Enterprise Engineering Services

Asia/Pacific Common Regional Virtual Private Network (CRV)-FAA Implementation Plan
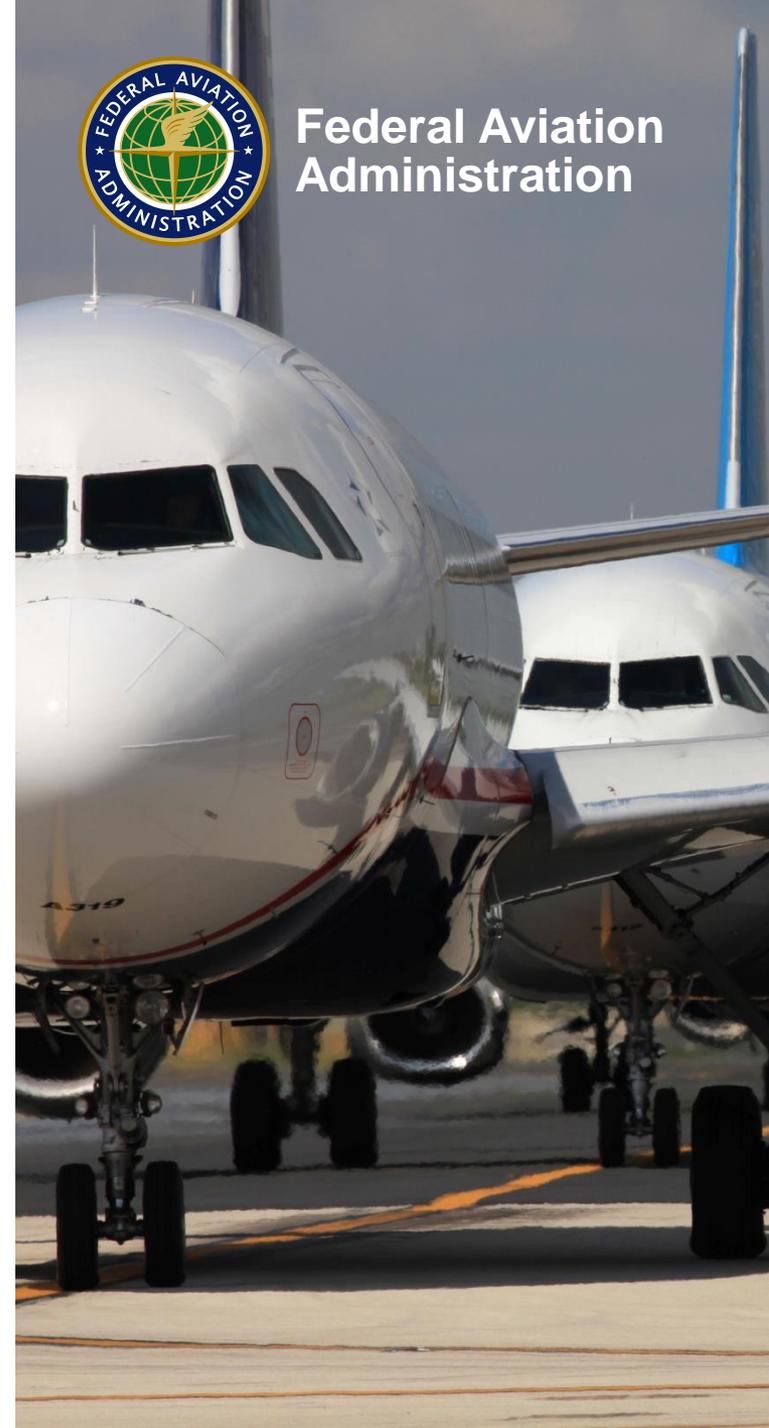
Federal Aviation Administration

Presented to: ISPACG/32

By: Braks Etta, US FAA

Date: 11-12 April 2018

CRV Implementation Schedule

1. **Plan Contract Award to PCCW Global by April 2018**
2. **PCCW Global to implement service by August 2018**
3. **Service acceptance test with Australia, Fiji and New Zealand planned for August 2018**
4. **Plan AMHS cutover with Australia by September 2018**
5. **Plan cutover AMHS service with Japan by September 2018**
6. **Cutover AMHS service with Fiji and New Zealand October 2018**
7. **Cutover Voice service with Australia, Fiji and New Zealand by October 2018**
8. **Plan implementation AIDC/AMHS with Philippines to be determined at CRV OG/4**

Note: This schedule is for planning purpose and is based on projected contract award by the end of April 2018.

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Current Telecommunication Issues

1. **Harris/FTI has requested termination of circuit by June 2018. An extension request has been issued to keep the service until October 2018**

2. **Telstra has requested termination of circuit by March 2018. AirServices was able to extend the service but there is no commitment from Telstra of extension time**

3. **The Time Division Multiplexer (TDM) that is in operation at four countries: Australia, Fiji, New Zealand and USA is obsolete. There is no maintenance contract in place since December 2015**

4. **FAA needs direct communication to support AIDC and voice service with Papua New Guinea (PNG) and Indonesia**

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CRV Background

- Asia/Pac Regional ICAO Office on behalf of eighteenth members formed a Task Force to solicit and select a common service provider in the region to replace all private circuits provider by multiple vendors.

- CRV is based on the Internet Protocol (IP) that is in compliance with ICAO Document 9896, Internet Protocol Suites. The winning vendor, PCCW Global, Inc., was announced in July 2017.

- CRV Task Force has been replaced by CRV Operation Group (OG) and recommends four members: Australia, Fiji, New Zealand and USA to form a pilot project to evaluate and validate the service as well as develop related implementation and operation documents.

- The CRV pilot project is expected to start in August 2018

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CRV Membership Status

- Signed contract with PCCW Global: Japan (December 2017)

- Finalized contract with PCCW Global: Hong Kong, China and Philippines (2nd Qtr 2018)

- Finalized contract between pilot project members and PCCW Global (2nd Qtr 2018)

- ASEAN members have expressed to join: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Singapore, Thailand and Vietnam
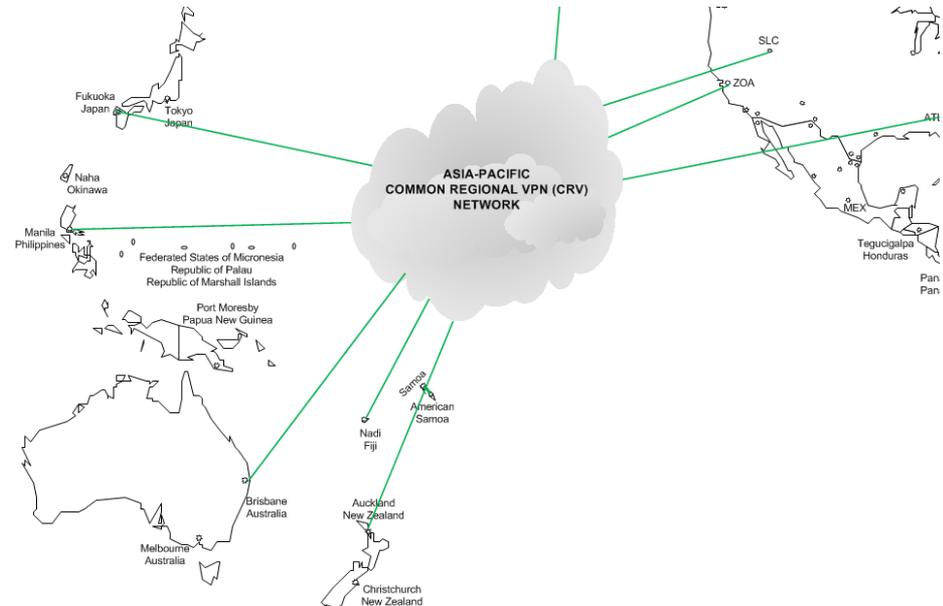
- Middle Eastern Regional ICAO has also joined CRV.

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Common Regional VPN (CRV)
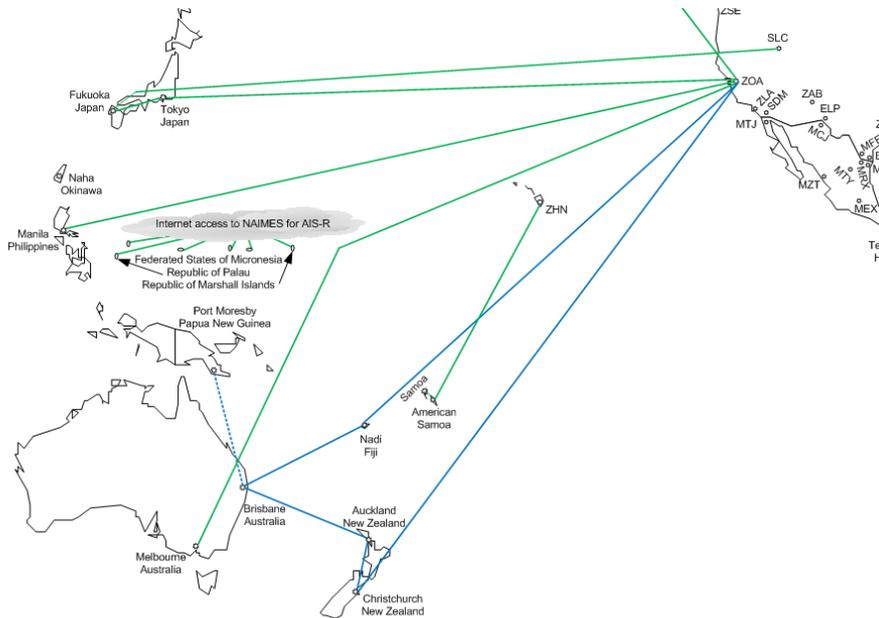
Existing Situation

- **Point-Point TDM**
- **S. Pacific AFS Network (BWM-like)**
- **Fixed bandwidth**
- **Obsolete "Half-Circuit" carrier billing**
- **Legacy voice protocols**

Regional Private Network - CRV

- **Common network service provider**
- **IP (Multi Protocol Label Switching)**
- **Supports voice (VoIP) and data**
- **States responsible for connections**
- **Foundation for AMHS & SWIM**
- **Increases connectivity; decreases cost**

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FAA Planned Activities

- **Data Communication:**
  - Provide one 2 Mega Bit Per Second (Mbps) drop at ATL NEMC (Diversity)
  - Provide one 2 Mbps drop at SLC NEMC (Primary)

- **Voice Communication**
  - Provide one 2 Mbps drop at ZOA
  - Provide two tail circuits: one from San Jose and one from LAX for diversity
  - Convert VoIP back to analog legacy dial plan to be compatible with VSCS and VTAB

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Questions?