

UNIVERSAL ACCESS AND SERVICE PROJECTS 2020 – CONSULTATION MEETINGS

Agenda

Introduction

Why Universal Access

Universal Access Regime in PNG

Development Goals

Connectivity Status

Project Proposals

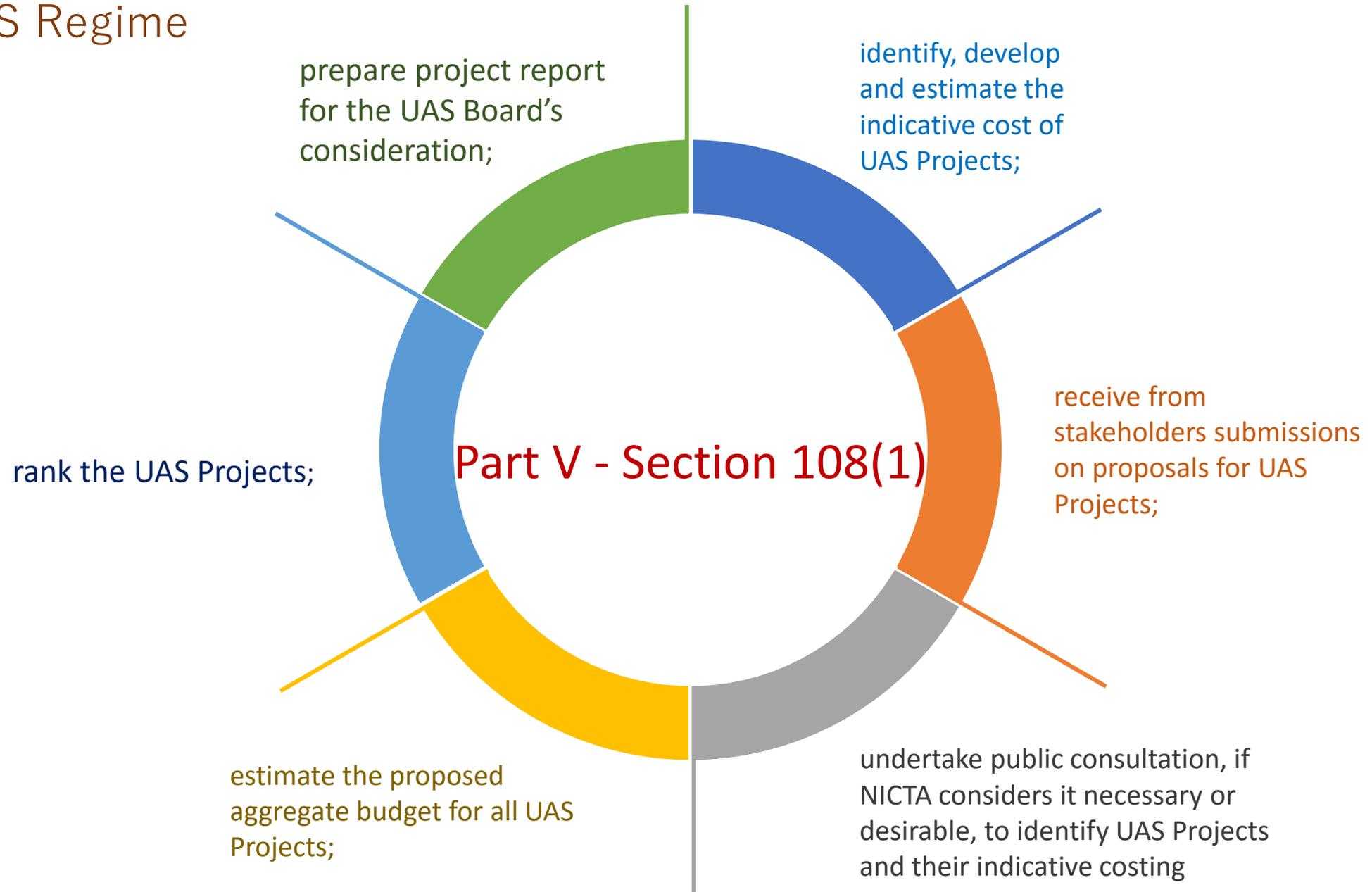
Why Universal Access ?

- Strong co-releation between ICT use and economic growth
- Effective delivery of ICT services such as e-education, e-government, mobile banking requires that most if not all, citizens, must have access
- ICT networks are of greater utility when more people can be reached; adding new users benefit current users

Universal Access and Service Regime

- Enabling Mandate - National ICT Act 2009
- Part V of the Act
- Purpose of Part V is to fund and implement approved UAS Projects to encourage the development of ICT infrastructure and improve the availability of ICT service in PNG, including rural and underserves areas
- Where commercial considerations do not work

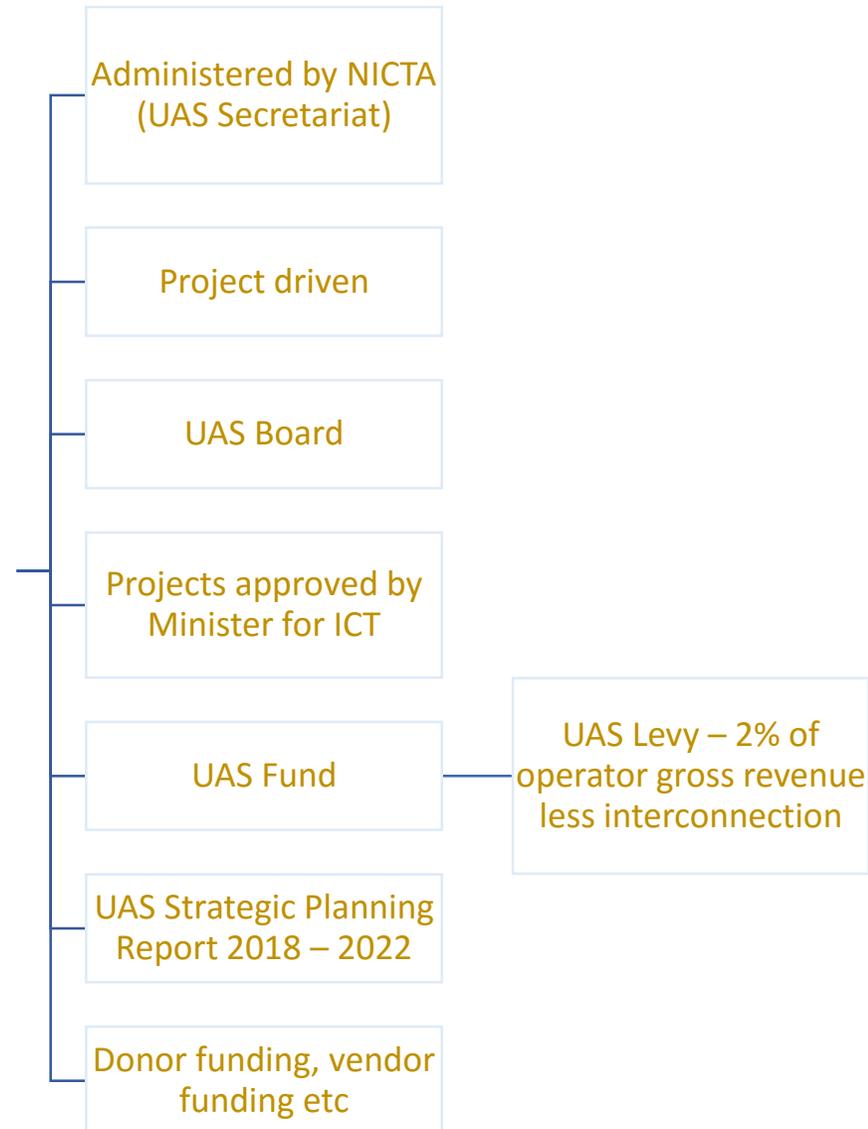
UAS Regime



Universal Access and Service (UAS) Regime

Part V of *National Information and Communications Technology Act 2009*

“encourage the development of ICT infrastructure and improve the availability of ICT services within PNG, including in rural communities”



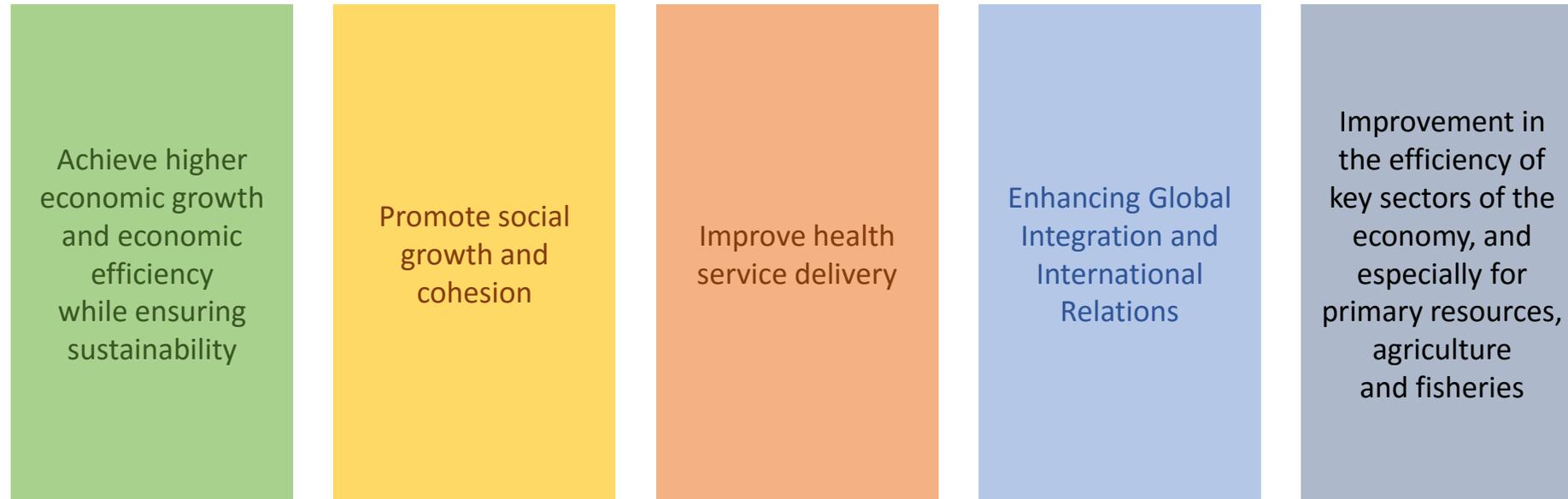
Development Agenda

Vision 2050 SDGs	
National Broadband Plan	
Medium Term Development Strategy 2018- 2022	
Strategic Planning Report 2018-2022	



National Broadband Policy (2014)

“facilitating the development of all elements of supply, demand and institutional readiness to support a broadband eco-system in PNG”



A download speed of 512kbps is considered to be the initial entry level or basic service, but we will be moving well beyond that soon



PAPUA NEW GUINEA



MEDIUM TERM DEVELOPMENT PLAN III 2018 - 2022

"SECURING OUR FUTURE THROUGH INCLUSIVE
SUSTAINABLE ECONOMIC GROWTH"

VOLUME ONE DEVELOPMENT PLANNING FRAMEWORK AND STRATEGIC PRIORITIES



KRA 2- Quality Infrastructure & Utilities (Internet)

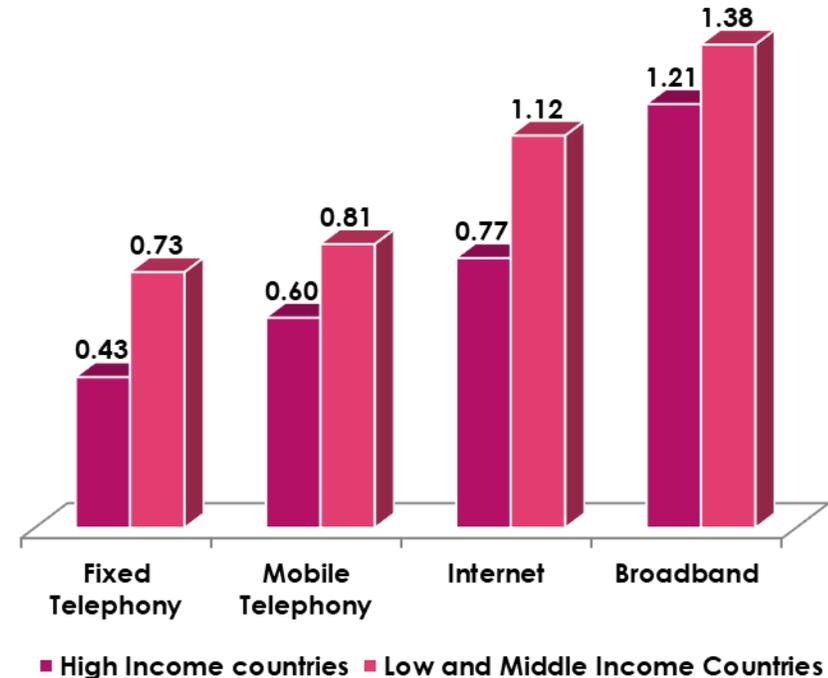
Table 4.4 Quality Infrastructure Goals and Targets

Goal	Indicators	Baseline	Target 2022
2.1 Improve infrastructure with sustainable and disaster resilient quality to provide more enabling environment for growth of the economy and for the improvement of service delivery	2.1 Total Length of national roads (km)	8,740	12,000
	2.2 Proportion of national priority roads in good (trafficable) condition (%)	33.5%	80%
	2.3 Estimated length of provincial and district roads upgraded and maintained in good condition (km)	16,100	18,000
	2.4 Number of bridges on national roads in good condition	15	80
	2.5 Number of missing link roads constructed	4	8
	2.6 Number of New/Improved wharves and Ports	16	22
	2.7 Number of small wharves & jetties in good condition	88	120
	2.8 Establishment of National Shipping Service	0	3 vessels operational by 2022
	2.9 Number of airports upgraded and maintained for higher seating capacity aircrafts	9	16
	2.10 Number of national airports that comply with international air safety standards (airport certified) on an ongoing basis	2	5
	2.11 Number of rural airstrips (650) rehabilitated to basic safety standards	10	300
	2.12 Proportion of Population with access to internet (%)	16	80
	2.13. Household electrification rate (%)	17	33
	2.14 Power generation by sustainable energy source (%)	4.4	11.25

2.12 Proportion of Population with access to internet (%)	16	80
---	----	----

Why Broadband?

- **Key driver of economic growth and national competitiveness**
 - 10 percentage point increase in broadband penetration in low and middle income countries accelerates economic growth by 1.38 percentage points
 - Businesses opportunities, job creation
- **Socio-economic impact**
 - E-government, civil registration, e-education, e-health, e-commerce
 - Inclusive growth



Source: World Bank Report on Broadband 2010

UAS Strategic Planning Report 2018 - 2022

Facilitate the expansion of broadband mobile telephone network coverage throughout all unserved areas of PNG, toward the goal of Universal Service in broadband mobile telephony

Universal Access to Mobile Broadband Services

Support the introduction and expansion of public high-speed Broadband Internet connections in local PNG communities, including connectivity for public institutions and public access facilities, to help increase broadband Internet access and utilization

Public Community Broadband

Mission

Promote universal access and usage of ICT services

Support for ICT utilization and demand initiatives, including content and applications, digital literacy, and affordable devices, to ensure that all PNG citizens can take advantage of and benefit from modern communications technologies and services

Support for ICT Utilization and Demand

Vision

Promote development of ICT sector

Facilitate efforts to increase the coverage of broadcasting signals to all populated areas of PNG, allowing all citizens to receive radio and television broadcasts

Expansion of Broadcasting Network Coverage

Accessing the Internet

70,000
fixed lines



combination of satellite and limited submarine cable services for international and internet connectivity

2,000
fixed broadband

3.2 million
mobile subscribers



submarine capacity from PNG is limited to 1 Gbps from Port Moresby and 10 Gbps from Madang. Caching is improving

0.9 million
mobile broadband



A very small proportion of population has access to a computer or similar device (other than mobile handsets) for accessing the internet

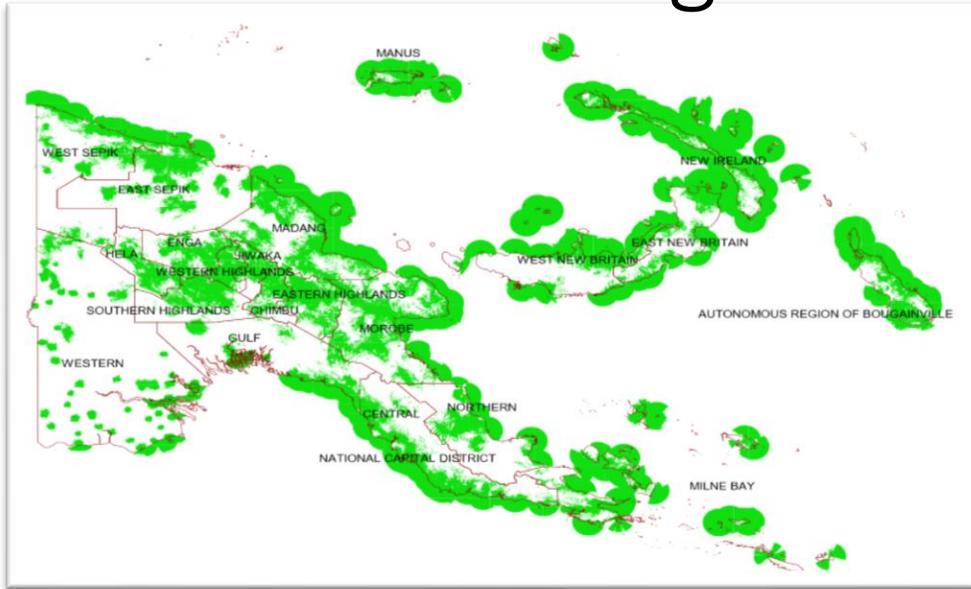
Wholesale broadband access is expensive, and the data rates available to retail customers is low. Broadband services are of poor quality and unreliable

Internet access has relied heavily on wireless, particularly cellular mobile technologies

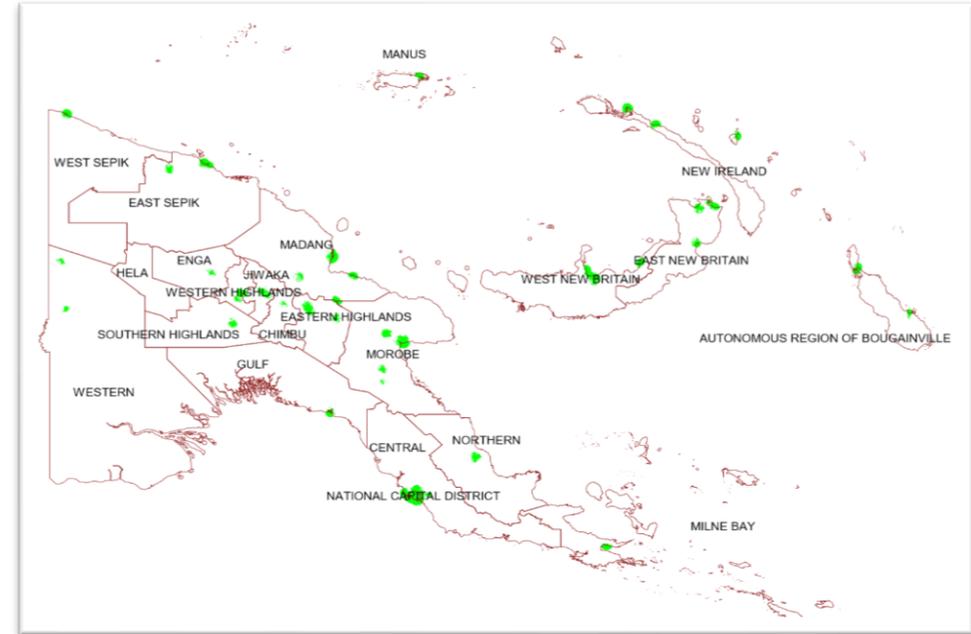
The last mile connection to broadband services will still be heavily reliant on wireless into the foreseeable future.

Mobile Coverage

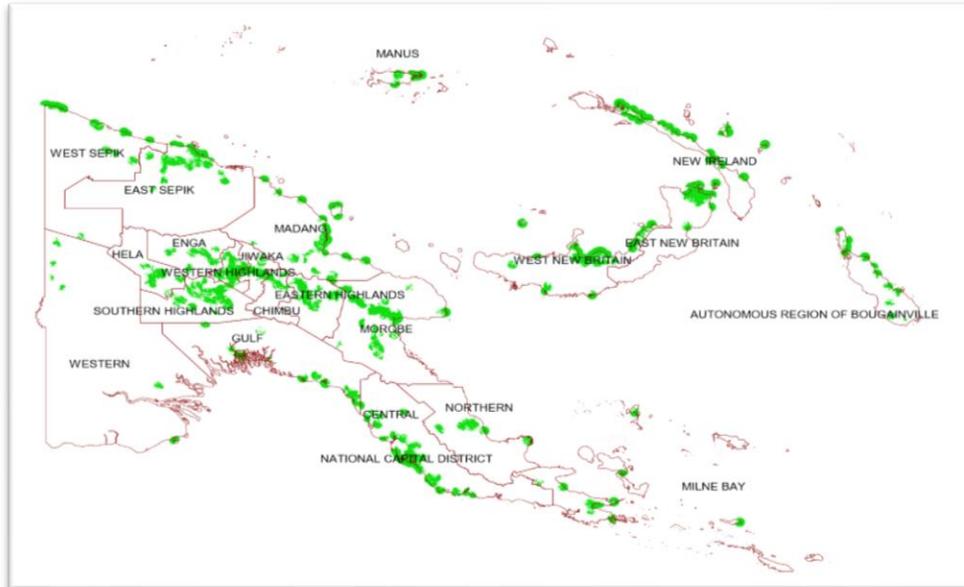
2G Coverage



4G Coverage



3G Coverage



2G

Area	Population Coverage	Total Population	Uncovered Population	% Population Coverage	% Uncovered Population
National	5,907,344	7,275,324	1,367,980	81%	19%

3G

Area	Population Coverage	Total Population	Uncovered Population	% Population Coverage	% Uncovered Population
National	3,711,227	7,275,324	3,564,097	51%	49%

4G

Area	Population Coverage	Total Population	Uncovered Population	% Population Coverage	% Uncovered Population
National	1,429,304	7,275,324	5,846,020	20%	80%

Mobile Coverage

2G (GSM) Coverage



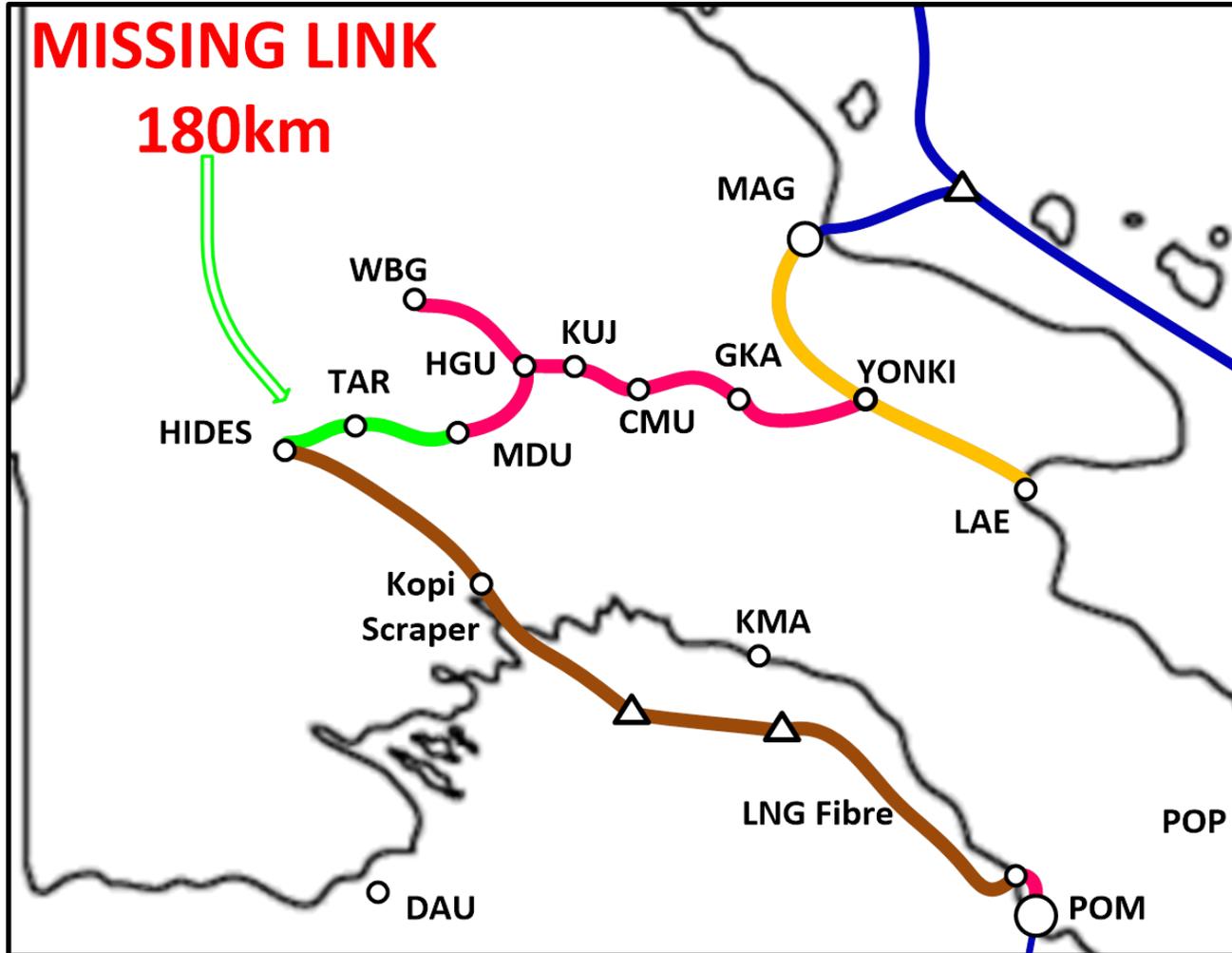
3G (UMTS) Coverage



4G (LTE) Coverage



National fibre broadband capacity infrastructure



- This is the route of the LNP-Highlands fibre backbone project run by DataCo the Government owned wholesale operator
- The linkages is with existing submarine cable systems terminating in Port Moresby and Madang
- The green “missing link” requires new investment
- Source: DataCo



Thank you
Q&A

Kila Gulo-Vui

Acting Director UAS Secretariat

✉ kgulovui@nicta.gov.pg

☎ 303 3227

📍 Levels 3, 4 & 5, Tower 1, Stratos Building
Savannah Heights, Waigani, NCD

Datec and NICTA Team, Connect the Schools Project, Balob Teachers College, Lae, Morobe Province, 2018