



ICAO

*International Civil Aviation Organization***Twelfth Meeting of the Common aeRonautical Virtual Private Network Operations Group (CRV OG/12)***Denarau Island, Fiji, 23-26 January 2024*

Agenda Item 9: States CRV Implementation

AUSTRALIA CRV IMPLEMENTATION UPDATE

(Presented by Airservices Australia)

SUMMARY

This paper presents an update on the implementation of the CRV and provides information on upcoming VoIP Gateway changes from Airservices Australia.

1. INTRODUCTION

1.1 This report provides a comprehensive overview of Airservices Australia's progress within the Common aeRonautical Virtual Private Network (CRV). It details the successful migration of services to the CRV, and provides an update of the current status with AirNav Indonesia.

1.2 Furthermore, the report provides information on changes to Airservices Australia's VoIP gateways, and how it affects its CRV intercom partners.

2. DISCUSSION

Australia CRV Status

2.1 Airservices Australia elected to install 2 "Package C" CRV services from PCCW. The first service was installed in the Brisbane Centre and the second service was installed in the Melbourne Centre in 2019. Today, of our seven international partners, 5 have been migrated successfully, and work with AirNav Indonesia is currently in progress.

2.2 Since the migration of these services, Airservices has seen greatly improved reliability of international network connections and improved voice quality of speech between controllers.

2.3 Airservices is now close to completing the migration of its services onto the Common aeRonautical Virtual Private Network (CRV).

The following tables shows the current services status on the CRV:

Country	Service	Date of Completion
New Zealand	Intercoms	04/2019
Fiji	Intercoms	04/2019
USA	Intercoms	04/2019
USA	AMHS	06/2019
Fiji	AMHS	07/2019
New Zealand	AMHS	12/2019
Singapore	AMHS	12/2020
PNG	AFTN	06/2021
PNG	Intercoms	10/2021
Indonesia	AMHS	Expected 02/2024
Indonesia	Intercoms	Testing underway
Indonesia	ADS-B	Planning
South Africa	AFTN	TBA

Current Status of Australia/Indonesia CRV connection

2.4 In our ongoing collaboration with AirNav Indonesia, there has been positive development to move onto the CRV. In the last few weeks, Airservices and AirNav have successfully conducted AMHS testing, with the migration of services expected to be completed by the end of January to early February 2024.

2.5 Intercoms testing also commenced in October 2023, achieving notable success using Airservices' upgraded VoIP gateways. However, the testing has been briefly halted to address and resolve specific issues identified within our respective networks.

2.6 Looking ahead, following the successful migration of AMHS and the resolution of intercoms-related matters, the migration of ADS-B services to AirNav will commence. We anticipate the completion of service migration with AirNav Indonesia this year and the continuation of our efforts to ensure seamless integration within the CRV framework.

Update of VoIP Gateways in Airservices

2.7 Currently for voice services Airservices uses public IP addresses into the CRV to allow the SIP calling to function correctly. This was due to challenges that were encountered in the pilot stages with using SIP aware firewalls in the path of the voice traffic flow. The firewalls did not support SIP calling with double network address translations.

2.8 Airservices Australia has recently implemented significant enhancements to its communication infrastructure, including upgrades of its firewalls and installation of new voice gateways. This transition has resolved the SIP issues previously experienced, and aligns with our steadfast commitment to maintaining robust and reliable communication systems within our network.

2.9 As part of this change, the voice services IP addressing will be updated and be in line with the CRV IP addressing. Airservices is therefore planning to migrate CRV intercoms partners to these latest voice gateways, thus new IP addresses later this year.

2.10 Ensuring a seamless and uninterrupted transition remains paramount during this pivotal change. To achieve this, Airservices will actively engage in comprehensive communication and coordination efforts with our partners, and by proactively managing and communicating these changes, we aim to facilitate a smooth and efficient migration process, with minimal disruption to our partners' operations.

Conclusion

2.11 In conclusion, as we move forward, Airservices' initiatives will continue to enhance operational efficiency and elevate the reliability of our communication systems. Airservices remains committed in its role in the CRV OG the aviation community.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

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