#### PACIFIC ISLANDS CONNECTIVITY AND PERSPECTIVES

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#### 1. Current Pacific Islands Internet consumer experience

Over 2.7 Millions Pacific islands Internet users (\*) experience between 10 to 100 Kbps speeds at peak hours



5 Mbps American Samoa ASTCA (Hawaiki Submarine Cable)

**500 Kbps** Palau Belau Submarine Cable

**200 Kbps** Cook Islands (Satellite only) and Fiji (Southern Cross cable)

100 kbps New Caledonia (Gondwana) and French Polynesia (Honotua)

(\*) excludes Australia and New Zealand

### 2. Facts & key findings

# Factors contributing to current low quality of service for Internet users in the Pacific

- High prices for Internet international capacity put pressure on Telecom operators / ISP forced to "purchase less capacity than the real demand"
- Telcos transport and Access Network needs improvements to support real Broadband

We are still far away from enjoying Mbps / Gbps speed experience despite:

- massive investment in Submarine Cables infrastructure

- huge capacity availability

#### Pacific Islands submarine cables are under utilised

Most Pacific Islands
Submarine cables in
service since 2008
use today less than
1% of design capacity

(Exception for **ASTCA** American Samoa 20 / 200 Gbps on Hawaiki used 10 % at RFS July 2018) - **Gondwana** 20 / 640 Gbps – **Tonga Cable 5** / 320 Gbps – **Palau** 6 / 400)

Examples Polynesian Region	Active capacity (Gbps)	Max. design capacity (Gbps)	Usage %
Honotua 2010 Tahiti - Hawaii	25	3200	0.78
Interchange 2014 Port Vila to Fiji	5	1280	0.39
TUI Samoa Cable 2018 Apia to Suva	16	8000	0.2

#### 3. New developments

#### Connectivity options availability / competition

- By 2023, All Pacific islands will be connected to at least one submarine cable
- Submarine cable / Satellite competition brings capacity pricing down for Pacific Islands
- More solutions will be available with High capacity LEO, MEO, GEO satellites fleets Submarine cable / Satellite competition bringing capacity pricing further down

#### **Latest trends / findings :**

- International Connectivity
  Growth is served by satellite
  when capacity pricing on
  submarine cable is higher than
  satellite Inflexion point at 100
  US\$ per Mbps wholesale price
  per Mbps monthly
- Satellite competition & Volumes increase brings unit prices down :
  - **Q4-19**: Vanuatu & PNG prices divided by 3
  - **Q1-20**: Solomon islands cable company under 100 US\$ at launch
- June 20: Cook islands and Niue have no choice than to challenge satellite pricing levels

#### 4. Ways forward

If future target for average speed per user at Peak Hours reach 1 Mbps across all pacific islands total capacity demand for Pacific Islands be exceeding 3 Tbps !!!

Total Pacific islands internet users (\*): around 2.7 Millions

**Current total capacity in use Cable / Satellite : 350 Gbps** 

**Current average Speed per user: 129.6 Kbps** 

Real potential of improved connectivity / usage through submarine cable infrastructure connecting most populated urban centers but as well for combined cable / Satellite to address rural / isolated communities.

## 5. Benchmarking - Wholesale International Submarine Cable capacity pricing

