



ICAO

*International Civil Aviation Organization***Thirteenth Meeting of the Common aeRonautical
Virtual Private Network Operations Group
(CRV OG/13)***Wellington, New Zealand, 05-08 March 2025*

Agenda Item 10: States CRV Implementation

IMPLEMENTATION STATUS OF PAN INDIA AMHS AND CRV NETWORK IN INDIA

(Presented by Airports Authority of India (AAI))

SUMMARY

This paper provides information on status of Pan-India AMHS implementation and CRV Network in India.

1. INTRODUCTION

- 1.1 India is having legacy AMHS system at Mumbai which is connected to various BBIS and BIS states in APAC region & Other region for exchanging AFTN/AMHS data and Voice services.
- 1.2 The process for replacement of existing legacy AMHS at Mumbai, IP-AMSS, legacy AMSS and AMSS Remote workstations (RWS) installed at various cities in India is in progress with installation and testing of new Pan-India AMHS system for 80+ Airports across the country. Presently, Site Acceptance Test (SAT) is in progress and new AMHS is likely to be operationalized by May, 2025.
- 1.3 The new Frequentis (FCO) make Pan-India AMHS system is having DC (Data center) system at Mumbai while DR (Disaster Recovery) system is installed at Delhi. The new AMHS will provide AMHS/AFTN services to 80 plus Airports all across India using AMHS User Agents (UAs) installed at various Airports and through dedicated web portal.
- 1.4 The new PAN India AMHS system will also support Digital NOTAM services using AIXM 5.1.1 data format, Email to SMS gateway, Centralized ATS and NOTAM database, Pilot portal for filing of FPLs, ADC/FIC & YA application and other applications.
- 1.5 The new DC and DR AMHS shall be connected with all Airports through Futuristic Telecom Infrastructure (FTI) network of AAI in MPLS cloud configuration, for seamless switchover from DC to DR system during contingency.
- 1.6 India had signed the service contract with PCCW Global for provision of CRV services on 15th March, 2022 using Package-B+ with 1 Mbps bandwidth. The CRV services at Mumbai commenced w.e.f 16.12.2022 and seven International AMHS data circuits and five speech circuits have been migrated on CRV network till date.

1.7 Hiring of 2nd CRV node at New Delhi for AMHS DR site in Package C using 2 MBPS Bandwidth is in process.

2. DISCUSSION

2.1 Presently, the CRV Network in India has been established with following states by replacing International Private Leased Circuit (IPLC) circuits and current status of migration on CRV Network are as follows:

Sr. No	CRV Network with States	Bandwidth	Data	Voice	Migrated/Implemented
1	Mumbai -Bangkok	64KBPS	AMHS		Q1 of 2023
2	Mumbai-Paro	64 KBPS	AMHS		
3	Mumbai-Singapore	64KBPS	AMHS		
4	Mumbai-Kathmandu	64KBPS	AMHS		
5	Mumbai-Beijing	64KBPS	AMHS		Q2 of 2023
6	Mumbai-Karachi	64KBPS	AMHS		Q4 of 2023
7	Mumbai-Colombo	64KBPS	AMHS		Q2 of 2024
8	Mumbai-Karachi	112KBPS		Voice	Q4 of 2023
9	Chennai-Kualalumpur*	112KBPS		Voice	Q4 of 2023
10	Ahmedabad-Karachi*	112KBPS		Voice	Q4 of 2023
11	Delhi-Karachi*	112KBPS		Voice	Q4 of 2023
12	Delhi-Lahore*	112KBPS		Voice	Q1 of 2024
	Total Occupied BW	1008KBPS			

Note: Voice circuits from Ahmedabad, Delhi and Chennai are being routed to Mumbai through AAI's Internal FTI (Futuristic Telecommunications Infrastructure) Network for onward connection to respective states through CRV Network.*

2.2 The performance of CRV Network has been observed satisfactory till date.

2.3 India has also initiated action to upgrade the existing CRV Bandwidth at Mumbai from 1 M (1024 Kbps) to 2 M (2048 Kbps) in Package B+.

- 2.4 After upgradation of CRV Bandwidth at Mumbai, it is proposed to migrate the following circuits on CRV network subject to readiness from the concerned state:

Sr. No	CRV Network with States	Bandwidth	Data	Voice	Likely to be Implemented
1	Chennai -Yangoon	112KBPS		Voice	In year 2025-26
2	Chennai-Jakarta	112KBPS		Voice	
3	Kolkata-Yangoon	112KBPS		Voice	
4	Kolkata-Sittwe	64KBPS	ADS-B		
5	Mumbai-Dhaka	64KBPS	AMHS		
6	Chennai-Colombo	112KBPS		Voice	
7	Chennai-Male	112KBPS		Voice	
8	Mumbai-Muscat**	64KBPS	AMHS		
9	Mumbai-Muscat**	112KBPS		Voice	

Note: Voice circuits from Chennai & Kolkata shall be routed to Mumbai through AAI's Internal FTI Network for onward connection to respective states through CRV Network.*

*Note**: Mumbai-Muscat CRV Network shall be established once Muscat (Oman) is ready for CRV.*

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- Note the information contained in this paper;
- Urge BBIS/BIS states having AMHS/AFTN/DSC connectivity with India to migrate on CRV network at the earliest.
- ICAO Secretariat is requested to urge MID region states, particularly Oman to join the CRV network at the earliest.
