



TRBR PUBLIC CONSULTATION REPORT ON OVER-THE-TOP (OTT) SERVICES 2021



Contents

1. INTRODUCTION	3
2. OBJECTIVES	4
3. OTT DEFINITION AND SCOPE	5
4. FINDINGS	6
5. CONCLUSION	12

1. INTRODUCTION

While smartphone penetration and high-speed internet packages is seen to be stimulating the uptake of OTT services, the Telecommunications, Radiocommunications and Broadcasting Regulator (TRBR) and the Government tax authorities are being challenged with demands to regulate OTT services. The mobile network operators are claiming the downturn of voice and SMS revenue causing an overall decline in sector revenue, leading to lower investment in network infrastructure rollout, substandard quality of services, lower tax revenue and lower licensing revenues. This has forced the operators to seek and call for regulatory interventions to enable a fair market playing field that either reduces the regulatory burden on operators or to impose a similar regulatory burden on OTT services.

For that, OTT Consultation Paper was released for public consultation on the 20th of November 2020 and was closed on the 11th of December 2020. Formal submissions were extended until 28th January 2021. Apart from all the consultation distributed to the stakeholders, only three responded formally submitting their views to the consultation namely the Kacific Broadband Satellites, the VanIGF (Vanuatu Internet Governance Forum) and Wantok Network Limited.

The increasing use of OTT Application Services is becoming a real concern for the MNO (Mobile Network Operators) as claimed to be eroding their revenue. Statistics have shown that the Voice & SMS are slowly declining, the Mobile data segment has progressively indicated a healthy growth over the years as consumers continue to have access to the internet to use the service. The issues at hand have imposed a lot of challenges from a regulatory perspective to design a suitable framework that is workable without limiting the intervention of competition into a particular market. This report intentionally aimed at highlighting the consolidated findings/views of the recent consultation with stakeholders including MNO, Government, Consumer Representatives, and Non-Governmental Organizations on the possible impacts that OTT is creating in the market. TRBR is mandated to regulate and monitor the Telecommunications market in an efficient and transparent manner, however, any decision made must be evaluated based on the Regulatory Impact Assessment (RIA) importantly focusing on the cost and benefit of its intervention into the market.

The result of the consultation indicates that although a regulatory imbalance exists between Telecommunication Service Providers (TSPs) and OTT Service Providers was increasing exponentially, Telecom Service Providers do collect charges from the customers for the consumption of data either on account of usage of OTT Services or on account of voice

services offered by them. It is highly recommended that Traditional Service Providers must adapt their business model and strategy to combat the growing demand by consumers as Technology innovation continues to drive and stimulate competition to the market leading to improving consumer choices of the services. It is evident by the response that Regulatory intervention should be kept minimal to allow the market to grow while imposing certain measures to ensure fair and reasonable opportunities to all market players including Service Providers and consumers. Concern was also raised on the implication to the Security issues of OTT service to consumers of the service.

2. OBJECTIVES

This report aims to provide the TRBR's evidence-based advice on the regulatory treatment of different aspects of Over-The-Top (OTT) application. The consultation and assessment leading to this report focused only on regulatory issues and economic concerns relating to OTT services as services providers also takes these concerns into account.

The key priorities areas that require considerable attention by the Regulator is to weigh the benefits and cost of actions through analysis and assessment that evaluates the potential impact of:

- The growth and demand trend of the service and product in the market.
- Consider the digital transformation in the market, how it enhances the current need of consumers.
- Growth of data service that is currently dominating the mobile market.
- Potential impacts on Service Providers revenue whether it is imposing additional cost of the Service Provider.
- Eventuality of impact that it may cause to the regulatory environment.

The analysis on the feedback is not exclusive for regulatory purposes but overall to assist on policy and advise relevant stakeholders, importantly government on matters pertaining to the development of the Telecommunication sector in Vanuatu.

3. OTT DEFINITION AND SCOPE

Limited market understanding has led to a lot of confusion amongst many countries on how to regulate OTT and is partly due to lack of a standard definition. Currently, OTT services have no globally accepted definition as Governments, regulatory bodies, international agencies, and telecom service providers have defined OTT services depending on their own content.

For this consultation on whether TRBR should establish a Regulatory Framework for OTT services, “OTT provider” is defined as a provider which offers information and communications Technology (ICT) services but does not operate a network or lease capacity from a network operator in Vanuatu. Rather, rely on the internet access with speed to be able to reach consumers, thus, going “over-the-top” of the telecom service provider’s network.

Basically, the different types of OTT apps include: -

- 1 Message and voice services – Communication Services
- 2 Video and audio content
- 3 Application ecosystems link to social networks such as e-commerce

For the purpose of this consultation report, TRBR has adopted these following definitions.

From	Date	Definition	
Ofcom	2015	A range of services, including messaging services, voice services (VoIP), and TV content services.	
BEREC	2016	Content, a service or an application that is provided to the end-user over the public Internet	
		Distinction	OTT-0 as electronic communication services (ECS) that are able to terminate on fixed-line or mobile networks such as skype-out calls
		OTT-1s are not electronic communication services (ECS) but potentially competing with them	

			OTT-2 encapsulates all other OTT services that are not captured by OTT-0 and OTT-1 (e-commerce, video, and music streaming, etc.)
ITU	2019	An application accessed and delivered over the public Internet that may be a direct technical/functional substitute for traditional international telecommunication services	
Source: Esselaar & Stork (2019c)			

4. FINDINGS

1. Is there a problem and, if so, what is it and can it be solved by regulatory intervention in a single jurisdiction such as Vanuatu? If the answer is 'yes', what specific and effective solutions do you propose?
2. Is the growth of OTT impacting the total revenues of MNOs? If so, is the increase in data revenues of the MNOs sufficient to compensate for this impact?

4.1 ECONOMIC PERSPECTIVES

Digital transformation is gaining momentum and life-enhancing services such as OTT are now driving communications into the future. However, mobile operators have continued to raise concerns over OTT services and argued that these services are causing the decline in traditional voice and SMS revenues leading to the overall decline in total revenue. The downturn of total revenue has impacted the investment in network infrastructure, quality of service, lowers tax revenue and lowering licensing revenues. With the TRBR's data collection framework, TRBR has been able to analyse trends in voice, SMS, and data revenue.

The analysis showed that the idea that OTT is causing the reduction in operator's revenue is derived from a simple understanding of the telecom revenue sources. Normally, revenue generated depends on several other important factors such as the number of subscribers,

retail pricing, quality of service, the level of competition in the market and many more. The claim has been assessed by taking into account these factors:

- Economic factor – which is the demand of mobile services
- Regulatory environment – where it considers fair competition, transparency, and proposed regulations.
- Operators’ business strategies such as innovative product design and current business models

Operator’s Financial Performance Vs Innovation in Data packages

The on-going adoption and deployment of 3G and 4G/LTE technologies around Vanuatu is stimulating the uptake of mobile data services resulting in an increasing number of OTT users and explosive growth of data traffic. The impact of OTT services on the operator’s financial performance should be reflected on whether the mobile operators are generating revenue from data services to compensate for the declining voice and SMS revenues. In other words, operator’s financial performance is seen to be determined by the operator’s creativity and innovation to boost their ability to sell data. Data collected by TRBR shows that over the past two years, mobile broadband adoption and usage has experienced a rapid growth due to mobile network infrastructure upgrade and intensive data-consumption contents such as OTT applications, social medias, Netflix and more which has led to explosion in mobile broadband traffic by 66% record over 6,300TB in 2020.

Data Revenue

The fast pace of digital transformation in Vanuatu has stimulated the transition from voice and SMS to mobile internet business models. The telecom sector is experiencing a data-oriented market where both mobile operators continue to invest and create innovative business models that support and boost the demand for mobile broadband services.

While operators are selling the homogenous products in the market, both operators (Digicel and Vodafone) have been aggressive in the market which is boosting effective competition where products or data packages are now distinguished by speed, quality of services, pricing and other forms of access such as public Wi-Fi and connectivity is workplaces, schools, and homes.



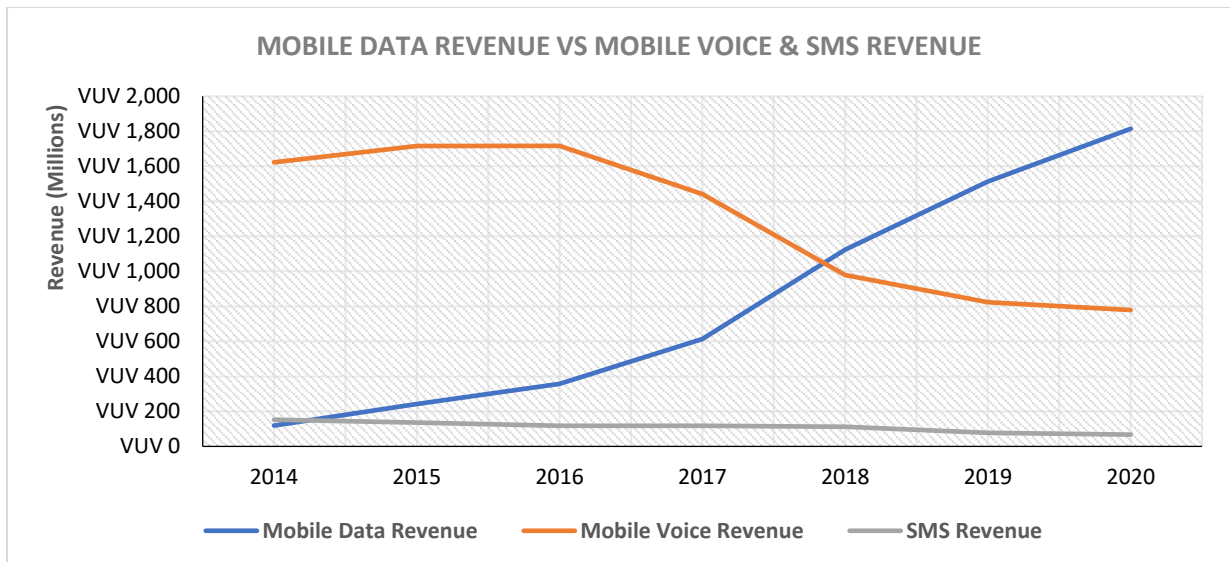


Figure 1: Mobile Data Revenue

Figure 1 describes the revenue trends for voice, SMS, and data since 2014 for the Vanuatu’s telecom sector. While mobile call traffic has increased slower, data traffic has experienced a significant explosive growth which has led to increasing revenue since 2014 hitting a higher peak of over VUV1.8 billion in 2020. This represents a year-on-year growth rate of 20%, however, data revenues have been growing at an average growth rate of 60% since 2014.

These revenue trends illustrate that.

1. The overall revenue growth remained positive though the telecom sector is experiencing an increasing number of OTT users and data traffic.
2. The operator’s ability to grasp revenue opportunities and mitigate risk determines the operators’ capabilities to generate revenue and profitability.
3. Increasing 3G and 4G/LTE network coverage around Vanuatu is the driver to generating even more data revenue to compensate for declining voice and SMS revenues.

Regulations

While revenue generating remains a priority for the operators, regulations can also impact operators’ financial capacity to invest in mobile networks to create revenue. For instances,

- a. The increase of Customs Duty Rates on imports up to 50% by the Government is imposing a huge burden on operators which tend to slow down the investment in

network rollout as operators require time to be financially capable to import equipment.

- b. Aligned with many countries in the world, the proposed SIM registration regulation will also impact the operator's revenue especially in the initiation stage. Operators are anticipated to lose subscribers and revenue due to SIM registration.

The two examples above illustrate how regulatory intervention may result in slowing down investment in network rollout and revenue generation. Thus, it's important that operators make good business models choices, that can address the role of regulatory factors.

Summary

Vanuatu is currently experiencing digital transformation which is currently boosting the progress toward a data-centric world, relying on traditional old business models will not be a successful strategy for the future, thus, it's important that operators rediscover their agility to change business models that suit the current demand in the market.

TRBR's assessment and analysis on the impacts of OTT shows that.

1. The overall revenue trend for both mobile operators is positive though the market has experienced growing numbers of OTT users and increase in data traffic.
2. Regulatory inventions to regulate OTT services may lead to unexpected outcomes including to lower network investments due to reduction in data revenue. The Government and TRBR are more focused on supporting and stimulating investment and deployment of 4G/TE throughout the islands of Vanuatu.
3. Operators' revenue and profitability is determined by the operator's ability to grab revenue opportunities and mitigate risk. While Vanuatu is experiencing digitalization, operators are now benefitting from the uptake of OTT services and rollout of fast broadband networks to generate and increase data revenue. Though analogue business models are still adopted, both strategies are business decisions and not a responsibility that TRBR is mandated to decide.
4. The TRBR's is not responsible to protect operator's outdated business models, instead the regulator is encouraging operators to be innovative through updating regulatory tools to safeguard fair competition in the telecom sector.

4.2 REGULATORY PERSPECTIVE

Guidance is Required for Regulatory Intervention

While digitalization is driving Vanuatu's progress into a new world of a data-oriented world for the telecom sector, these transitions imply that laws, policies, and regulations need to change as well to maintain fair competition.

For that, and in alignment with ITU's principles, these regulations need to be guided by the minimal intervention that limits the interventions to market conditions where sustainable competition does not evolve naturally while principle of proportionality implies that these regulatory intervention does not incur high cost more than revenue generated from it.

OTT Regulated Issues

Furthermore, the regulation of OTTs is relatively a new dimension for the Vanuatu regulatory environment and the TRBR is currently at the data-gathering stage to assess the impacts of these OTT services. While this is in progress, issues such as cyber bullying, cyber threats, critical infrastructure attacks, disinformation, fake news, pornography, harmful content, hate speech, data privacy and data protection remain an important concern under OTTs for the Government and requires immediate attention. However, some OTT players such Facebook have already identified areas of regulations such as, privacy, data portability, election integrity and harmful content to address OTT.

OTT Regulatory Development in Vanuatu

Year	Regulations, Policy or Laws	OTT Related Issues
2020	Amendment of Penal Code	Address issues such as, Slandering, fake news, misinformation, harmful contents,
2021	Cyber Crime Act	Addressing issues such as, Cyber bullying, infrastructure attacks, cyber threats, harmful content, fake news, and misinformation.
2021	Proposed SIM Registration Regulation	This regulation will address issues such as fake news, misinformation, harmful content, data privacy and data protection etc.

Regulatory Mandate Differs

Currently, OTTs and MNOs are in separated segments of the value chain which implies that regulatory mandates that governs both services differ as well. Licensed operators are seen to have more advantage with privileges such interconnection rights, obtaining numbers and allocation of spectrum. For this, these licensees in return must meet their license obligations such as paying license fees, taxes and more. OTT providers on the other hand, are not licensed and are not paying fees or tax but operates over the licenses network.

Intensive online contents, interactive apps and quality featured devices is currently stimulating network demand and driving the need to upgrade networks as the traditional business model is limited to the connectivity segment of the internet value chain which enables other players to be dominant in these segments. Thus, it is important that MNOs adapt to evolution of both technology and demand. OTT is currently stimulating the increasing level of competition in the market and at the same time contributing to the social and economic development of Vanuatu.

The TRBR's Position

While OTT is dominating the medium of communications and will continue to increase, it does not mean that the OTT should not be regulated. Government's policy makers and the TRBR

are currently mindful of why to regulate and the implications that would occur in the event of intervention to regulate OTTs. The reason for any regulation is to achieve desirable market conditions for the consumers and MNOs that do not naturally arise in the market or for the TRBR to intervene to regulate when there is a market failure and only where the outcomes would bring benefit and restore preferable market conditions.

Thus, now the TRBR sees no immediate need to intervene to regulate OTTs as there is no sign of market failure nor any evidence of unhappiness from the consumers in relation to OTT services uptake. And though traditional voice and SMS revenue is declining, the increasing usage of OTT via mobile data services is boosting a rapid growth in revenue for the MNOs. As such, TRBR encourages the licensees to change their business models to accommodate the OTT, and further should not in any means limit the use of OTT services that could have impact on their revenue. Further, OTT services offered by the licensees with access to interconnection and are categorised as paid services by the consumers must not by in any means be blocked or limited, that could reduce competition in the market or limited business opportunities for the licensees providing the paid services to the consumers.

5. CONCLUSION

TRBR is currently at the data-gathering stage where assessment on the impacts of regulating OTTs is still in progress and at the same time monitoring the market for any indication of market failure or any dissatisfaction arising from OTT usage by the consumers.

For this, TRBR is committed to continue implementing regulatory best-practice principles to ensure that the market conditions favor both the MNOs and the consumers. Immediate intervention to regulate OTT may impact consumers, ICT sector and economic growth negatively and this has been evidenced by many countries such as Uganda, Benin and many more where imposition of tax has slowed down consumption and economic growth due to increased prices.

These concerns have prompted TRBR to be very mindful on whether to immediately intervene, however, the TRBR is more concerned that the regulatory intervention should not deviate from the primary of regulation and must follow best-practice principles. More assessment is needed prior to any regulation to estimate the impact on the markets and to ensure regulatory principles of proportionate and minimal intervention are met.

Thus, the TRBR immediate focus is to continue monitoring the market and collect evidence of the impact of OTTs in the market. In any case that there is evidence of market failure or dissatisfaction in the market, the TRBR without hesitation will have to intervene and assess which regulatory tool is appropriate and proportionate to address such a market situation.