



CONSULTATION PAPER ON THE METHODOLOGY OF ASSESSING AFFORDABILITY OF INTERNET ACCESS AT THE RETAIL LEVEL



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1. CONSULTATION PROCESS

This Consultation Paper seeks information and submissions concerning the Methodology approach that TRBR is adopting to assess the affordability of internet access at the retail level. TRBR also encourages comments on related issues such as retail internet service quality and availability, and the levels of usage of retail and wholesale internet capacity and services.

The Telecommunications, Radiocommunications and Broadcasting Regulator (TRBR) welcomes and invites comment and feedback to this Consultation Paper from all stakeholders and interested parties, including wholesalers, retailers, consumers and other users of internet capacity and services, and the Vanuatu Government.

The deadline for submissions or comments is **16th October 2020**

TRBR will accept comments in English or French or Bislama.

Respondents are required to clearly mark any information included in their submission that they reasonably claim is confidential to them or their business, and to provide reasons to support the information being confidential. Where information claimed to be confidential is included in a submission, respondents also are required to provide both a confidential and non-confidential (redacted) version of their submission. TRBR will apply the confidentiality portions of the TRBR Act, and any other relevant legal principles, to any such claim of confidential information, and will consult with a party prior to any decision to publish such claimed confidential information. Information not designated as confidential will be assumed to not be subject to any claim of confidentiality.

If comments are submitted in printed format, they must be submitted on A4 paper accompanied, where possible, by a disk containing the comments, in electronic format

Comments should be provided to TRBR via the following means

- Email address consultation@trbr.vu
- Faxed to (678) 24470
- Posted or hand delivered to:

**CONSULTATION ON THE METHODOLOGY OF ASSESSING AFFORDABILITY OF
INTERNET ACCESS AT THE RETAIL LEVEL**

For any phone enquiries regarding this consultation document, please call the following numbers;

- (678) 27621
- (678) 27487

This Consultation Paper can also be accessed on <https://www.trbr.vu/en/public-register/consultations/2020>, and it does not involve TRBR making any final decision, or any decision subject to internal or judicial review on any matter.

You are welcome to visit our website <https://www.trr.vu> for more details on the latest developments in the Telecommunications, Radiocommunications and Broadcasting industry and other related matters.

2. DEFINITIONS

Terms	Definitions
"1 for 2"	An affordability standard target that measures affordability of internet where 1GB of the mobile broadband data is priced at 2% or less of the Gross National Income per Capita or average monthly income of a country
The TRBR Act	The Telecommunications, Radiocommunications and Broadcasting Regulations Act 30 2009 as amended by Amendment 22 2018
Primary Data	These are data that will be collected by TRBR from first-hand sources using surveys and interviews with key people and institution in the telecom sector.
Second Data	Secondary data is data TRBR collected from studies, surveys or experiments that have been run by other institutions such as the Internet Service Providers, Vanuatu National Statistics Office etc.
ICL	Interchange Limited, the owner and operator of the ICN-1 submarine cable, and supplier of wholesale internet capacity using that submarine cable.
Affordability Index (ADI) Drivers	The ADI is a tool developed by the Alliance for Affordable internet (A4AI) to assess how well a country's policy, regulatory and overall supply-side

	environment is positioned to lower industry costs and ultimately create more affordable broadband.
Mbps	Megabits Per second
Universal Access Policy (UAP)	Government Policy that requires the expansion of telecommunication services to underserved and unserved areas and TRBR has been designated
Wholesaler of Internet Capacity	A telecommunications service provider that sells internet capacity to other suppliers telecommunications services, (rather than to consumers or the general public).
Retailer of Internet Capacity	A telecommunications service provider that that sells internet capacity to consumers and the general public.
Quintiles	A quintile is the 1/5 th or 20 percent portion the population. The population is divided into five equal groups, according to value of the country's average monthly income per person. Person at the top quintiles earn the most on average while those in the lowest quintiles earn the least on average.
ISP	Internet Service Providers service providers who are granted Telecommunications license by TRBR to provide internet services in Vanuatu.
OGCIO	Office Of the Government Chief Information Officer
TRBR	Telecommunications, Radiocommunications and Broadcasting Regulator

3. BACKGROUND INFORMATION

1. In today's "data-centric" world, affordable internet access is vital to telecommunications consumers in Vanuatu, and to the development of the telecommunications sector and the national economy. Social and economic inclusion of all ni-Vanuatu requires affordable internet access.
2. Such affordability and usage of internet and services depends on the effective functioning of the wholesale and retail markets for internet capacity.
3. Retail telecommunications service providers supply internet services in the retail market to consumers, businesses, the public sector, and educational and service organizations.
4. While average wholesale internet prices have dropped by 55% since November 2019 for the mobile operators, this is expected through the competition in the retail market to be passed on to consumers in the form of lower prices, thereby improving affordability and encouraging increased take-up and usage of such services by the public.
5. It also is important that retailers do not charge excessive prices – that is, prices that exceed recovery of costs and a reasonable profit - and that decreases in wholesales pricing of internet capacity flow through to benefit consumers.
6. In September 2015, the United Nations concluded that "Everyone should have access to the internet" and agreed on a new set of Sustainable Development Goals (SDGs), target 9c of which calls for universal and affordable access in the world's least developed countries by 2020.
7. To address this, the Vanuatu Government has released its National Sustainable Development Plan for the period of 2016-2030 which also targets internet access. Vanuatu 2030 ECO 2.9 sets an objective "to increase use of and access to information and communications technologies, including on-line government services".
8. The TRBR, under TRBR Act, has worked collaboratively with the Service Providers (retailers & wholesalers), the Government and other Stakeholders to facilitate the development of

telecommunications and promote national, social and economic benefits through affordable internet access.

9. The TRBR has obligations and powers to regulate and monitor prices of internet access services under the TRBR Act, and under the Licenses and Exceptions granted to telecommunications suppliers under the TRBR Act.
10. The legal and regulatory framework administered by TRBR and applicable to retail pricing of internet access services includes Part 7 of the TRBR Act, and obligations of retail suppliers under their Licenses.
11. TRBR intends to ensure a regulatory environment that is fair, workable and promotes sustainable market competition and investment in telecommunications facilities to supply affordable internet access services to the people of Vanuatu.

4. METHODOLOGY OF ASSESSING AFFORDABILITY OF INTERNET ACCESS AT THE RETAIL LEVEL

4.1 Hypothesis

12. The assessment and review of the affordability of internet access in the retail broadband market will promote the adoption of the “1 for 2” affordability target. The review will look particularly at how poverty, income, gender inequality and ICT policies impact on affordability.
13. “1 for 2” affordability target measures affordability of internet where 1GB of mobile broadband data is priced at 2% or less of minimum average monthly income of a country. This target has been recommended by Alliance for Affordable Internet¹ (A4AI) and has now been adopted by the UN Broadband Commission as it considers poverty and income inequality.
14. “1 for 2” means that, if the price of 1GB internet package is equal or less than 2% of a person’s average monthly income then internet access can be considered to be affordable or, conversely,

¹ A4AI Affordability Report 2015/2016

if the price of 1GB is more than 2% of the minimum average monthly income it can be considered to be above the affordability threshold.

4.2 Methodology

4.2.1 Affordability Drivers Index (ADI)

15. The Affordability Drivers Index (ADI) is a composite measure that will enable assessment of the extent to which Vanuatu has implemented several factors that can lower the overall cost structure for broadband. These factors include policies, incentives, and infrastructure investments.
16. The ADI does not measure the actual broadband price, nor does it tell us how affordable broadband is in Vanuatu, but it will score (out of 10) the extent to which policies are being implemented to address the affordability of internet in Vanuatu.
17. The main policy groups include:
 - (a) Infrastructure (i.e. the extent to which ICT infrastructure has been deployed, as well as the policy framework and settings in place to encourage future infrastructure expansion); and
 - (b) Access (Current broadband adoption rates as well as the policy framework and settings in place to enable equitable access.)
18. Each variable (such as policies, incentives, or regulatory frameworks) will be scored by institutions, companies, and individuals who are impacted by these variables. Higher scores indicate the existence and ongoing implementation of a combination of factors which contribute to lowering the costs of broadband provision and, as a result, to lower prices.
19. There are two types of data that will be used in the construction of the ADI:
 - (a) Primary Data, which will consist of new data gathered via surveys and interviews with key people or institutions/companies in the telecommunications sector who are impacted by, or responsible for implementing, these policies, incentives, and regulatory settings; and
 - (b) Secondary Data, which will consist of information described from paragraph 21 below.

20. The survey includes questions which will be scored by the relevant institutions on a scale of (0-10) on matters related to these policies, regulations, and various aspects regarding broadband and affordable internet access. The questions have been designed to align with the A4AI Policy and Regulatory Good Practices which will assess the extents to which each institution have work to achieve a policy and regulatory environment that reflect the best practice outcomes. Institutions involved, will be invited to provide evidence and justification that support each of their scores.
21. Secondary Data is the existing data described below that can be collected from the data providers including, Vanuatu National Statistics Office (VNSO), ISPs, OGCIO, DSPPAC, Labor Department etc.

4.2.2 Statistics

22. The internet affordability assessment will require a range of statistical information (secondary data) that will be analyzed to assess the extent of service take-up, usage and affordability in the retail market. These statistics include information in the categories described below.
23. Gross Domestic Product (GDP) – The components of GDP calculation will give an idea of how much telecommunications & broadcasting sector is contributing to the economy of this nation under the service sector.
24. Poverty and Unemployment – poverty and unemployment remain a major issue affecting affordability of internet throughout Vanuatu.
25. Gross National Income per Capita – This is an important statistic as “1 for 2 “target will be assessed against the country’s average monthly income in each quintile. Income and expenditure for individuals and households for both urban and rural will also be considered as part of this statistics.
26. Internet Package Pricing – There are 2 sets of internet packages that will be used. The cheapest 1GB package and the most expensive 1GB package offered by Internet Service Providers (ISPs). The choice of the service providers used in the study will depend on the market shares by

subscription. ISPs with larger market shares will be prioritized for surveying and statistical collection.

27. Gender – Research by Web Foundation shows that the gender wage gap diminishes the ability of women and female headed households to afford internet access. Thus, it is of importance that TRBR’s assessment also considers gender as an important factor that is affecting internet affordability in our society. Statistics will be needed such as average income and spending on internet access and usage by women or female headed households, income comparisons with usage by men and male headed households.
28. For the provision of these statistics, we will work collaboratively with Vanuatu National Statistics Office (VNSO) base on a current MoU between VNSO and TRBR. Internet package pricing will be collected from the ISPs, while other related statistics will be obtained from TRBR’s data framework and from the Government and any other institution.

4.2.3 Policy, Incentive & Regulatory Framework

29. This exercise will involve identifying each policies, incentives, and regulatory framework and their implementing institutions that continues to address telecommunications sector while at the same time impacting the affordability through lowering cost structure of internet access. These legal frameworks include:
 - Universal Access Policy (UAP)
https://www.trbr.vu/attachments/category/215/universal_access_policy.pdf
 - Vanuatu National ICT Policy
<https://ogcio.gov.vu/images/Vanuatu-National-ICT-Policy-EN.pdf>
 - Spectrum License Fee Regulation
https://www.trbr.vu/attachments/article/151/radio_apparatus_licence_spectrum_regulation_fees.pdf
 - Quality of Service Guideline
https://www.trbr.vu/attachments/category/94/quality_of_service_guideline.pdf
 - Reference Interconnection Offer (RIO)
30. These legal frameworks will play an important role in the construction of the ADI which will indicate the extent by which these policies are implemented, and the impact it has on the affordability of internet access in retail market.

31. To evaluate the effectiveness of the Telecom Regulatory and Policy Environment in Vanuatu, a Telecom Regulatory Perception Survey will be carried assessing nine dimensions. These dimensions include Market Entry, Allocation of Scarce Resources (Spectrum), Interconnection, Tariff Regulation, Regulation of Anti-Competitive practices, Universal Access Fund Administration, Infrastructure sharing, Taxation and Quality of Services. The survey will focus mainly on the evaluation of the telecom subsector of broadband.
32. The Telecom Regulatory Evaluation provides measure of stakeholder perceptions of the regulatory environment. The survey asks informed stakeholders to rate on a scale of 1 to 10, (1 being highly ineffective and 10 being highly effectively) the regulatory and policy environment in the country along the nine dimensions stated above, and, as already noted, will seek reasons for the scores given in each case.
33. The goal is to measure perception among informed stakeholders, those who have expert, in depth knowledge about various aspects of the regulatory and policy environment in the country. Therefore, the pool of potential respondents is limited to the senior level decision makers in the various relevant organizations.
34. A Sample Survey is provided in Annex A below.

4.2.4 Income Inequality & Affordability

35. To understand how many persons in the country can afford broadband package, the use of average monthly income broken down by population segments, rather than a single national average income.
36. The approach will be to rank everyone based on their estimated average monthly income and then group the entire population into quintiles. Persons at the top quintiles earn the most on average while those in the lowest quintiles earn the least on average. Looking at broad averages for the whole population is too imprecise an analytical tool. TRBR wants to ensure that the assessment considers the situation in Vanuatu at various income levels. The decision to use quintiles is because this approach will be manageable and will also generate us explanatory power when considering the results.

37. The analysis will give an approximation of the total number of quintiles for which a 1GB package is affordable based on the price threshold being less than 2% of average monthly income. For this, we will sum the number of quintiles (each 20% of the population) where price is less than 2% of the average monthly income for that quintile.

4.2.5 Reporting

38. The assessment report will involve data analysis, construction of ADI, report write up and policy recommendations. Based on these findings and recommendations, the Regulator will be able to decide whether to lower or allow Service Providers to keep current retail internet package prices. The assessment can be repeated at various times in the future to monitor changes in affordability and the effectiveness of policy changes that have been introduced along the way. If necessary, TRBR will develop Fully Allocated Cost Modelling to provide more information on the reasonable costs of providing internet service in Vanuatu under various demand conditions. A decision on the need for such a model has not been made yet but may be one outcome from the initial assessment.
39. Other possible outcomes that the Regulator may consider would be to leave price package where they are in the market but require all ISPs to offer a basic internet access package that is geared to the requirements of any income group (quintile) that does not have an offering available that is affordable on the 1 for 2 rule.

5. CONCLUSION

40. The TRBR's proposed internet access affordability assessment methodology has been developed pursuant to Section 33 of the TRBR Act and Alliance for Affordable Internet (A4AI) Policy and Regulatory Best Practices. TRBR is confident that this proposed affordability assessment methodology fully satisfies the requirements of the TRBR Act and A4AI best practices but seeks the views of interested stakeholders to enable improvement and refinement where that might be possible.
41. The TRBR's proposed affordability assessment methodology will address several concerns raised by many telecommunications consumers in Vanuatu and at same time will deliver outcomes for consumers that promotes the achievement of the National Sustainable Development objectives in the country.
42. TRBR requests comments on current affordability of internet access in Vanuatu, the best ways to analyse such affordability for the purpose of this assessment, and as to measures to ensure that wholesale price decreases are sufficiently passed on to benefit consumers.

6. ANNEX A: TELECOMMUNICATIONS REGULATORY SURVEY

TELECOM REGULATORY SURVEY ON THE EFFECTIVENESS OF THE TELECOM REGULATIONS

The Telecom Regulatory Environment Survey is a tool that is intended to evaluate the effectiveness of the Telecom Regulations, Policies, and Incentives in the telecom sector in Vanuatu along nine dimensions. These dimensions include Market Entry, Allocation of scarce resources (spectrum), Interconnection, Tariff Regulation, Regulation of Anti-competitive practices, Universal Access Fund Administration, Infrastructure sharing, Taxation and Quality of Services.

A. Personal Information

Please state your personal details below;

- i. Name _____
- ii. Title _____
- iii. Institution/Company Name _____

B. Telecom Policies, incentives & Regulations

Please specify any Telecom Policies, incentives or Regulation your organisation or institution is/has been involved in implementing or impacted by;

- Universal Access Policy (UAP)
- Vanuatu National ICT Policy
- Spectrum License Fee Regulation
- Quality of Service Guideline
- Reference Interconnection Offer (RIO)
- Other (please specify).....

In the case of each of policies please indicate in a few words how your organisation or institution is affected, if at all.

C. Liberalized Market with an open, competitive environment

C1. Market Entry

1	2	3	4	5	6	7	8	9	10
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Why have you given this score?.....

C2. Regulation of Anti-Competitive Practices

1	2	3	4	5	6	7	8	9	10
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Why have you given this score?.....

D. Policies & Practices to encourage lower cost structure for industry

D3. Allocation of Scarce Resources (Spectrum Management)

1	2	3	4	5	6	7	8	9	10
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Why have you given this score?

D4. Interconnection

1	2	3	4	5	6	7	8	9	10
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Why have you given this score?

D5. Tariff Regulation

1	2	3	4	5	6	7	8	9	10
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Why have you given this score?

D6. Effective Universal Access Fund Administration

1	2	3	4	5	6	7	8	9	10
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Why have you given this score?

D7. Streamlined processes for infrastructure deployment and sharing

1	2	3	4	5	6	7	8	9	10
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Why have you given this score?.....

D8. No luxury taxation or excessive customs/tariffs on telecom goods and services

1	2	3	4	5	6	7	8	9	10
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Why have you given this score?

D9. Quality of Service

1	2	3	4	5	6	7	8	9	10
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Why have you given this score?.....

Comments:

**** END ****



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