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# Samoa National Broadband Policy 2012

“BETTER CONNECTIONS TO THE WORLD”

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## 1. Introduction

### 1.1 Background / Context

Globally, many countries – both developed and emerging - are concerned with developing more sophisticated strategic positions for country broadband adoption and are undertaking comprehensive national broadband plans to significantly and rapidly increase their access to broadband services and its performance. Internationally, the Broadband Commission<sup>1</sup> has set four clear, new targets for making broadband policy universal and for boosting affordability and broadband uptake:<sup>2</sup>

- **Target 1: Making broadband policy universal.** By 2015, all countries should have a national broadband plan or strategy or include broadband in their Universal Access / Service Definitions;
- **Target 2: Making broadband affordable.** By 2015, entry-level broadband services should be made affordable in developing countries through adequate regulation and market forces (amounting to less than 5 percent of average monthly income);
- **Target 3: Connecting homes to broadband.** By 2015, 40 percent of households in developing countries should have Internet access; and
- **Target 4: Getting people online.** By 2015, Internet user penetration should reach 60% worldwide, 50 percent in developing countries and 15 percent in less developed countries ('LDCs').

Following its successful policies which have seen significant increases in the country's telephone penetration the Government of Samoa is now committed to facilitating the growth of broadband services and cementing the nation's place within the global connected ICT community. Broadband platforms promote the convergence of voice, data and audio-visual services onto a single network. Only with a higher adoption rate of broadband services will Samoans be able to truly integrate themselves into globalised trade, commerce and society of the 21<sup>st</sup> century.

While the private sector has shown initiative in rolling out some broadband services, the Government is committed to a national, guided approach to facilitate an increase in the supply and uptake of broadband. Broadband is now too important to leave solely either to the market or commercial players to invest sufficiently and quickly enough to secure country advantages. The proposition that broadband infrastructures are "essential to the future of Samoa" is strongly endorsed by the Government.

### 1.2 This Policy

This Policy has been prepared by the Ministry of Communications and Information Technology ('MCIT') following public consultation in late 2011 and early 2012. It has been developed taking into account the applicable legislative regime detailed in the *Telecommunications Act 2005* and the *Broadcasting Act 2010*. It is consistent with the objectives detailed in section 3 of the *Telecommunications Act*.

The Government believes that it is necessary for policies, especially in areas involving both public and private sector input, to be formulated and enacted in as transparent manner as possible. This public consultation means that Samoa's national broadband policy is both practicable and reflective of broad consensus in the country.

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<sup>1</sup> Jointly established in May 2010 by the ITU ([www.itu.int](http://www.itu.int)) and UNESCO ([www.unesco.org](http://www.unesco.org))

<sup>2</sup> See [www.broadbandcommission.org/slider/targets.aspx](http://www.broadbandcommission.org/slider/targets.aspx)

## 2. Definition of Broadband

Broadband is a term used to describe a network connection that exceeds designated speeds. It is widely used and the precise speed at which a network connection is deemed to be a broadband service varies. The International Telecommunications Union ('ITU') has previously provided multiple definitions of what constitutes a broadband service. For example, the Standardization Sector defines broadband as a network connection speed of between 1.5 to 2 Mbps while the Development Sector defines broadband as a connection speed of greater than 256 Kbps. In recent times, the ITU's definition has changed and now broadband is defined as a cluster of concepts namely always-on, high-capacity, and combined provision of voice, data and video at the same time.

Samoa does not wish to limit technology and sector progress by aligning ourselves with a minimum broadband speed. We instead prefer the new ITU definition and will define 256 Kbps as a 2012 broadband benchmark which will be expected to exceed 512 Kbps or 1 Mbps in the short term. Much higher speeds are expected in the future given rapid technological developments in both fixed and wireless technology.

## 3. Why Broadband is so Important to Samoa

The challenge for Samoa is to go from having widely available telecommunications services (especially cellular mobile services) to widespread affordable broadband access. Again, we are very fortunate that there is a range of broadband technologies including wireless broadband which will facilitate increases in broadband adoption in Samoa. However, significant investments will need to be made.

The benefits of broadband are numerous and cannot be overstated. Research from the World Bank shows that investment in higher-end technologies – such as broadband networks – have been shown to deliver the greatest benefits on GDP growth.<sup>3</sup> As such a 10 percent increase in fixed line teledensity seems to increase GDP by around 0.5 percent. The same increase in mobile teledensity increases GDP by some 0.7 percent. And a 10 percent increase in broadband penetration can boost GDP by an average of 1.3 percent.

Social benefits arising from the proliferation of broadband services include improved quality of education and healthcare arising from enhanced communications services and access to data. Social inclusion with the wider Samoan communities and families both in and outside of the islands is also fostered through the greater ability for persons to communicate with broadband technologies.

Greater broadband adoption also has the potential to indirectly reduce Samoa's environmentally harmful carbon emissions and the national carbon footprint as part of our national response on climate change. The need for travel is reduced due to the utilisation of telecommuting and video-conferencing.

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<sup>3</sup> Source: Christine Zhen-Wei Qiang and Carlo M. Rossotto with Kaoru Kimura, *Chapter 3 Economic Impacts of Broadband*, in World Bank, *Information and Communication for Development 2009: Extending Reach and Increasing Impact (IC4D2009)*

## 4. Current State of Broadband in Samoa

### 4.1 Telecommunications Access / Pricing

At present, according to the ITU's *Measuring the Information Society Report 2011*, the broadband market in Samoa is underdeveloped and penetration is low. [Exhibit 1](#) below details the leading indicators on Samoa's telecommunications sector and [Exhibit 2](#) provides a regional comparison of retail tariffs in Samoa on a Gross National Income ('GNI') basis.

**Exhibit 1: Samoa's Telecommunications indicators**

INDICATORS	KEY STATISTICS
Total number of mobile phone subscribers	167,400
Mobile teledensity	91.4 percent
Total number of fixed subscribers	35,300
Fixed teledensity	19.3 percent
Internet users	7 percent
Fixed broadband subscriptions per 100 inhab	0.11 percent
International internet bandwidth (Mbit/s)	135
International internet bandwidth (bps) per internet user	3,901

Source: ITU Statistics Yearbook 2011 and MCIT sources

**Exhibit 2: ITU Regional Tariff comparisons on a GNI basis, 2011**

Country	ICT Price Basket	Fixed Telephone sub-basket as % of GNI per capita 2010	Mobile cellular sub-basket as a % 2010	Fixed broadband sub-basket as a % of GNI per capita 2010	GNI per capita 2009
Fiji	4.7	2.4	5.9	5.7	3,840
Kiribati	39.6	7.6	11.3	251.2	1,830
Micronesia	9.3	4.5	4.4	19.2	2,500
Papua New Guinea	42.8	4.6	23.7	142.5	1,180
<b>Samoa</b>	<b>12.7</b>	<b>5.1</b>	<b>7.5</b>	<b>25.7</b>	<b>1,630</b>
Timor-Leste	21.5	8.4	7.9	48.3	2,460
Tonga	8.8	2.3	4.0	19.9	3,260
Vanuatu	35.9	18.8	10.7	78.3	2,620

### 4.2 Infrastructure

Samoa currently uses a range of technologies to provide broadband services including namely, xDSL, GSM WCDMA (namely HSPA+), Fibre, Satellite and WiMAX.

While there is over 90 percent GSM population coverage in Samoa and recently the provision of wireless broadband services has been facilitated by releasing spectrum in the EGSM band. This has resulted in one of the mobile operators, namely Bluesky Samoa offering HSPA+ broadband services covering more than 70 percent of the population. They along with other operators offer lower speed EDGE services. However, prices for wireless data services from Bluesky Samoa and Digicell remain high.

WiMAX is provided by CSL subsidiary, Zoom. Coverage extends to most of the Vaitete area and surrounding regions. Ipasifika, one of the ISP's is using WiMax as well. Digicel will also be launching its Broadband early this year, 2012.

The competitiveness and efficiency of any broadband market is determined in part by its international connectivity. This is particularly pertinent for an isolated island nation such as Samoa, which requires external connectivity via satellite or submarine cable (or both) to transmit or access data externally. There is currently a submarine cable providing international connectivity to neighbouring Pacific islands, Hawaii and the mainland United States. Additional opportunities to secure greater international connectivity may present themselves in the future and are likely to receive Government support.

## **5. Broadband Technology Options**

### **5.1 Fixed – Optical fibre, cable etc**

Fixed broadband technologies comprise a range of services including DSL, cable and optical fibre. Since there is limited fixed copper network infrastructure in Samoa, there is limited ability to use such PSTN networks for the provisioning of xDSL services (although the reduced use of copper lines for voice services may provide an opportunity to use such lines for broadband access from the fibre backbone). The deployment of new last mile access network infrastructure utilising entirely fibre technology would be prohibitively expensive for Samoa given its mountainous and tropical topology and as such wireless broadband options are likely to be the most cost-effective for last mile connectivity.

### **5.2 Wireless Broadband**

This encompasses a variety of 3G and 4G standards such as UMTS, HSPA+, WiMAX and LTE/LTE-A. Typical user speeds vary widely, but for the most part are slower than their fixed counterparts. Unlike fixed technologies, wireless broadband utilises scarce radio spectrum and require base-station infrastructure.

It is arguable that given differences in fixed and mobile uptake, Samoa's population like other global markets is more receptive to an emphasis on wireless broadband deployment. Certainly, using wireless broadband services will allow a much faster deployment of broadband services to Samoans.

### **5.3 Satellite**

Satellite provides wide-ranging coverage at varying speeds (1 Mbit/s average). It is typically prohibitively expensive and generally only suited for use in isolated areas.

According to the *National Communications Sector Policy 2005*, a 174-degree Intelsat Satellite provides international connectivity to Australia, New Zealand and the US mainland. The continued use of this satellite and the operation of the earth station in Apia are important for backup and backhaul redundancy services.

## 6. National Broadband Targets and Plan

### 6.1 Economic and Social Priorities

The 'Strategy for the Development of Samoa 2008-2012', while currently subject to revision outlines the Government's aspirational economic and social targets to be obtained over the current four-year timeframe. Broadly speaking, Samoa seeks to achieve:

- Sustained macroeconomic stability;
- Private sector led growth and employment creation;
- Improved education outcomes;
- Improved health outcomes;
- Community development through improved economic and social well-being;
- Improved governance; and
- Environmental sustainability and disaster risk reduction.

The Strategy Paper also details the Government's goals for the telecommunications sector. It hopes to improve access and affordability in part by administering a new regulatory framework. This new framework will address a number of issues relating to, *inter alia*, the development of interconnection agreements, the regularisation of licensing procedures, the management of international gateway access and the establishment of a compensation regime for the universal service obligation.

### 6.2 Broadband Priorities

The mission statement of the MCIT is to *inter alia* 'To ensure all sectors of the community and Government have access to high quality, affordable, and safe ICT.'<sup>4</sup> Achieving the key priorities of the 'Strategy for the Development of Samoa 2008-2012' is likely to be facilitated with greater broadband penetration.

There are a number of achievable priorities that are closely related to the extent of broadband development and uptake as detailed in [Exhibit 3](#) below.

**Exhibit 3: Key broadband priorities**

IMPROVE ACCESS	ENSURE AFFORDABILITY	FACILITATE INFRASTRUCTURE	INCREASE UTILISATION
<ul style="list-style-type: none"><li>• Consider use of universal access policy</li><li>• Promote access of broadband services</li></ul>	<ul style="list-style-type: none"><li>• Increase competitive framework</li></ul>	<ul style="list-style-type: none"><li>• Initiatives to encourage infrastructure deployment/sharing and co-location</li><li>• Address infrastructure gaps</li><li>• Protect critical infrastructure</li></ul>	<ul style="list-style-type: none"><li>• E-Government</li><li>• ICT education &amp; training</li><li>• Participation in regional and global workshops</li><li>• Disaster communication systems</li></ul>

<sup>4</sup> See 'National Strategic Plan for ICT 2004-2008'

### 6.2.1 Access

Access to content via broadband connectivity vastly expands economic opportunities and the possibilities and scope of personal interaction. All Samoans stand to reap substantial benefits from being able to communicate and access content from any location. The Government may consider expanding the scope of the universal service commitment to encompass access to broadband services if access to broadband services is not significantly enhanced in the short and medium term. It will also provide for broadband access in commercially non-viable areas. In addition, the ability for users to access government and private organisations via broadband services is accepted practice in developed nations and the Government will take this fact into account.

### 6.2.2 Affordability

Accessible but prohibitively expensive broadband services will not achieve national priorities. Ensuring broadband affordability is an important goal for the Government. Affordability will only be obtained through an improved competitive framework that facilitates a number of operators participating into Samoa's broadband market. Policies will be implemented which will facilitate and encourage private sector investment and participation. A technology-neutral approach to broadband technology means that winners will not be picked and the local market will adopt the most efficient, practical services.

Infrastructure sharing and co-location are other regulatory options which are to be encouraged. Sharing reduces the cost base and the need to duplicate infrastructure. It is therefore an important factor in facilitating the improved affordability of broadband services.

### 6.2.3 Infrastructure

Improved infrastructure is an essential priority for the Government's desire to increase the penetration of broadband services. Absent direct intervention, this can be obtained through a variety of mechanisms such as public / private partnerships ('PPPs'), subsidies and tax breaks.

The Government will also explore the possibility of facilitating increased international connectivity. This may be necessary given the bandwidth requirements that would result from substantially increased wireless broadband penetration. Digicel will cooperate and assist government in the negotiations of another submarine cable to provide more international capacity.

### 6.2.4 Utilisation

Adequate access and infrastructure will not of themselves lead to acceptable broadband uptake in the absence of sufficient skills and capacity. The Government is committed to providing extensive training and workshops for both the user and supplier sides of broadband technology. It also commits to participating in regional and global workshops. A comprehensive suite of e-government services, perhaps through a dedicated Government network must be deployed so as to encourage broadband uptake and greatly enhance service delivery and transparency.

### 6.3 Broadband Adoption Targets

Exhibit 4 details the broadband adoption levels targeted by the Government of Samoa for 2015 and 2020, respectively.

**Exhibit 4: Broadband Adoption Targets**

	2015			2020	
	Households	Businesses		Households	Businesses
<b>Urban</b>	11-20%	~30%	<b>Urban</b>	31-40%	~60%
<b>Rural</b>	0-10%	11-20%	<b>Rural</b>	21-30%	~40%

\*From ITU Survey Response

There are a number of other specific broadband targets to be achieved over the next five-years comprise:

- *Community Access*: communities over 200 people to have access to broadband services;
- *Individual Access*: 20 percent of Samoans are to have access to broadband of 256 Kbit/s, with 60 percent having access over 2 Mbit/s speeds;
- *Community Broadband Centres*: All Samoan communities with broadband access shall have the option to establish a Community Broadband Centre;
- *School Access*: 100 percent of all schools to have broadband access (as part of the Schoolnet project); and
- *Government Access*: The proportion of transactions between citizens and Government are able to be conducted online.

The Ministry will work with other Ministries including but not limited to the Health Ministry to determine whether other sector specific broadband targets should also be set for the next five years.

## 7. Supporting the Broadband ecosystem

### 7.1 Improved Spectrum Management

#### 7.1.1 Current Allocations

Effective management of scarce spectrum is an essential aspect of Samoa's plan to greatly increase broadband penetration using wireless technologies.

#### 7.1.2 Future Allocations

The OOTR plans to allocate up to 100 MHz of additional spectrum in the next few years below 1 GHz, depending on demand to facilitate wireless broadband services. This additional spectrum will firstly be allocated in the 900 MHz band and then in the 700 MHz 'digital dividend' band for LTE services. The latter is to take account of, if possible, with the *Common Position in Asia APT Wireless Forum (recently renamed AWG)* so as to access cheaper equipment/devices and secure international roaming.

In the 'Spectrum Management Policy & Guidelines', a proposed plan for the 700 MHz band was discussed. The OOTR expressed its desire to devote this band for wireless access services on a technology-neutral basis. In particular, the 698-763 MHz and 776-794 MHz bands were to be allocated for commercial services and digital TV.

Allocating additional spectrum for wireless broadband is a priority due to the need to generate certainty and encourage deployment. The Government and the OOTR are currently in the process of implementing this policy.

### 7.1.3 Best Practice Guidelines

Samoa will adhere to the ITU's 'Best Practice Guidelines for Spectrum Management' as a means of promoting broadband access. [Exhibit 5](#) details a condensed form of these Guidelines and will form the basis of future spectrum allocations.

**Exhibit 5: Best Practice Guidelines for Spectrum Management**

Objectives	Policies
<b>Facilitate the deployment of innovative broadband services and technologies</b>	<ul style="list-style-type: none"> <li>Remove unnecessary restrictions on spectrum use &amp; embrace minimal regulation</li> <li>Release spectrum promptly and allocate spectrum to facilitate new competition</li> </ul>
<b>Promote transparent and non-discriminatory spectrum management policies</b>	<ul style="list-style-type: none"> <li>Consult widely &amp; publicly</li> <li>Publicise decisions &amp; consultation process</li> <li>Implement stable and predictable decision-making process</li> </ul>
<b>Embrace technology neutrality</b>	<ul style="list-style-type: none"> <li>Adapt to technological convergence and avoid picking winners. Let the market determine appropriate technology</li> </ul>
<b>Adopt flexible use measures for wireless broadband services</b>	<ul style="list-style-type: none"> <li>Provide incentives for smaller new operators to deploy infrastructure at low cost</li> <li>Adopt lighter regulation for rural and isolated areas</li> <li>If spectrum scarcity becomes an issue, allow secondary market trading.</li> <li>Promote shared-use bands where practical.</li> </ul>
<b>Ensure affordability</b>	<ul style="list-style-type: none"> <li>Set reasonable spectrum fees.</li> </ul>
<b>Optimise spectrum availability</b>	<ul style="list-style-type: none"> <li>Provide timely equipment authorisations and accommodate new &amp; emerging technologies</li> </ul>
<b>Manage spectrum efficiently</b>	<ul style="list-style-type: none"> <li>Allocate spectrum in an economically efficient manner</li> <li>Promote and encourage usage of spectrum efficient technologies</li> </ul>
<b>Ensure a level playing field</b>	<ul style="list-style-type: none"> <li>Prevent spectrum hoarding by setting caps</li> </ul>
<b>Harmonise regional and international standards &amp; practices</b>	<ul style="list-style-type: none"> <li>Implement policies and allocations that are consistent with regional and global best practice and standards</li> </ul>
<b>Adopt a broad approach to promote access</b>	<ul style="list-style-type: none"> <li>Coordinate spectrum management policy and practice with other regulatory instruments (i.e. competition &amp; trade policy, universal service measures. etc)</li> </ul>

### *7.1.3 eGSM Band Plan*

The OOTR has implemented a plan that authorises the utilisation of eGSM frequency for wireless broadband (eg WCDMA at 900 MHz). The Government considers that using the nation's existing GSM infrastructure is a sensible means of fast-tracking the country's move towards widespread wireless broadband up-take.

The particulars of the plan permit the extension of the current 900 MHz band deployments. Compatibility is not a significant concern as most equipment is backwards compatible with the extended frequency range. Most smartphones are capable of operating in the UMTS 900 MHz range, as are wireless broadband dongles.

## **7.2 Facilitating Backhaul**

The Government will work with existing operators to encourage investment in higher speed backhaul transmission capacity to facilitate the deployment of wireless broadband services with a high quality of service and higher end to end speeds. Where possible it will encourage and provide fast tracking for optical fibre construction as well as investment in fibre and microwave backhaul transmission facilities.

## **7.3 Possible establishment of a Samoan Internet Exchange (SIX)**

Currently, Internet traffic of domestic origin must pass through the submarine cable to an external Internet Exchange ('IX') where the data is stored and is subsequently sent downstream to Samoa. This is both costly and inefficient.

The Government will investigate the practicality of establishing a Samoan Internet Exchange ('SIX') with the support of international agencies. This would enable the local exchange of Internet traffic which would normally require overseas conveyance. This would lead to a reduction in operating costs and help achieve the Government's objective of increasing the affordability of broadband services.

An IX will benefit local content due to the providing of cheaper, more efficient and lower latency paths between networks.

## **7.4 Ensuring International Connectivity**

Samoa's international connectivity is provided by submarine cable and satellite.

In mid-2009, the Samoa-American-Samoa ('SAS') cable was completed. This cable ensured the connection between Samoa, American Samoa and Hawaii. It provides more than 40x the current capacity used in both Samoa and American Samoa combined. Other newer international cable projects are being considered regionally which will also be examined by Government, given the need for a longer term fibre optical solution and backup and redundancy facilities.

Enhanced bandwidth and additional connectivity must be considered if broadband adoption targets are to be achieved. Of first and foremost importance is the need to upgrade the network connecting the Upolu and Savaii islands. This is a necessary pre-requisite to meeting the rural / remote adoption targets.

## **7.5 Supporting Samoan Content / Applications**

Supporting Samoan content via national broadband is a priority for the Government. While some may view the advent of broadband and vastly improved international connectivity as a direct challenge to local content due to the ease of access users will have to non-local sources, we instead view this as an opportunity.

The Government will adopt policies on quality Samoan content which is accessible over future broadband infrastructure. As we are a small market of greater than 186,000 people, addressing this will be no small undertaking. However, a greater proportion of population with broadband access means that there is a bigger market to develop for. In effect, this means that the richness of Samoan culture, language and sports will be far easier to access both locally and abroad.

The development of key applications such as e-money and transfer payments, e-governance, e-education, e-health, establishment of broadband community centres, fostering suitable partnership with international donor agencies for securing funding for augmenting the capacity of the submarine cable system, access to bottleneck facilities at reasonable terms and conditions, and technology neutral wireless broadband master plan is important to ensure the accessibility of local content. Samoa does not need to be a technology leader but can be smart in implementing the solutions that are based on learning through international best practices.

## **7.6 Device availability and affordability**

In order to facilitate broadband device availability and affordability, within the next 12 months the Government will assess the availability and affordability of smartphones, tablets, PCs etc in order to determine (i) whether such devices are treated similarly from a taxation and custom duty perspective and (ii) whether reductions in duties and/or streamlining of categories is desirable in terms of public policy.

## **7.7 Infrastructure Sharing**

For a country of Samoa's size and geography, infrastructure sharing should on public policy grounds to be facilitated by the regulatory regime. Replication of broadband infrastructure can be costly, inefficient and unsustainable. Furthermore, there are a number of factors that contribute to the need for Samoa to formulate an infrastructure-sharing framework *inter alia*:

- There are obvious capital expenditure constraints in a country of Samoa's size;
- Samoa's susceptibility to natural disasters such as tropical storms and tsunamis means that infrastructure must be strategically positioned and be of high quality. This is less likely in cases of duplication;
- The unappealing aesthetic value of duplicated infrastructure like towers.
- An unnecessary duplication of towers and other passive infrastructure could have harmful effects on Samoa's environment.

Infrastructure-sharing guidelines were formulated and consulted on by the OOTR in 2011 but not yet formally adopted. Such guidelines which are likely to be adopted in early 2012 addresses passive infrastructure sharing (eg cellular towers, poles, ducts, etc).

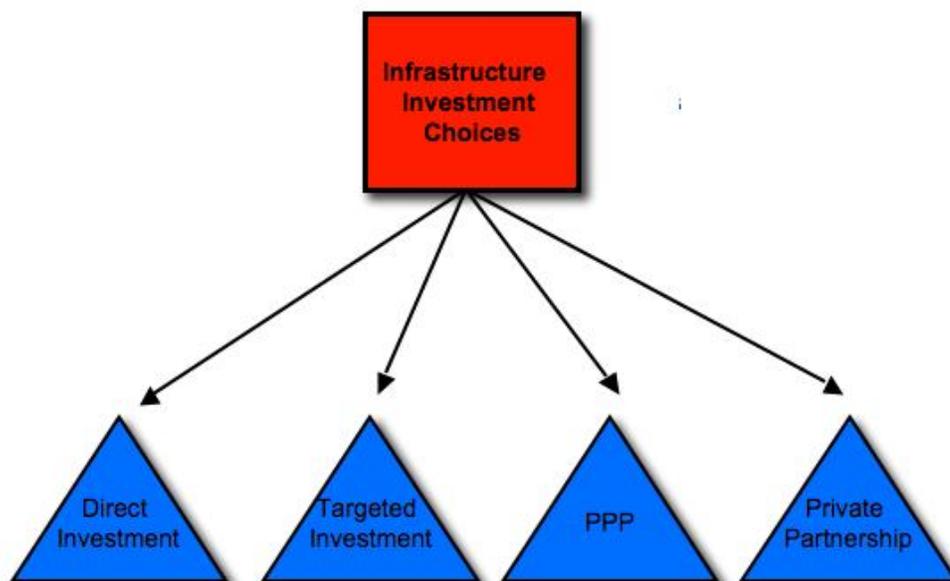
## 7.8 Financing the Broadband Plan

There are a number of different models for financing the creation of additional broadband infrastructure. These models vary widely and on one end may involve a largely 'hands off' approach whereby the Government creates and enforces a regulatory framework and leaves it to the private sector to meet adoption targets, while on the other end may see direct intervention in the marketplace via a Government-owned entity.

In circumstances where the private sector is reluctant to enter the market, the Government may have a case for assuming some of the risk by forming PPPs and/or granting subsidies. Other forms of indirect finance may include tax-breaks and/or grants. Samoa may also receive sources of funding via concessional finance (including the World Bank) and international aid.

Exhibit 6 below presents the range of investment choice open to the Government.

**Exhibit 6: Infrastructure investment**



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**Source:** ITU: GSR 2011 Discussion Paper

## 7.9 Cybersecurity

As Samoa enters the new paradigm of globalised ICT services and telecommunications convergence, attention will need to be turned towards developing an enhanced cyber or Internet security framework. Absence of such a framework may jeopardise foreign investment and lead to reluctance to store data within Samoa's jurisdiction.

From the perspective relating to the provision of Government services, enhanced cyber security is very important in relation to areas such as remote-medical assistance and education.

The form of cyber security measures will be formulated in the near future.

## 8. Roadmap to Samoa's Better Connections to the World

This policy is to be achieved over a five to ten-year timeframe. Its short to medium-term focus reflects the essentiality of a prompt and widespread adoption of broadband services. In line with global trends, the Government expects over the next several years, the adoption of IMT advanced technologies to become more prevalent to the extent that it hosts the vast majority of Samoan network connections by that time.

Exhibit 7 below highlights the timeline for key broadband plan targets/milestones in Samoa.

**Exhibit 7: Key Broadband plan targets/milestones**

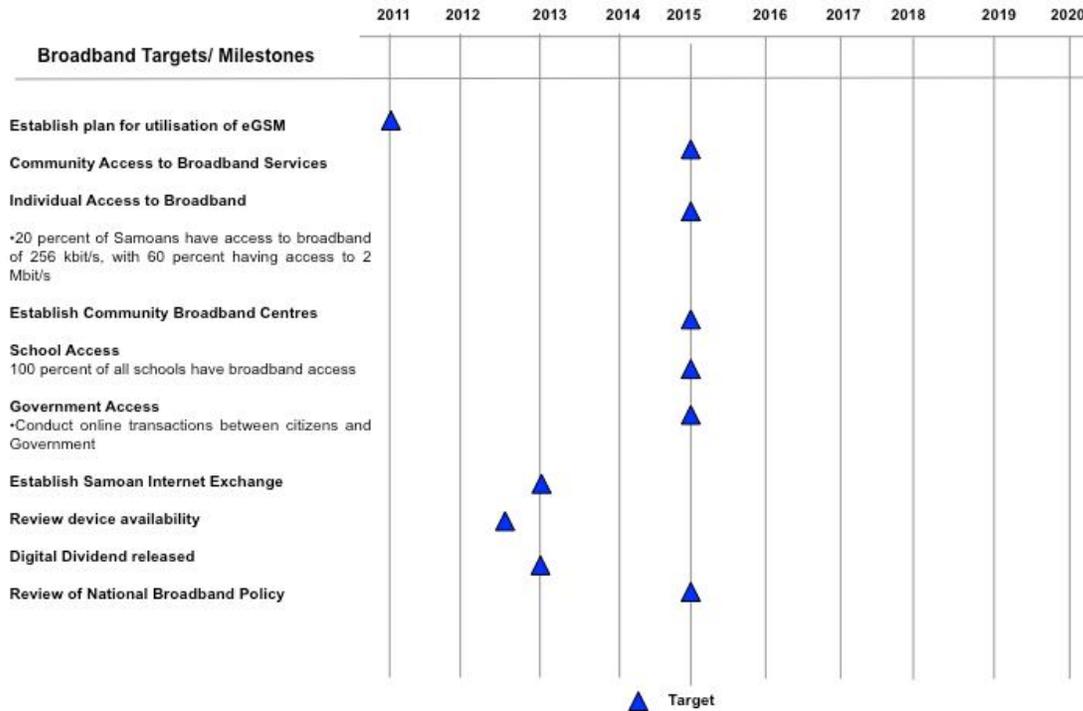
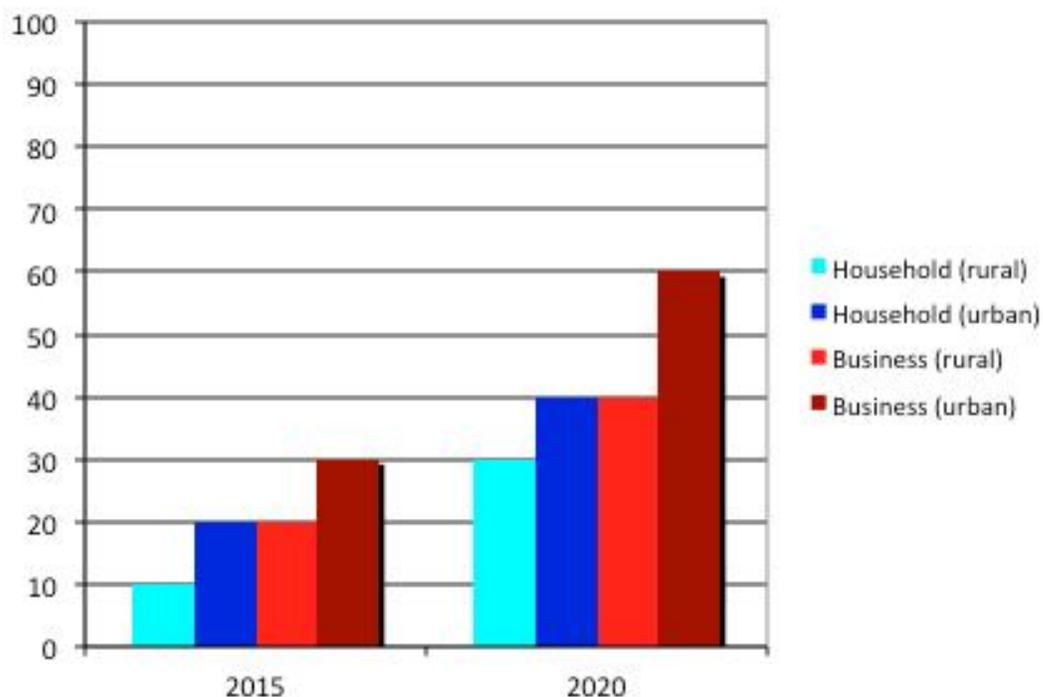


Exhibit 8 below further highlights the broadband penetration targets for business and households in Samoa in 2015 and 2020 respectively.

## Exhibit 8: Samoa's Broadband Penetration Targets

Percentage %



## 9. Implementation and the Future

### 9.1 National ICT Committee

Following on from the quality work undertaken by the National ICT Committee, its brief will be extended to include a specific broadband mandate. The broadband mandate will guide the implementation of Samoa's broadband policies and will encompass the following areas:

- The development of an implementation plan that is consistent with the framework currently being devised by the ITU in consultation with the Samoan Government;
- Coordinating the implementation of the national broadband plan between public and private stakeholders;
- Consulting and advising relevant public and private sector stakeholders on the components of the plan and implementation framework;
- Facilitate the monitoring and measurement of broadband penetration in Samoa;
- Advising the Minister of any shortcomings that have been observed in the implementation process and recommending any necessary alterations; and
- Any additional responsibilities as directed by the Minister.

## 9.2 The Future

Broadband has become a key component of national economic infrastructure and enabler of competitiveness and economic growth, and offers huge potential for social and economic development in Samoa. In fact, broadband is critical and increasingly important part of economic infrastructure to promote the long-term growth of Samoa's productivity in health, education and government services.

This national broadband plan presents the direction the industry is heading towards as a catalyst to Samoa's continued rapid development and aims to provide broadband connectivity across the country through a combination of wireless and fixed technologies. By formulating a clear policy regime, this broadband policy endeavours to create an investor friendly environment for attracting investments in the sector, envisages leveraging infrastructure to enable all citizens and businesses in both rural and urban areas to participate in the Internet and envisages support to key social sectors such as education, health and government.

The Government will review this national broadband policy in 2015. The review will:

- Provide an important opportunity for Samoans to take stock of where it stands in the global information society, to examine what has worked and what has not, to assess the adequacy of the infrastructure to meet the future needs of both individuals and businesses throughout Samoa, to consider whether the current policy and regulatory framework could be improved to better satisfy these requirements and to ensure cost effective implementations and roll-out mechanisms for wireless broadband;
- Examine whether any amendments are necessary to the *Telecommunications Act 2005* and the *Broadcasting Act 2010* and/or new or amended subsidiary legislation is desirable arising from (i) increased broadband service diffusion and speeds and (ii) the increasing convergence of telecommunications, broadcasting and IT; and
- Assess the societal impacts on Samoan culture, language and society of increased broadband penetration in the country.

- END-