering Plan in October with the specification of National Emergencies phone numbers for emergency services.
- Assignment of National Emergencies phone numbers to emergency services.

- Promoting awareness of emergency numbers through Talk-Back shows on Radio Vanuatu and newspapers, and to reduce nuisance calls.
- Allocation of 33 xxx and 35 xxx fixed number ranges to Digicel Vanuatu Ltd, for assignment to the i-GoV fixed network and customers on other fixed networks.
- Opening-up of 16X Short Code Range for Government and NGO public Information Services; with the assignment of 166 for public warning, alert dissemination through voice and SMS services, to be operated by the National Disaster Management Office (NDMO).

TRR will actively monitor compliance with the National Numbering Plan and Procedures to ensure that the management of numbering resources is appropriate and responsive to the changing needs of the operators and end-users, and to ensure that the numbering arrangements reflect current industry practice.

TRR will actively monitor compliance with the National Numbering Plan and Procedures

### 6.2 QUALITY OF SERVICE GUIDELINE

TRR produced a Quality of Service (QoS) Guideline in late 2012. This document guides service providers with information they are required to provide to TRR on their QoS, in many of their service provisions: such as repair time for faults, response time to queries etc. TRR will publish relevant data that it collects. This will improve the visibility of the actual QoS being provided by the operators, and is intended to increase

their performance, as well as provide useful data to consumers in assisting their choice of service provider.

In an earlier form, a draft QoS Regulation was released for public consultation in November 2011. Feedback received from the consultation resulted in TRR's decision to replace the proposed Regulation with a QoS Guideline.



Consultant Chris Doyle discussing spectrum matters with the team

TRR commenced development of a new radio apparatus license fees regulation that will come in to force on 1st of January 2014

### 6.3 RADIO APPARATUS LICENCE AND SPECTRUM LICENCE (FEES) REGULATION

Section 4(1) of the Act, requires that all users of equipment that emit radio waves or operate a radiocommunications device in the territorial boundaries of Vanuatu, including transmitting satellite earth stations, radio devices in ships or aircraft registered in or under the law of Vanuatu, must have a Radio Apparatus Licence or an Exception issued by the Regulator under section 14 of the Act.

To facilitate the management of the radiofrequency spectrum, TRR issued a Regulation establishing the framework for the collection of radio apparatus licence and spectrum licence fees as provided for in the Act.

Currently TRR licences radio apparatus for accessing the radiofrequency spectrum and collects a licence fee for their use.

Since the radio frequency spectrum is a finite resource, every effort and care is required to manage it in the best possible manner to guarantee its availability to everyone wishing to utilise it, and for social and economic activities. In 2012, TRR commenced studies into future spectrum management and requirement needs. This will continue in 2013.

With the opening up of the telecommunications market for competition there is a need for a Licence Fees Schedule that is in line with best practice, is transparent, and facilitates increased efficiency in the process of frequency allocations, assignments and licensing, as well as providing a stimulus to increased national economic activity and development. Within this in mind, TRR commenced development of a new radio apparatus license fees regulation that will come in to force on 1st of January 2014.



## 7.0 INTERNET GOVERNANCE

The internet will play a vital role in the economic and social development of Vanuatu. In order for there to be good governance of internet resources allowing equitable and fair access to all Internet Service Providers (ISP), some regulation of the internet resources is required. Chief among these is the management and regulation of the .vu country code Top Level Domain (ccTLD) namespace including domain name services (DNS).

Domain name services are also a critical part of the Internet's basic infrastructure. Every device connecting to the Internet has a unique Internet protocol (IP) address (e.g. 192.168.2.1) which is represented by an internet domain name; basically a character-string representation of an IP address (e.g. www.trr.vu for 192.168.2.1). DNS provide users with useful meaningful addresses that make navigating the internet's vast wealth of information resources possible. Without DNS, the Internet would be effectively useless for the majority of its users. The .vu ccTLD which is a public attribute and the DNS needs to be properly protected in order for their services to continue.

TRR, as exclusive manager and administrator of .vu ccTLD names and domain name registration for Vanuatu (via section 7, (4), (e) of TRR Act)<sup>9</sup>, embarked on a project this year to establish a policy and governance framework for the management and administration of the .vu ccTLD.

The Project had two main objectives:

- 1) to develop and establish an administrative and technical policy and governance framework for the .vu ccTLD namespace;
- 2) to implement the framework through the development of appropriate policies, procedures and guidelines for effective administration and operation of .vu ccTLD, including technical Registry services and the overall domain name registration for Vanuatu.

The framework is intended to guide the roles and responsibilities of parties operating in the .vu domain name space, domain operations, dispute resolution, and consumer protection needs in the

use of .vu domain names and related services. A draft consultation paper<sup>10</sup> for public input on the future arrangements of .vu ccTLD management and administration was released this year. The project's future deliverables are pending the outcome of further public consultation due to be undertaken in 2013.

In respect of Internet governance and Internet issues in Vanuatu, TRR:

- Developed a draft Internet Code of Practice (ICP)<sup>11</sup> and released it for public input. The ICP provides guidelines that promote industry self-regulation concerning the type of content prepared and distributed over the internet in Vanuatu. The aim of the ICP is to guide ISPs and content producers in producing acceptable material and to support the protection of children/minors from viewing unsuitable content. Additionally, the ICP aims to promote and encourage end user confidence and uptake in the use of the Internet in Vanuatu.
- Conducted Cybersecurity awareness to high school students and also to high school Principals during the 2012 Principal's ICT Conference in a lead up to ICT Day on May 17th. TRR also conducted awareness to staff of the Office of the Vanuatu Council of Churches and to the Child Help Desk Office in the Department of Women's Affairs.
- Facilitated and supported the establishment of an Internet Exchange Point (VIX) in Vanuatu. (See also section 3.6 of this report).

The Internet and ICTs offer major transformational opportunities. While the country embraces these developments, Internet governance issues also need to be addressed. The open nature of the Internet brings many challenges. TRR continues to monitor and to create awareness, assistance programs, and guidelines for the safe and responsible use of the Internet in order to ensure that this important resource remains open, participative, safe and equitable for Vanuatu citizens.

The internet will play a vital role in the economic and social development of Vanuatu

9. <http://www.trr.vu/attachments/article/53/Telecommunications%20and%20Radiocommunications%20Regulation%20Act%202009.pdf>

10. <http://www.trr.vu/attachments/article/29/.vu%20ccTLD%20Management.pdf>

11. <http://www.trr.vu/attachments/article/29/Internet%20Industry%20Code%20of%20Practice.pdf>



*TRR engaging with consumers in a rural area*



## 8.0 CONSUMER ACTIVITIES

A leading role for TRR is to protect and promote the interests of consumers, citizens and business consumers in the national development of Telecommunications/ICT sector as per Part 8 of the Telecommunications and Radiocommunications Act' 2009. Hence, TRR has produced a number of consumer Regulatory tools to assist it in addressing consumer issues that have arisen to date. Such tools include Consumer Protection Guidelines, Advertising Guidelines, the Internet Regulatory code of practice, and Consumer Complaint Handling Processes.

Section 6 of the consumer protection Guideline states that TRR will establish User Advisory Groups to obtain feedback and opinions on the implementation of the Guidelines, as well as on consumer matters, proposed Decisions and Regulations by TRR. Accordingly, TRR established its Business Advisory Group (BAG) and its Consumer Advisory Groups (CAG). The establishment of these Groups assists TRR in gaining a consumer perspective, to educate consumers on their rights and obligations, as well as fostering enhanced investment and encouraging take up of ICT services in Vanuatu.

The BAG and CAG comprise representatives from major businesses, retail, consumers, not for profit organisations, government agencies, health centres and schools.

Key objectives for the Groups are to:

- assist TRR and provide feedback and opinion on consumer issues, including on regulatory instruments being developed by TRR;

- provide opinions as to the issues being faced by the constituents being represented; and
- support on-going awareness programs in the area of consumer protection.

One of the outcomes of the meetings was TRR's establishment of Advertising Guidelines highlighting the ten (10) key principles of fair advertisement.

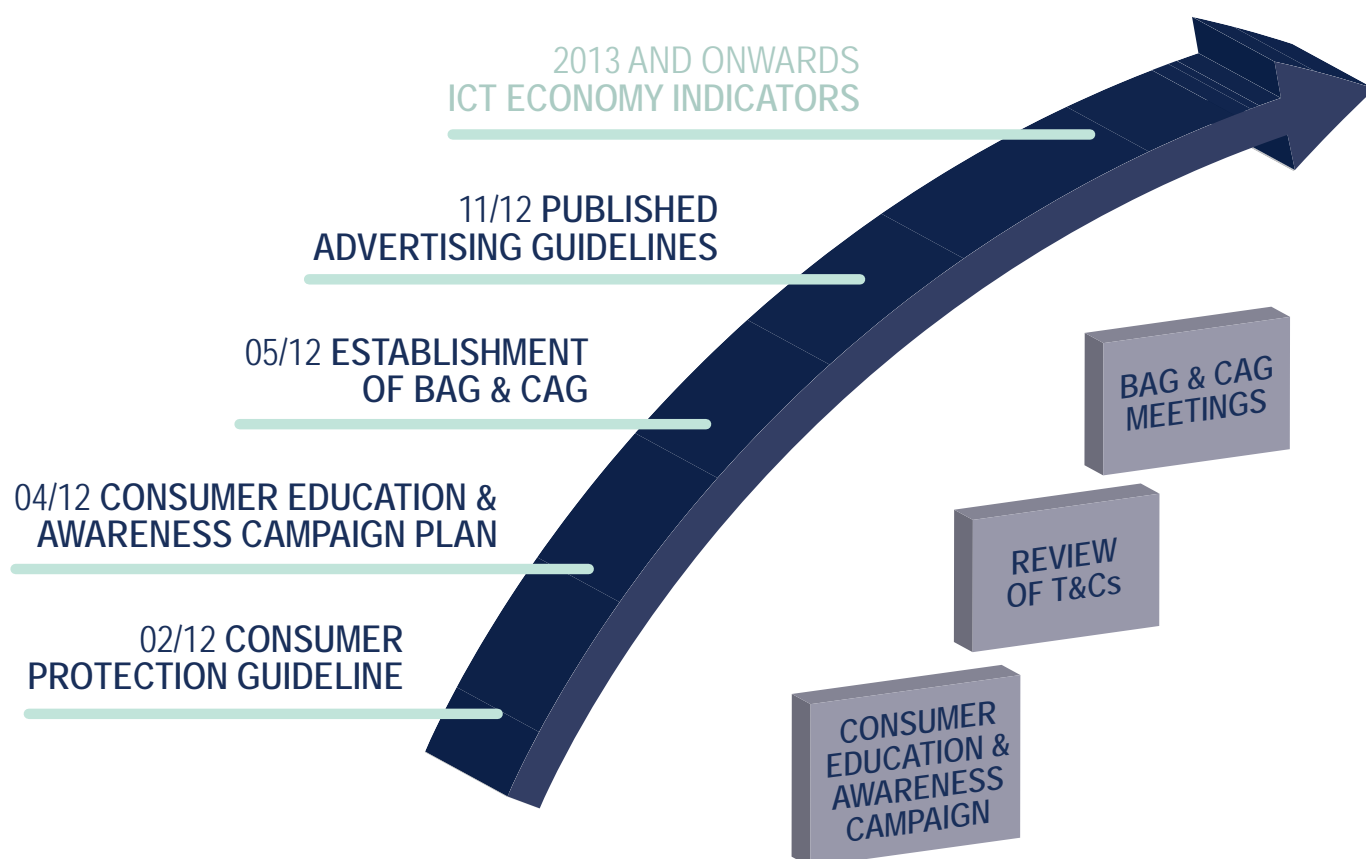
TRR is considering widening CAG and BAG representation with members from different provinces.

TRR intends to focus on a range of programs including, increasing consumer educational and awareness campaigns to ensure consumers are empowered, that their voices are heard, and that their needs are addressed through appropriate action by service providers or consumer enforcement measures undertaken by TRR.

Another part of TRR's assistance to consumers, is TRR's registry of complaints formally submitted to the office. In 2012 TRR registered and dealt with a number of different types of customer complaints. Of these, 85% were related to quality of service (voice and data), followed by infrastructure and land disputes, and misleading information. Most complaints were, appropriately, referred back to the respective operator to deal with. TRR stepped in when the parties (operator and consumer) could not reach agreement in these situations. With TRR's action, the consumer complaint was appropriately addressed.

In 2012 TRR registered and dealt with a number of different types of customer complaints. Of these, 85% were related to quality of service

## TIME LINE FOR THE BUSINESS AND CONSUMER ADVISOR GROUP



|   |                              |
|---|------------------------------|
| 1 | CONSUMER EMPOWERMENT         |
| 2 | CONSUMER SAFETY              |
| 3 | CONSUMER ENFORCEMENT         |
| 4 | CONSUMER REDRESS             |
| 5 | OTHER CONSUMER SERVICES      |
| 6 | CONSUMER STRATEGIC FRAMEWORK |

## 9.0 UNIVERSAL ACCESS



*Rensari TRR pilot telecentre building*

### UNIVERSAL ACCESS

Part 4 of the Act outlines Universal Access Policy (UAP) provisions primarily aimed to improve access to telecommunications services for locations which are not, or not yet adequately, served by existing services. The Government of Vanuatu (GoV) established a UAP trust fund in May 2008, with seed funding from AusAID.

The UAP fund is administered by TRR under the Telecommunications and Radiocommunications Regulation Act No. 30 of 2009 as Trustee and the implementing agency of the UAP.

The UAP fund has so far been used in support of pilot projects such as the Rensarie Broadband Pilot Project.

### EXPANSION OF MOBILE SERVICE

In August 2010, GoV agreed that ten remote locations should be provided with mobile service: Aneityum, Futuna, Gaua, North Maewo, East Pentecost, North West Santo, Vanua Lava, East Erromango, South East Tanna and the Torres Group. This decision was as a result of TVL and Digicel not willing to extend their mobile telephone networks and services on a 'normal' commercial basis. Through a competitive tendering process, TVL was awarded the UAP contract to provide mobile services to these areas.

By 2012, nine of the ten sites have been implemented and commissioned; the latest being the Futuna site, which was switched on in November 2012. The Torres Group is the last location to be completed. Discussions are underway on this project including TVL's overall assessment of the implementation and viability of the service.

### COMPENSATION OF TVL

This year, TRR has monitored, mediated and resolved some of the problems associated with the transition from rural fixed line to mobile service, under the Settlement Agreement signed in 2007 between the GoV, Cable & Wireless and TVL.

Under the UAP expansion of mobile service area, mobile service coverage has superseded most rural fixed line services.

TRR keeps a close watch on all such related aspects.



*Signing Phase 2 UAP with community signing for management responsibility Mr Roy Obed, Mr John Kampai and Regulator Mr Ron Box*

### THE UAP BROADBAND PILOT PROJECT

This year TRR progressed the Rensarie UAP broadband pilot project with the following objectives:

- To provide broadband internet access to Rensarie College (RC), Rensarie Health Centre (RHC) and the surrounding communities of RC;
- To test the deployment of broadband internet access in remote rural areas;
- To provide basic education in the use of internet services in remote rural areas;
- To stimulate the demand of broadband internet and services in remote rural areas;
- To develop and provide a cost-effective, sustainable model for Vanuatu's experience and lessons learned during the 12 months pilot period, for application to future UAP projects.

Since the implementation of the pilot project, significant positive impacts were observed in 2012. The Rensarie Telecentre (RT) now enjoys a 24/7, 512 kbps downlink/128 kbps uplink Internet speed. Wireless access is available to the public,

RC and RHC. The Rensarie area and its surrounding communities have readily accepted the project and there is now increased uptake of the Internet.

RC Principal, Mr John Kampai, currently championing the project, described RC as experiencing an "information explosion" with increased enthusiasm shown by both teachers and students in teaching and learning methods. As a direct result of the pilot project, RC recorded a 25% increase in success rate for RC Year 12 Anglophone students in their 2012 end of year exam, and an overall student pass rate of 30% to 55%. RC came second in a school - competition on Climate Change and owed their win to the availability of an Internet service which enabled them to gather relevant and adequate information for the competition.

From the Rensarie Broadband Pilot project six months review Report, developed by TRR in early September 2012, a way forward has been agreed. It includes transition of the pilot for another 12 months with management being handed over to the local community under RC. The final phase will be project managed by TRR and operated under the management of RC towards self-sustainability.

## 10.0 EXPERT ADVICE

### 10.1 REGISTRY OF CONSULTANTS 2012

In accordance with section 11 of the Telecommunications and Radiocommunications Regulation Act 2009 ("the Act"), this section lists the consultants and advisors retained by the Regulator. It also provides a description of the matters in relation to which they have consulted or advised.

| Name                  | Position Held                            | Area of expertise or project responsibilities  |
|-----------------------|--|--|
| NICOLA BARNES         | REGULATORY PROGRAM & PROJECTS MANAGER    | Responsible for administration of the World Bank Grant funds. Co-ordinated World Bank funded activities, procurement and reporting. Assisted TRR to establish and oversight program management discipline. Provided project management training.               |
| ALAN HORNE            | REGULATOR                                | Performed duties as the Regulator from October 2010 until 30 November 2012   |
| RONALD BOX            | REGULATOR                                | Performed duties of the Regulator from 1st December 2012   |
| ERIC BRAUN            | LEGAL ADVISOR                            | Assisted TRR's in house Chief Legal Officer and TRR staff on significant legal matters including preparation, review and advice on regulations and orders, assisted on litigation matters, and provided specialist advice on technical telecoms legal matters. |
| CHRIS DOYLE           | SPECTRUM EXPERT                          | Radio spectrum analysis, assisted with development of proposed revised radio licensing Fees Schedule   |
| ALAN SHORT            | INTERCONNECTION & COST MODELLING ADVISOR | Provided advice and assisted on interconnection and cost modelling work.   |
| NATHANS AND ASSOCIATE | SPECIALIST LEGAL AND ECONOMIC FIRM       | Provided economic and legal analysis and evaluation on issues such as anti-competitive claim and market dominance.   |

## MAP OF VANUATU ISLANDS



VANUATU

MATTHEW

HUNTER



## 11.0 VANUATU & TELECOMMUNICATIONS HISTORY

The Republic of Vanuatu is an island nation located in the South Pacific Ocean. The archipelago is located some 1,750 km east of Australia, 500 km north-east of New Caledonia, west of Fiji and south of the Solomon Islands. It was named New Hebrides during its colonial period.

Vanuatu has 63 inhabited islands, an aggregate land area of 12,200 square kilometres and a total population of 235,000 (2009 census). Most of the islands are mountainous and of volcanic origin, and have a tropical or sub-tropical climate.

Vanuatu is 2.5 hours flying time north east of Brisbane and 3.5 hours from Sydney, Australia.

Many of the islands of Vanuatu have been inhabited for thousands of years, with the oldest archaeological evidence found dating to 2000 BC. The predominant race in Vanuatu is Melanesian. In 1605, the Portuguese explorer Pedro Fernández de Quirós became the first European to reach the islands, believing it to be part of Terra Australis. Some Europeans began to settle in the islands in the late 18th century, after British explorer James Cook visited the islands on his second voyage, and gave them the English name New Hebrides.

In 1887, the islands began to be administered by a French-British naval commission. In 1906, the French and British agreed to an Anglo-French Condominium on the New Hebrides. During World War II, the islands of Efate and Espiritu Santo were used as allied bases by the US military.

Independence was achieved on July 30, 1980 resulting in an independent parliamentary democracy, for which general elections are held every 4 years.

Tourism is one of the major industries in Vanuatu with more than 240,000 visitors annually. Reliable telecommunication services are an essential tool to support the private sector and the government's economic and social policies. The tourism industry, in particular, relies on high speed internet access in order to be competitive with other regional destinations.

Privately owned Telecommunication services were introduced into Vanuatu from early 1978. The company which is now Telecom Vanuatu Limited (TVL) was the only service provider of telecommunications services until the market was liberalised in 2008.

On 20 November 1992, the Minister for Telecommunications, on behalf of the Government, entered into the Franchise Agreement with TVL. The Franchise Agreement provided for the grant to TVL of the sole rights for the twenty year term to provide, operate and develop the "Public Telecommunication System" of Vanuatu and further to be the exclusive provider of "Public Telecommunications Services" in Vanuatu. TVL then ventured into new technology at that time, including the analogue telecommunications services and internet.

The major turning point in the telecommunications sector occurred in 2007 when the government, under a settlement agreement, exchanged its 33.3% shares in the incumbent operator, TVL, to end the monopoly. The government now has no commercial investment in any telecommunications company.

In order to create a regulatory framework for Vanuatu, the Government repealed some of the Sections and Parts of the Telecommunications Act (1989) and passed the Telecommunications and Radiocommunications Regulation Act No. 30 of 2009 ("the Act") in 2009. The Act established the Telecommunications and Radiocommunications Regulator (Regulator). The Regulator is responsible to enforce and give effect to the Act, by making regulatory decisions and advising the Minister as to policy matters. The Regulator is also empowered under the Act to issue telecommunications and radiocommunications licences and make regulations on a broad range of matters.

## Timeline of Major events in Telecommunications history:

|                         |  |
|-------------------------|--|
| <b>November 2007</b>    | Com approved Telecommunications Policy statement   |
| <b>December 2007</b>    | Telecommunications Act amended   |
| <b>19 December 2007</b> | Settlement Agreement   |
| <b>28 February 2008</b> | Interim Regulator appointed and delegation   |
| <b>10 March 2008</b>    | Settlement day   |
| <b>11/14 March 2008</b> | TVL & Digicel licences   |
| <b>13 March 2008</b>    | Interconnect Agreement   |
| <b>25 June 2008</b>     | Digicel Launch (duopoly until March 2011)  |
| <b>11 March 2009</b>    | Com approves open licensing policy   |
| <b>2009</b>             | More telecommunications licence issued (not mobile telephone)  |
| <b>November 2009</b>    | Telecommunications and Radiocommunications Act   |
| <b>September 2010</b>   | TVL received 80 million for uneconomic customers   |
| <b>September 2010</b>   | TVL awarded UAP 10 sites   |
| <b>November 2011</b>    | TRR launches broadband internet pilots in Malekula   |
| <b>November 2011</b>    | Telecommunications/ICT portfolio transferred to the Prime Ministers' office  |
| <b>December 2011</b>    | Digicel launches 3G mobile data services   |
| <b>January 2012</b>     | Establishment of the National Telecom GIS (NTG) database   |
| <b>February 2012</b>    | Consumer Protection Guidelines Published   |
| <b>March 2012</b>       | Telecoms portfolio moves under the PM's Ministry   |
| <b>April 2012</b>       | Consumer & Business Advisory Groups begin work   |
| <b>May 2012</b>         | National ICT Showcase Day (18th May)   |
| <b>June 2012</b>        | National Numbering Plan and Procedures published   |
| <b>June 2012</b>        | Successful negotiation of Interconnection Agreement between TVL and Digicel  |
| <b>August 2012</b>      | Spectrum Planning Allocation & Assignment Practice published   |
| <b>September 2012</b>   | UAP Broadband Pilot Project Six Months Review Report released  |
| <b>October 2012</b>     | National Numbering Plan and Procedures amended   |
| <b>November 2012</b>    | Advertising Guidelines drafted   |
| <b>30 November 2012</b> | The former Regulator, Mr. Alan Horne finished as the TRR Regulator   |
| <b>1 December 2012</b>  | New Regulator Mr Ronald Box commenced  |
| <b>19 December 2012</b> | Signing of Agreement between TRR and Rensarie College (RC) for RC to manage the Telecentre on behalf of the community, and agreement for phase out of the Rensarie UAP Broadband Pilot Project over a 12 months period (final phase) to facilitate transition to self-sustainability |



## 12.0 VANUATU OPERATOR VIEWS

The commercial telecoms companies or licensees each play a vital role in ensuring a successful telecoms market is sustained in Vanuatu. This section provided the licensees that accepted TRR's proposal to respond to 5 standard questions (proposed by TRR).



*Rensari TRR pilot telecentre building*

### 12.1 INCITE

#### COMPANY PROFILE

Operating in Vanuatu since 2003, INCITE is a leading privately owned technology business with head offices in Port Vila. INCITE has 6 staff, including 3 internationally experienced systems engineers and 2 technicians. INCITE's approach is to partner with clients to develop the best and most innovative technology solutions to support and grow their business.

Core services include:

- Supply, configuration and support of servers and PCs
- Design and implementation of Local and Wide Area Networks
- Supply and configuration of high speed routers, firewalls and switches
- Internet connectivity, especially diverse internet supply allowing for load sharing and resilience
- VoIP PABX Systems
- VSAT Internet for remote locations

- Software requirements specification and selection
- General ICT Consulting, including ICT Reviews

While a focus is undoubtedly on providing clients with the best information technology solutions available, success lies in the talent and dedication of Incite's team of qualified IT professionals. INCITE is committed to ensuring their people lead their field in this technological world. Through this approach they are able to satisfy clients with technology solutions that assist the client to support and grow their businesses.

INCITE's expertise covers all aspects of information technology – from strategic IT advice, project management and network design through to infrastructure implementation and helpdesk support. No job is too complex, nor too small.

INCITE is committed to delivering complete IT solutions and providing outstanding customer service to make technology work for the client.



## IN 2012 OUR FOCUS HAS BEEN ON:

In 2012 INCITE continued to install and upgrade servers and equipment for our many clients, especially upgrades of Windows Servers to the latest version due to discontinued support for older versions. With the advent of multiple internet providers, INCITE also installed a number of multi-internet gateways for clients who require resilient connections.

This year was however a big year for INCITE with the awarding of the Vanuatu Government Telecentre Project in Rensarie Malekula. In November 2011, INCITE completed the installation of an innovative cyclone resistant Telecentre powered by solar energy. For the past 12 months INCITE has been intricately involved in the day to day support and development of the business. This was a Pilot Project to promote Rural Growth through the use of internet in areas considered uneconomic and therefore would not attract normal internet operators who only provide access. The goal of the project was to create a sustainable business that would require no on-going funding. This is the first time the Vanuatu Government has

attempted such a project and it is hoped that the findings that INCITE deliver will assist the country in developing an ICT Policy especially covering provision of service to rural and uneconomic areas.

From a technical perspective the Telecentre has run exceptionally well with internet supply maintaining 99.9% uptime 24 hours a day throughout the period. Superior technology solutions is INCITE's core business, so we considered this the easy part, the difficult part being the uptake of usage amongst the local population. Rural people in such areas of Vanuatu have generally not experience or perceived need for internet service and low levels of literacy provide a challenging environment. However usage has grown slowly, and the Telecentre has also found additional sources of income such as photocopying, phone charging, sale of memory sticks etc., in effect becoming a business solutions centre in the rural community. INCITE wishes the project every success as it prepares to hand over to local management (in late 2012).

## OUR KEY STRENGTHS

INCITE's key strength is its technical staff. INCITE's people, equipment, facilities and customer service are world class, yet their local knowledge makes them the best partner in the Vanuatu market. They act with integrity at all times and always put customer needs first.

With decades of experience working overseas in modern corporate environments, INCITE's team is able to see the big picture of their client's business. INCITE are not interested in technology for technologies sake; they are interested in

technology helping clients grow their business. Sometime in Vanuatu that means doing less, or doing things very differently. With over 10 years' experience in Vanuatu, INCITE knows what works and what doesn't.

INCITE's staff are also focused on an engineering approach, where solutions are designed, implemented, tested and documented. Service is also a hallmark of our staff, client problems are attended to within minutes normally, and clients continually updated on progress.

When we think about the future of telecommunications in Vanuatu... we see a bright future for telecommunications in Vanuatu, especially when the under sea cable goes live

As well as bringing down communications costs, the reduced latency will have a huge impact on content delivery and the type of services possible. In the last 2 years, with the advent of multiple ISPs, we have already seen a big jump in what is possible. We already have a number of clients using VoIP between sites and overseas, and we have also setup a number of clients with multiple internet feeds, allowing them to leverage the best of each ISP and also providing resilience in case of failure. Although these technologies sound exciting, the real benefit is in improved business opportunities through access to new markets, improved cost/profit ratios and quicker results in a fast paced business world.

## OUR COMPANY AND THE COMMUNITY

INCITE is not just a technology company but also very much involved in the community. Such involvement includes:

World ICT Day - Incite was a proud sponsor of Vanuatu's first ever World ICT Day, showcasing INCITE's range of products and services.

Rowing - INCITE continues to be a proud supporter of the Vanuatu Rowing Association (VRA) sponsoring one of the new carbon fibre

singles, and regular attendance at VRA events.

Round Island Relay - INCITE are keen supporters of the annual Wilco Round Island Relay. (Last year the team easily took out the best support vehicle of the day with a booming audio system and on-board fire-show!)

Vanuatu Women's Volleyball - INCITE is a proud supporter of the all-conquering national women's volleyball team.



## 12.2 TELSAT

### COMPANY PROFILE

Telsat Broadband is one of the newest Internet Service Providers in Vanuatu, having received our telecom license in September 2009, we've been working hard to establish our network coverage and begin providing Port-Vila residents with an alternative choice for their broadband demands.

Our goal is to expand our network coverage throughout the islands of Vanuatu with the use of our VSAT island connectivity system which is unique to Telsat's network. Through the use

of this system, we can provide customers with account roaming capabilities which the other providers simply cannot.

Telsat Broadband is a sister company to Telsat Pacific - PayTV, which has been a long-established business in Port-Vila for over a decade and with the growing support of our valuable customers we will continue to expand from a small private company to your best choice for internet in the South Pacific.



### IN 2012 OUR FOCUS HAS BEEN ON:

In 2012 our focus has been on expanding our network coverage, filling in blind areas throughout Efate and preparing for the launch of our Island network by purchasing land and erecting towers on various islands.

Our IT section has concentrated on development

of software which will be fully IPV6 compliant, which will be installed in mini servers installed at each island site. This will link all the sites to our main billing and control servers in Vila, enabling a seamless nationwide wireless internet service with roaming capability.

### OUR KEY STRENGTHS ARE:

1. Low entry costs. Subscribers do not need to purchase any equipment to use our internet service if they are within range of a repeater.
2. Seamless roaming across the country
3. No need to have multiple subscriptions for use in different locations. eg Work and Home
4. No contracts
5. Option of having multiple logins on one shared account which can be used simultaneously in different locations
5. Ability to service very remote locations using VSAT technology

When we think about the future of telecommunications in Vanuatu... we see huge changes in the way people communicate with each other, do remote schooling, banking and other general business

The tourism sector will also benefit greatly once the smaller, remote guesthouses and bungalows start to utilise the benefits of online bookings and web sites.

### OUR COMPANY AND THE COMMUNITY:

We give huge discounts to schools, sponsor students chosen for scholarships by the school and donate prizes for fund raising events by:

Schools, the Society for the Disabled and other charity organisations.



## 12.3 TELECOM VANUATU LTD

### COMPANY PROFILE

TVL is the original telecom company of Vanuatu. Originally Hebritel in early 1978, this company brought the first dual way communication via satellite on 1 June 1979. Renamed Vanitel in 1980 at Independence, we launched the fully computerised reservation system for Air Melanesia - Qantas and then the first international data transmission in the south pacific in March 1988. Rebranded Telecom Vanuatu Limited in 1989, TVL launched the GSM in 2002, and by 2004 had connected 58 islands with fixed lines.

TVL started to provide fast internet over ADSL in 2007, laid optical fiber in Port Vila and Luganville in 2010, and moved to a brand new digital switch in 2011.

TVL is the only company to provide fixed, mobile, and internet services over 71 islands of Vanuatu.

TVL is 50% owned by France Câble et Radio and 50% by Mauritius Telecom, has more than 100 staff and is led by Catherine Rumillat, Managing Director.

### IN 2012 OUR FOCUS HAS BEEN ON:

During 2012 our focus has been on assuring the technical stability of the infrastructure in TVL in order to offer a better quality of service in Port Vila and to offer a better link to the islands.

TVL launched the mobile internet over 71 islands bringing the communities together in the digital world.

TVL has increased its customer relationship and it's Quality of Service by setting-up a call centre. TVL also brought optical fiber connection to some of its key customers.

TVL has hired several young Ni Vanuatu graduates who will become, after a few years of training and mentoring, valuable future managers for TVL.

### OUR KEY STRENGTHS ARE :

- Strong recognition of the TVL brand
- Widest mobile internet coverage
- Strong link with communities via long term sponsorships
- Secure and high quality of optical fibre network for the businesses of Vanuatu

When we think about the future of telecommunications in Vanuatu... we see a developed ICT sector with fair competition between the operators and an access to the latest services of telecommunication for the entire population

We look at maintaining the link between the communities, bringing advanced services and content to most of the Ni Vanuatu people.

This access to information will boost the education and health in every island as well as supporting the economic growth.

### OUR COMPANY AND THE COMMUNITY

TVL is the telecom company that is the most linked between the communities.

This is translated in the reality by a strong sponsorship of over 5 years to the VFF that allowed to create a TVL league, supporting matches in every provinces; Sponsorship of

several sports events (Olympic Day, Netball, swimming competitions, horse riding...) concerts (Fest Napuan, Luckutemgud Santo, Christmas in the Park) without mentioning our regular promotions on phones for island sales and our set up of towers in remote areas.

## 13.0 FINANCIAL STATEMENT



## INCOME STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2012

| EXPRESSED IN VATU  | 2012          | 2011          |
|--|---------------|---------------|
| Operating Revenue  | 170,259,712   | 193,769,129   |
| Operating expenses   | (163,061,971) | (139,190,657) |
| Operating surplus before payment to Universal Access Fund            | 7,197,741     | 54,605,472    |
| Universal Access Fund  | -             | (20,000,000)  |
| Operating surplus / (deficit) after payment to Universal Access Fund | 7,197,741     | 34,605,472    |

## STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2012

| EXPRESSED IN VATU              | 2012        | 2011        |
|--------------------------------|-------------|-------------|
| <b>Current assets</b>          |             |             |
| Cash and cash equivalents      | 52,647,669  | 49,361,369  |
| Receivables                    | 39,429,376  | 32,853,795  |
| Other assets                   | 12,017,036  | 10,329,843  |
|                                | 104,094,081 | 92,545,007  |
| <b>Non current assets</b>      |             |             |
| Plant and equipment            | 16,316,656  | 19,348,288  |
| Total assets                   | 120,410,737 | 111,893,295 |
| <b>Current liabilities</b>     |             |             |
| Creditors and accruals         | 3,997,973   | 3,731,280   |
| Provisions                     | 285,068     | 969,740     |
|                                | 4,283,041   | 4,701,020   |
| <b>Non current liabilities</b> |             |             |
| Provisions                     | 4,321,470   | 2,583,790   |
| Total liabilities              | 8,604,511   | 7,284,810   |
| Net assets                     | 111,806,226 | 104,608,485 |
| Accumulated surplus            | 111,806,226 | 104,608,485 |

The statement of financial position is to be read in conjunction with the notes forming part of the full financial statements available from TRR.

