



ICAO

*International Civil Aviation Organization***Eleventh Meeting of the Common aeRonautical Virtual Private Network Operations Group (CRV OG/11)***Bangkok, Thailand, 01-03 February 2023*

**Agenda Item 8:** States CRV Implementation, CRV Bandwidth Utilization Rate, and operations experience sharing

### **PASNET FOR THE PACIFIC ISLANDS CRV CONNECTIVITY**

(Presented by Airways New Zealand)

#### **SUMMARY**

This paper presents an overview on the options for using PASNet to connect the Pacific Islands to CRV.

## **1. INTRODUCTION**

- 1.1 Options for network connectivity to some Pacific Islands is limited and in some cases expensive.
- 1.2 The World Bank implemented the Pacific Aviation Safety Network (PASNet) in 20xx and to date 4 cycles of installation has occurred in the Pacific.
- 1.3 Sites current supported are:
  - Tonga (one site is Airways New Zealand owned, the other is Tonga owned)
  - Samoa
  - Cook Islands
  - Niue
  - Tarawa
  - Solomon Islands
  - Funafuti
- 1.4 Soon to be installed are 3 sites in Vanuatu.

## **2. DISCUSSION**

- 2.1 The PASNet installs once implemented, where handed over from the World Bank to the Pacific Island State.
- 2.2 The design and implementation were carried out between the World Bank, PASO, Airways New Zealand and other entities.

**Agenda Item 8**

01-03/02/23

2.3 PASNet was built in a similar way to the CRV, focusing on the immediate needs of States.

2.4 Limited maintenance of the PASNet installs is the responsibility of Airways New Zealand, including all and any necessary configuration changes.

The design considered the need to add extra services and other users in a similar way that CRV is design and implemented.

2.5 To date the installation has been relatively stable from a configuration point of view. There have been failures of equipment due to environmental issues and the annual Sun Spot activity outages each year.

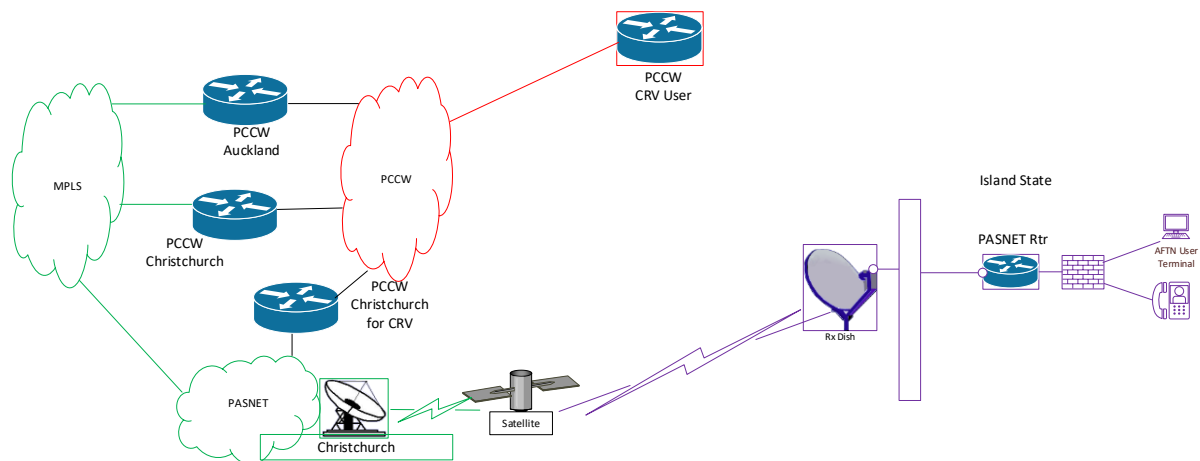
2.6 The options for connecting CRV to PASNet has been narrowed to two options. For each option the operating model, cost recovery, monitoring etc needs to be resolved.

2.6.1 Option 1 – Install a new CRV NID in Christchurch.

In this option a new CRV NID and associated circuit would be installed in Christchurch and connected into the PASNet network.

The network would be segmented on vlan and IP address at Christchurch providing for connectivity to each Pacific Island.

This option would not need to have a CRV NID installed at the Pacific Island Site.

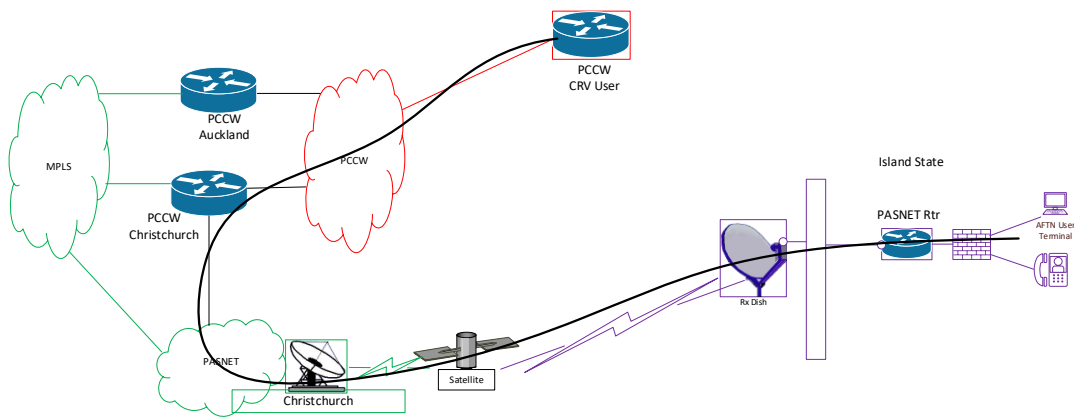


### 2.6.2 Option 2 – Use the exiting Airways New Zealand Christchurch CRV NID

In this option the existing Airways New Zealand Christchurch CRV NID and associated circuit would be connected into the PASNet network via an extra interface on the CRV NID.

The network would be segmented on vlan and IP address at Christchurch providing for connectivity to each Pacific Island.

This option would not need to have a CRV NID installed at the Pacific Island Site.



2.7 In each option there will be design changes required to the current installation to support the allocated IP address for the Pacific Island State, routing to the peering State and specific services expected to be used.

2.8 The cost to implement connectivity of CRV over PASNet is still unknown.

2.9 There is a strategy discussion on this in February within Airways New Zealand.

### 3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) discuss various options proposed; and
- c) discuss any relevant matter as appropriate

**Agenda Item 8**

01-03/02/23

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