





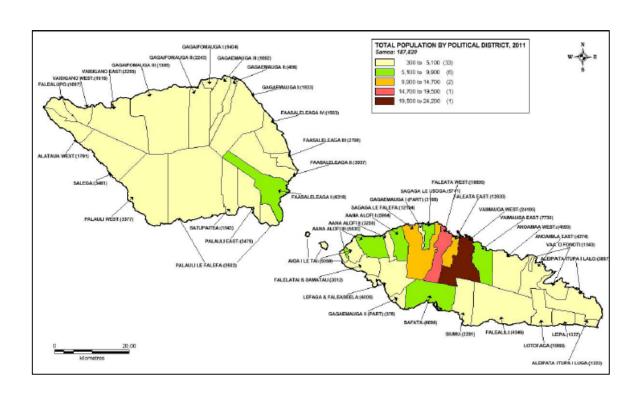
# Radiocommunication for Bridging Digital Divide Samoa Experience

Unutoa Auelua-Fonoti REGULATOR















# **ICT Sector consists:-**

- Ministry of Communications and Information Technology (MCIT) is responsible for Policies.
- Office of The Regulator (OOTR):
  - responsible for the oversight of telecommunications, broadcasting, postal services and electricity;
  - Spectrum Management.
- Samoa Post responsible for the provision of postal services

MCIT, OOTR and Samoa Post are under the portfolio of the Minister of ICT Hon Afamasaga Rico Tupai





#### WHAT'S THE DIGITAL DIVIDE?

PEOPLE HAVE ACCESS TO



OR DON'T HAVE ACCESS TO ((🚫



The modern information technology







Television



Internet

















**EFKS TV** 

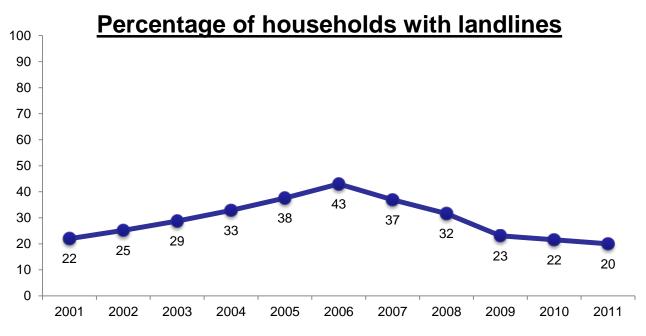


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# Landlines



Source - Samoa Bureau of Statistics

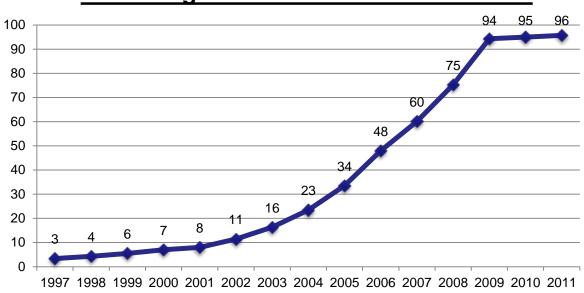
- Bluesky is the only provider that provides landline telephony services
- Samoa has relatively high penetration of fixed line services in 2006.
- 43% of households in 2006 has landlines, declined rapidly by 2011





# **Mobile**

#### Percentage of households with mobiles



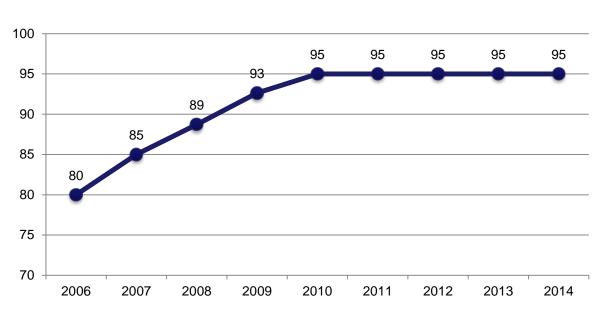
Source - Samoa Bureau of Statistics





# **Mobile**

#### Mobile Coverage (%of population that can receive 2G mobile signal)



Source - OOTR Monitoring Data
- Samoa Bureau of Statistics





#### Mobile

- The percentage of the population that can receive a GSM mobile signal has risen with household penetration from 80% at Digicel's launch to 95% by 2014
- coverage rather than affordability is currently the biggest barrier to higher levels of penetration, household penetration continues to rise, although slowly.
- household penetration is higher than the coverage rate suggesting that although some households do not have coverage, they nonetheless posses a mobile phone and use it when they are within signal range.
- Mobile Subscription penetration had reached 89% of the population in 2011 however data obtained in 2014 shows 237,411 active SIM Cards, representing a mobile penetration level of 124%
- Both mobile operators launched mobile broadband in 2011 using HSPA+ technology with theoretical download speeds of 21 Mbit/s.
- Digicel has launched its LTE services using LTE 700 and LTE 1800 in 2016.





## Internet

- OOTR is currently working on defining this market and will complete this task in the next 6 months or so.
- Technologies Used
  - Fixed
    - ADSL
    - WiMax
    - WiFi Broadband
    - HSPA+
    - LTE 700
  - Mobile
    - EDGE
    - HSPA+
    - LTE 700
    - LTE 1800





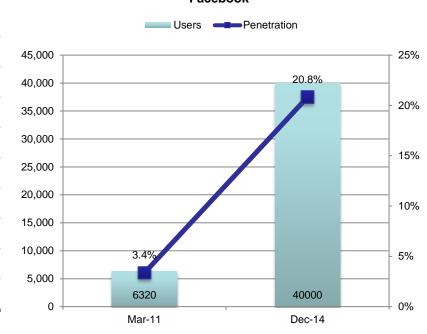
#### Internet

### Monthly retail Internet prices, US\$, 1 GB data included

# 180 169 160 140 120 100 80 60 43 40 20 16

#### Source - PRIF Report 2014

#### Facebook







#### Internet

- To boost internet penetration in rural areas govt started telecentres project in 2006 with the support of ITU
- Given the rapid growth of mobile penetration over the last few years and the availability of the mobile broadband, these telecentres are no longer use.
- MCIT finalised and issued a National Broadband Policy in 2012 calling for higher penetration of high speed services.

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

**Table 1 : Broadband Adoption Targets** 

Source: MCIT 2012.





#### **Backbone Networks**

- SAS Cable is currently providing Samoa with the International Internet Bandwidth connected to Hawaii via American Samoa.
- Satellite Services are also use by other providers for providing a significant portion of the International Internet Bandwidth. Digicel uses O3B.
- Bluesky's domestic backbone network is primarily underground fiber optic cable, which is generally resilient to cyclone-related hazards.
- Domestic backbone networks transmissions uses microwave as back haul as well as fibre in urban areas.
- With the new Tui Samoa Cable in the pipeline, the OOTR is expecting the cost of Internet to be further reduced and that more people will be able to access the internet.





# **Other Projects**

- Transition from Analogue television to Digital television, consultations started in 2013. Fully implement in Dec 2017.
- Samoa National Broadband Highway (SNBH) is the Government's communications network linking all govt ministries. It was launched in 2014.
- New Tui Samoa submarine Cable will commissioned in 2017.
- One Laptop per Child project was launched in 2010 where a total of 75 XO laptops were received by two Primary Schools in Savaii.
- The Schoolnet project supported by ADB is still running by the Ministry of Education which aim to incorporate e-learning in schools using digital resources to teach various subjects in Secondary Schools.
- The Ministry of Health is in the process of developing an e-health strategy together with MCIT
- The IXP will be fully implemented.
- Universal Access Funds mechanism has been developed by OOTR to help get the services to the underserved areas.
- OOTR continues to celebrate the Girls in ICT Day an initiative of ITU that Samoa do support in order to empower young women in ICT.







# **THANK YOU**