UNIVERSAL ACCESS (UAP) STAKEHOLDERS ELEVENTH REPORT

ON

THE STATUS OF IMPLEMENTATION OF THE GOVERNMENT'S UNIVERSAL ACCESS POLICY

TO

6 JULY 2020

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Executive Summary

This Universal Access Policy (UAP) Report provides an update to our stakeholders and the citizens of Vanuatu on the status of the implementation of Government's UAP. This is the eleventh (11th) report since the initial implementation of the UAP, however, it is the first report after the extension on the implementation period of the UAP which is now extended to the 1st of January 2022. This report highlights the progress that has been made in respect of UAP implementation to date.

The initial implementation of the UAP came to an end on the 1st of January 2018. After this period, the Office of the Prime Minister (PMO), the Office of the Government Chief Information Officer (OGCIO) and the Office of the Telecommunications, Radiocommunications and Broadcasting Regulator (TRBR) continued to receive complains about mobile network coverage issues and quality of service issues. The Prime Minister, Hon. Charlot Salwai Tabimasmas who was the Minister responsible for Telecommunications and ICT then, requested that more efforts be put into addressing the continuous network coverage issues. On the 30th of October 2019, the Council of Ministers (COM) then approved the extension of the implementation period of the UAP to the 1st of January 2022 according to COM Decision 291 of 2019.

In progressing forward with the UAP, the TRBR saw the importance of undertaking a Quality of Service (QoS) benchmarking measurement and coverage audit. The objective of the benchmarking and audit exercise was to check whether the services provided by the Mobile Service Providers in Vanuatu was in line with international standards, specifically the International Telecommunications Union (ITU) standard, and most importantly to ensure that services provided were of good and reliable quality. Further, an outcome of the activity was to identify remaining areas with poor coverage and areas with no coverage at all. The TRBR therefore, engaged Midwex, an international company specializing in mobile network auditing with over 10 years work experience in similar terrains like Vanuatu, through a competitive tender process in the first quarter of 2020 to undertake the audit exercise. The undertaking of this network audit has helped set the basis of moving forward with the UAP implementation.

Another milestone on the UAP implementation was the establishment of the UAP Working Group (UAPWG). The core objective of the UAPWG is to work closely with the TRBR to ensure successful implementation of the UAP. Members in the UAPWG include representative(s) from the Government and the TRBR, to ensure that Government inputs and the industry inputs are included in the decision-making process related to the UAP implementation. The UAPWG have had their first and second meetings, and a list of UAP proposed sites was compiled and put forward for their discussion. These proposed sites have now been finalized for further consultation with the Service Providers for the UAP implementation.

The TRBR Act No. 30 of 2009 as amended by Amendment No. 22 of 2018, Section 19 mandates the provision of the Universal Access Policy Fund. A Licensed service provider is liable to pay an annual levy to the UAP fund, a sum not greater than 4% of its net revenue. Also, any person may voluntarily contribute towards the UAP Fund and such, persons may specify that such contribution be applied in a specific manner. This UAP trust fund was established by the Government and TRBR is the designated administrator of the Trust fund. The funds were specifically for UAP Projects, as such TRBR has drafted a UAP Guideline which should help to progress UAP and

set rules and guidelines to enhance the administration of the UAP Trust fund and the UAP implementation guidelines in general. The guideline will be finalised in Quarter 4, and TRBR is yet to finalise the guideline with its stakeholders and the Service Providers, an approach for UAP rollout.

The rollout of the first 21 sites throughout Vanuatu under the *play or pay approach* was completed in the first period of the UAP, and the feedback that the TRBR received from Vodafone and Digicel indicated that most of these sites were economically unsustainable, and therefore, the TRBR in collaboration with OGCIO, is working on identifying an approach that is cost effective and that may bring value for money on a broader scale. A possible approach is that the Government should build infrastructure, which will eventually be shared by the service providers in order to lower their investment cost. This would encourage competition within the industry and at the same time allow citizens to make choices based on the value for money they get from the network of their choice. The other approach is to utilise the UAP funds to subsidize the cost of the Service Provider's projects under UAP, specific to improving coverage at the identified and approved unserved or underserved locations. These approaches are still under discussions and TRBR is hoping that a decision will be finalised by the end of Quarter 4 of 2020.

In parallel with the UAP implementation, TRBR is also implementing other UAP programs, and one of these programs is the Community Telecommunications Grant (CTG), that was established in 2018 and has been ongoing to date purposely to continue addressing coverage improvements, especially towards requests by communities and organizations in unserved or underserved areas. The Grant has also supported other areas such as the Community ICT literacy training and improving storage capacity projects for some organizations. TRBR has also assisted during the severe impact of TC Harold, by putting in place an internet facility for two sites on the Island of Malo and a site on Pentecost. These sites were discussed and allocated by the Emergency Telecommunications Cluster (ETC) after the destruction caused by TC Harold. TRBR also continued to provide support to Schools with difficulties in sustaining the operations of the Computer Laboratory and Internet Community Centre (CLICC) and Tablet for Students (TFS), a piloted program that ended in December 2017. In addition, TRBR is supporting nine (9) schools in 2020, particularly working with them to strengthen the operations of their facilities.

TRBR remains confident and is committed to achieving the Government's UAP objectives by working collaboratively, cooperatively, and constructively with the Service Providers, stakeholders, and other relevant parties.

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1. Introduction

As part of TRBR's obligation in accordance with the UAP, TRBR is required to report to the public on the progress of the UAP Implementation. With the initial implementation of the UAP that ended on the 1st of January 2018, the Council of Ministers (COM) in their 23rd Meeting on the 30th of October 2019, approved the extension of the UAP implementation period to the 1st of January 2022, and since then, I am glad to inform you that the UAP implementation has been progressing very well.

Key outcomes of the last six months period include:

- completion of the Quality of Service benchmark measurement and Coverage audit;
- Establishment of the UAP Working Group;
- Identifying proposed areas for UAP rollout;
- Draft UAP Guideline to enhance the administration of the UAP Trust fund and the UAP implementation guidelines in general;
- Continue addressing the improvement of Coverage through the Community Telecommunications Grant (CTG);
- Improved coverage at sites affected by TC Harold;
- Continuous support to the CLICC/TFS sites; and
- Community ICT Literacy training.

2. UAP Telecommunication Service Undertakings

The Policy was developed and approved by the COM in 2013 with the objective of extending the telecommunications coverage and services to the underserved and unserved areas of the country. The Telecommunications, Radiocommunications and Broadcasting Regulator (TRBR) is mandated by the TRBR Act to manage the UAP and the UAP Trust fund and tasked as the implementing Agency for the UAP.

The primary objective of the UAP required that 98% of the Vanuatu population should have access to the following telecommunication services:

- Voice;
- Narrowband data services including text messaging;
- Upgrade the mobile networks from 2G to 3G technologies; and
- Broadband Internet services that shall enable a download speed of at least 2Mbps and upload speed of at least 1Mbps[1].

A secondary objective of the UAP was to ensure that all Government offices and schools have the ability to access broadband data and internet services, and that services offered outside Port Vila and Luganville were of comparable cost to those available in Port Vila and Lugainville.

With the extension on the UAP implementation period from the 1st of January 2018 to the 1st of January 2022, TRBR has made significant progress based on its commitment, active involvement, and strong focus to achieve satisfactory outcome for the Government's UAP. The key outcomes are presented in the subsequent sections of this Report.

2.1   Quality of Service Bench Marking Measurement and Coverage Audit

The undertaking of the Quality of Service benchmark measurement and Coverage audit is an important milestone towards achieving the UAP objectives. It sets the basis to move forward with the UAP implementation, particularly the importance of having to identify the quality of service issues in the Operators network as a contributing factor towards the poor customer

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Discussions with operators in 2013/14 resulted in a change in definition for the speed able to be achieved

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experiences, especially in the rural areas. As such, the main objectives of the QoS benchmark measurement are:

- To ensure that the service provided meets the standards as prescribed by the TRBR and also the International Telecommunications Union (ITU), and to locate areas of improvement for the Service Providers;
- To find out areas requiring improvement in coverage and/or services
- To inform the public in the simplest way on some key indicators of QoS for Mobile Services so that affected consumers have a good understanding of telecommunications markets, and can make informed choices; and
- to ensure that TRBR continues to have access to timely, relevant, and accurate information related to the QoS and coverage, and to effectively, and efficiently monitor the activities of the telecommunications sector in Vanuatu and to ensure sustainable and effective competition.

The Quality of Service benchmark measurement and Coverage Audit activities were conducted in the fourteen main Islands with the highest population and these islands includes: Gaua, Vanua Lava, Santo, Malekula, Ambrym, Paama, Maewo, Ambae, Pentecost, Epi, Efate, Tongoa, Erromango and Tanna.

The coverage results from this activity focuses on all technologies included 2G, 3G & 4G, and the data was analysed against the Vanuatu's 2016 mini census.

Table1: Summary of Coverage per technology per population of the 14 Islands

Island	Popuation by Island Source (vanuatu.popgis.spc.int)	VOICE Coverage (2G & 3G) by population 2020 TRBR Report	DATA Coverage by population 2020 TRBR Report	Free Mode Voice % Coverage	Free Mode Data % Coverage	2G Voice % Coverage
Ambae	10,858	3,019	1,412	21.4	13	6.4
Ambrym	7,385	2,046	1,182	19.3	16	8.4
Efate	96,402	66,618	67,194	77.1	78	71.2
Epi	6,278	4,250	1,256	36.9	20	30.8
Erromango	2,084	1,259	375	32.2	18	28.2
Gaua Banks	2,533	1,907	481	37.5	19	37.8
Maewo	3,577	2,189	894	32.5	25	23.7
Malakula	30,981	21,687	8,675	34	28	16
Paama	1,631	1,388	457	42.5	28	42.6
Pentecost	16,899	13,164	6,929	29.5	41	48.4
Santo (inc islands)	52,145	45,575	22,422	43.9	43	43.5
Tanna	32,280	28,923	7,424	44.7	23	44.9
Tongoa *	2,546	2,034	662	37	26	42.9
Vanua Lava Banks	3,072	2,126	707	28.6	23	40.6
TOTALS *	258,671	196,182	98,036	43.60	37.90	46.70
actual population	266,355	% covered throughoput this test		Combined Voice (2G & Free Mode)		
By Percentage %		75.84	37.90	90.30		

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The coverage analysis provided in the table above (Table1) shows that voice is at 75.84% coverage by population and 4G mobile broadband access is 37.90% coverage by population on these fourteen most populated islands which represent 97% of the total population of Vanuatu based on 2016 National Census.

The outcome indicated that there are still underserved and unserved areas with significant populations that needs to be addressed in the UAP implementation during the extension period. TRBR is committed to ensuring that these areas will be addressed in the UAP implementation to meet the Government UAP objectives.

A full report on the outcome of the recent QoS exercise facilitated by TRBR will be made available to the Minister of Telecommunication and ICT in the upcoming successive reports.

2.2   Establishment of UAP Working Group

The UAP Working Group (UAPWG) is a new initiative established by TRBR, with the objective of ensuring that Government inputs are included in the discussions and decisions on the UAP implementation approach, and the monitoring of the UAP implementation. The core objective of the Working Group is to ensure that the UAP is implemented successfully.

The responsibilities of the UAPWG includes:

- Transparently choosing new UAP sites;
- Discussing projects related to UAP
- Discussing the way forward on the UAP Implementation;
- Support the UAP coordinator in the monitoring and implementation of the UAP; and
- discussing related issues and risks and suggesting ways to the TRBR to mitigate these issues and risks.

Members of the Working Group includes representative from the Government through the Office of OGCIO and the TRBR. The members include:

- OGCIO Officer (Government Representative)
- TRBR Technical Manager
- TRBR ICT and Internet Governance Manager
- TRBR Market monitoring and Competition Manager

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- TRBR Telecommunications Engineering officer

The Working Group had their first meeting on the 2nd of June 2020 and then followed by a second meeting on the 15th of June 2020.

2.3   UAP Proposed Areas

The TRBR has undertaken various activities to identify inhabited areas that are currently unserved or underserved, including the recent QoS and Coverage bench marking exercise, and also additional audit performed by the TRBR staff.

The major outcome of the bench marking exercise was the identification of the inhabited areas with limited or no mobile coverage. A total of fourteen (14) Islands were visited by the expert firm including Vanua lava Banks, Gaua Banks, Santo and its outer Islands, Pentecost, Maewo, Ambae, Malekula, Ambrym, Paama, Efate, Epi, Tongoa, Erromango and Tanna.

Supplementing the bench marking exercise done by the expert firm, the TRBR staff members also visited several Islands in the Country for further coverage audit. The results from the drive and walk test using network cell info and a mobile app were analyzed to identify where the underserved and unserved areas are. All data derived from this exercise can be accessed by the public on the TRBR website (www.trbr.vu).

Furthermore, the TRBR has compiled a list of the priority areas that was put forward to the UAP Working Group for discussion. A total of twenty-seven (27) unserved areas and thirty-three (33) areas underserved, were identified from Hiu Island in the Torres group to Aneityum Island in Tafea Province. Further information on the underserved and unserved areas may be obtained from TRBR Office

2.4   UAP Guideline

The UAP Guideline is a new initiative taken by TRBR with the objective to effectively administer the utilization of the UAP Funds. The Telecommunications, Radiocommunications and Broadcasting Regulation Act No. 30 of 2009, as amended by Amendment No. 22 of 2018, Section 19 and mandates the provision of the Universal Access Policy Fund. A Licensed service

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provider is obliged to pay an annual levy to the UAP, a sum not greater than 4% of its net revenue. Additionally, any person may voluntarily contribute towards the UAP Fund and such a person may specify how their contribution may be applied in a specific manner. A UAP Trust fund was established by the Government and TRBR is the administrator of the UAP Trust fund.

The UAP Guideline relates to the administration of the Universal Access Program and fund, towards subsidy to ensure that the UAP continues to effectively and efficiently achieve its primary purpose of providing modern, affordable and sustainable telecommunications services, particularly to areas and communities that are unserved or underserved.

The UAP Guideline is yet to be finalised, but TRBR has completed its consultation on the draft Guideline to obtain comments and inputs from the stakeholders including the Mobile Service Providers, the Internet Service providers, and the Government.
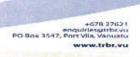
3. UAP Programs

3.1 Community Telecommunications Grant

The establishment of the Community Telecommunications Grant (CTG) came into effect following the closure of the initial implementation of the UAP that ended on the 01st of January 2018. The purpose of the CTG is to ensure continuous support on the improvement of network coverage in the underserved and unserved areas. The Grant also supported other ICT related projects including the Community ICT projects and the Internet literacy trainings.

Since the initial implementation of the Grant in 2018, several communities have benefited from various projects supported by the Grant. Pepeyo Cultural Educational Village located at Erakor Community on the Island of Efate, has been awarded the Grant to support Community Literacy training. Further Arts, a Non-Government Organization (NGO) was supported with the project to enhance and increase its storage capacity and film production. Brenwe School in Malekula, Gambule School on the Island of Maewo and Erata Community on the Island of Tongariki have benefited from the provision of Internet and ICT facility.

TRBR has also continued to support Schools with ICT and internet facility, after the Computer Lab and Internet Community Centers (CLICC) and the Tablet For Students (TFS) programs came to an end in December 2017. These Schools include, South West Bay Primary and Secondary Schools on Malekula, Lini Memorial College on Pentecost, Martin School in Hiu Island in the Torres Group and Tasvare School on Merelava in the Banks Group. A requirement

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of this program is that the communities would be allowed to have access to the facilities after school hours at these locations.

ICT and Internet facility at Gambule School, Maewo

3.2   Tropical Cyclone (TC) Harold Sites

With the devastating impact of TC Harold in the Northern Islands of the Country, Telecommunications services were severely disrupted. Santo, Malo and Pentecost Islands were without telecommunications services, and hence it was difficult for the operators to transport equipment, and technical personnel to the sites for repair works after the cyclone.

As discussions and coordination of relief supplies were underway by NDMO to the affected areas, the National Emergency Telecommunications Cluster (NETC) in Collaboration with the NDMO were looking at ways to address the coverage issues, while the terrestrial network including the mobile network were being restored. Nine (9) priority sites that were identified by the NETC are:

- NDMO office Luganville Santo
- Melsisi, Central Pentecost
- North East Malekula
- West Coast Santo
- Pangi, South Pentecost
- Area Provincial Office, East Malo
- Bwatnapni, Central Pentecost
- Wunpuku, North West Santo

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- Atariboe Clinic, Malo

The islands of Vanuatu are covered by both Kacific and Intelsat Satellites therefore, using the VSAT technology to provide Internet and basic communications services in coordination with OGCIO and the TRBR as a short-term solution is the best option. Out of these nine sites, the office of the TRBR financially supported three sites, which included Bwatnapni School in Central Pentecost, Atariboe Clinic in Malo and the Area Council Office and Kitacu Primary School on East Malo.

The financial assistance from TRBR to the three sites included the VSAT internet equipment, electrical power systems (mainly renewable solar energy), and free broadband internet service for a period of six months.

3.3 Continuous Support to CLICC and TFS Sites

From 2014 to 2017, TRBR has been supporting the following pilot projects with the assistance of the Australian government:

- -the Computer Laboratory and Internet Community Centre (CLICC)
- Tablet for Students (TFS) Project; and
- Internet Café Support (ICS) Project.

As part of this program, 19 Schools and 3 ICT entrepreneurs in the rural communities were connected. The facilities were also accessible by the public in these communities and the pilot program ended in December of 2017.

An evaluation of the Program was undertaken in 2018 and revealed that the program did benefit both the schools and the communities with significant impact on the schools and children's education.

The evaluation report also highlighted some of the challenges encountered during the operations of these projects as well, which included:

- Difficulties faced in the sustainability, maintenance, and operations of the facilities both financially and technically;
- No internet connectivity due to equipment failure, due to damaged caused by the natural disasters and/or inconsistency of service provision due to the Operators network instability and unavailability;

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- Lack of skills and knowledge among the facility coordinators and the school administration in general to identify the appropriate processes for addressing the connectivity issues or to deal with the technical issues; and
- limited use of the facility by the communities due to lack of knowledge and skills on the use of ICT technologies.

Based on this Evaluation Report, the TRBR has identified nine (9) Schools with these issues. As such, TRBR is working with these schools to address these issues with financial assistance from Governance for Growth (GFG). These Schools includes:

I.	Venie Matapevu, Santo Bush
II.	Saint Ann School, Portolry- Santo
III.	Sulua Primary School, Maewo
IV.	Lamap Community Centre, Malekula
V.	Lambubu School, Malekula
VI.	Walarano School, Malekula
VII.	Orap School, Malekula
VIII.	Torgil Rural Training Centre, Ambae
IX.	Eles School, Nguna Island – Efate

3.4 Community ICT Literacy Training

Lack of basic ICT knowledge and skills is the main challenge on the uptake of ICT Services in the rural communities as identified in the evaluation of the CLICC and the TFS Piloted Program. Community access to the CLICC and TFS facilities by the communities was very limited due to the same reasons, particularly the elders and the youth who had no formal or very limited formal education.

Following those findings, TRBR, in 2018 and 2019 delivered basic ICT training in various communities on the Islands of Tanna, Santo, Malekula, Pentecost and Maewo, through contractors which included Communications Solutions, Ituani Vocational Skills Centre and an ICT Officer at Tafea College. The trainings were tailored according to the ICT needs identified from each respective community with the ICT facilities.

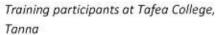The training locations recorded a high number of attendees as summarized in the table below.

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Island	Facilitator of training	Attendance
Tanna	Tafea College ICT	44
Santo	Ituani Vocational Skills Centre	58
Pentecost	Communications Solutions	26
Malekula	Communications Solutions	57
Maewo	Communications Solutions	24

The training topics offered in these locations includes:

- Windows 7 basic computing
- MS Word
- MS Excel
- MS Power Point
- Email creation
- Social media
- Child online protection
- Internet browsing (Educational and Entertainment)
- Printer installation
- Solar Power maintenance

The Community ICT training is also included in the TRBR UAP 2020 work plan and it will be an ongoing activity, since it is the key to empowering communities to use telecommunications services effectively.

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Training participants at Tafea College, Tanna

Training participants at Merei Centre School Tassariki, South Santo

4.   Next Steps

TRBR is committed to continue working actively to achieve goals of the Government's UAP and will focus on the tasks below for the next six months.

1. Finalize UAP Guidelines;
2. Confirm the UAP sites;
3. Consult with the Service Providers on the UAP approach and finalize the implementation approach;
4. Undertaking agreement with Service Providers on the Rollout of the UAP sites
5. Finalize Awardee and implement projects for 2020 Community Telecommunications Grant;
6. Engage Service Providers and contractors to work with nine (9) CLICC/TFS Sites that are facing challenges;
7. Continue Monitoring the TC Harold sites; and
8. Continue Monitoring the VSAT sites currently supported by TRBR.

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5. Reporting

This is the 11th report to the Stakeholders on the implementation of the projects associated with the 2013 UAP, however, it is the 01st report issued during the extension period of the UAP implementation period as per the COM decision 291 of 2019.

TRBR's implementation efforts have had a significant impact on the progress made with the UAP objectives, in terms of ICT and benefits to the people of Vanuatu. TRBR as the implementing authority of the Government UAP will continue to work positively, enthusiastically, and cooperatively with all its stakeholders to achieve the overall objectives of the Government UAP.

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