

**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

PROGRESS OF CRV IMPLEMENTATION IN MALAYSIA

(Presented by the Civil Aviation Authority of Malaysia)

SUMMARY

This paper presents the CRV implementation between Malaysia, Singapore, Thailand, India and Indonesia over the CRV network.

1. INTRODUCTION

1.1 Official commencement date for CRV services in Malaysia has started in November 2021 and CRV Contract Agreement between PCCWG and CAAM on behalf of the Government of Malaysia was signed in Sept 2022.

1.2 The Contract Agreement for CRV services between the CRV service provider and Malaysia is a Government requirement in Malaysia.

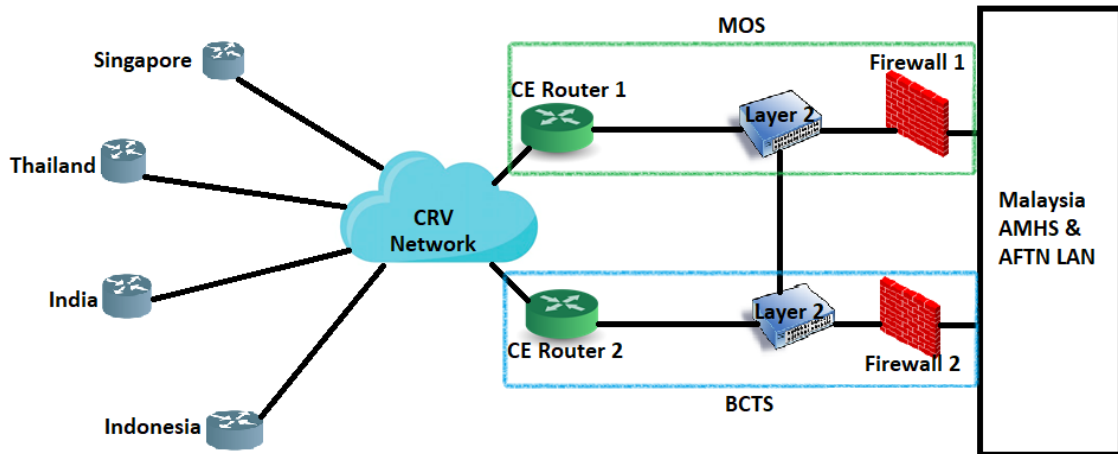
2. DISCUSSION

2.1 Currently, Malaysia subscribes to package A with 2mbps, which connects Kuala Lumpur Air Traffic Control Center (KLATCC) to the CRV network.

2.2 In the near future, Malaysia may consider adding CRV subscriptions which connect for Kota Kinabalu Air Traffic Control Center (KK ATCC) to the neighboring States with packages according to operational needs such as (AFTN/AMHS, AIDC, Voice, ADS-B data sharing).

2.3 The following table shows the CRV Implementation Plan between Malaysia (KLATCC) and Singapore; Thailand; India; and Indonesia:

CRV Implementation Plan in Malaysia			
States	Services	Timeline	Remarks
Singapore	AMHS	24/05/2022	Network connectivity & AMHS testing completed
		Q1/2023	Cut over & migration
	AIDC	Q1/2023	AIDC testing
		TBD	Cut over & migration
	Voice	Q1/2023	Voice testing
		TBD	TBD
ADS-B	TBD	TBD	
Thailand	AMHS	11/10/2022	Network connectivity & AMHS testing completed
		27/01/2023	Cut over & migration completed
	AIDC	11/10/2022	AIDC testing
		27/01/2023	Cut over & migration
	Voice	Q1/2023	Voice testing
		TBD	Cut over & migration
ADS-B	TBD	TBD	
India	AMHS	Q1/2023	Network connectivity & AMHS testing
		TBD	Cut over & migration
	AIDC	Q1/2023	AIDC testing
		TBD	Cut over & migration
	Voice	Q2/2023	Voice testing
		TBD	TBD
ADS-B	TBD	TBD	
Indonesia	AMHS	Q2/2023	Network connectivity & AMHS testing
		TBD	Cut over & migration
	AIDC	Q2/2023	AIDC testing
		TBD	Cut over & migration
	Voice	Q1/2023	Voice testing
		TBD	TBD
ADS-B	TBD	TBD	



CRV NETWORK DIAGRAM - KUALA LUMPUR AIR TRAFFIC CONTROL CENTRE (KLATCC)

2.4 CRV Bandwidth Utilization Rate.

2.4.1 The following table shows the information regarding CRV bandwidth utilization for the AMHS services between Malaysia, Singapore and Thailand (updated Oct 2022):

Origination Site Name / Site ID	Destination Site Name / Site ID	Services	Data bandwidth (Kbps)
Malaysia KLATCC (MOS/DR) / Site ID: 60001	Singapore (Site ID: 65001) & (Site ID: 65002)	AMHS	128 Kbps
Malaysia KLATCC (MOS/DR) / Site ID: 60001	Thailand (Site ID: 66001)	AMHS	128 Kbps

2.4.2 CRV bandwidth utilization rate information for neighbouring States that connected to Malaysia will be updated according to the Malaysian CRV Implementation table as in paragraph 2.3.

2.5 CRV Operation experience.

2.5.1 Referring to the Malaysia CRV Implementation Plan schedule as paragraph 2.3 above, AMHS, AIDC, Voice and ADS-B services migration to the CRV network only starts in Q1/2023.

2.5.2 Nevertheless, the involvement and technical assistance provided by the PCCWG representative in the initial preparations before carrying out the AMHS test activities carried out between Malaysia - Singapore and Malaysia - Thailand was very helpful and facilitated.

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
