



ICAO

International Civil Aviation Organization

**Twenty Sixth Meeting of the Communications/
Navigation and Surveillance Sub-group (CNS SG/26) of
APANPIRG**

Video Tele-Conference, 5 – 9 September 2022

Agenda Item 3: 3.1 Review Report of the Ninth Meeting of the Aeronautical Communications Services Implementation Coordination Group (ACSICG/9) including:

- Report of the Ninth and Tenth Meetings of Common Aeronautical VPN Operations Group (CRV OG/9 & 10);
- Outcomes of Webinar on CRV Implementation

CURRENT STATUS OF CRV IMPLEMENTATION IN INDIA

(Presented by Airports Authority of India (AAI))

SUMMARY

This paper provides information on the latest progress of CRV implementation in India.

1. INTRODUCTION

1.1 India being one of the Pioneer States is committed for implementation of CRV in Asia/Pacific region. This paper presents the progress made by India for implementation of CRV.

2. DISCUSSION

2.1 Presently India is having an AMHS system at Mumbai connected to various BBIS and BIS states for exchanging AFTN/AMHS/ADS-B data and Voice on IPLS circuits. The details of existing circuits connected to Mumbai are as indicated in **Annexure-I**.

2.2 Being one of the BBIS states, India have been closely monitoring the progress of other BBIS states Singapore, Thailand and China and BIS states for aligning the implementation of the CRV with them for effective utilization of the network.

2.3 India had planned to implement the CRV after the CRV trials were successful but the implementation got delayed, due to issues related to taxation and some other clauses, took quite some time to get resolved with PCCW and later on there was further delay due to the COVID-19 Pandemic in year 2020 & 2021 respectively.

- 2.4 India initially plans to have a CRV node connected with Mumbai with the existing AMHS.
- 2.5 India further plans to replace the existing AMHS for which the tender is already in progress. The new AMHS will have a DC at Mumbai and a Disaster Recovery site at Delhi. Another CRV node is planned at Delhi after new AMHS and the disaster recovery site at Delhi is up and running.
- 2.6 The Purchase Order for CRV implementation in India was awarded to M/s PCCWG on 15th March, 2022. As per information received from M/s PCCW the implementation of CRV network is getting delayed due to shortage of Semiconductor Chipsets required for Cisco Router.
- 2.7 India is in constant touch with M/s PCCWG for early implementation. The latest delivery date given by M/s PCCW is Dec, 2022 for CRV Implementation in India.
- 2.8 India has parallelly approached adjacent BBIS & BIS states to confirm their readiness for CRV connectivity with India, to avoid further delay in implementation. Consent from Thailand, Singapore, Sri Lanka, Bhutan, China & Nepal has already been received in this regard.
- 2.9 Subsequently, LOA (Letter of Agreement) shall be signed with adjacent BBIS & BIS states for establishment of connectivity on CRV.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) Note the information contained in this paper;
 - b) Urge PCCW for meeting the timelines for establishing the CRV node at Mumbai, India.
 - c) Urge BBIS/BIS states having connectivity with India to keep themselves in readiness to avoid any further delay in establishing the connectivity.

Annexure-I**INTERNATIONAL LEASED CIRCUITS DATA/SPEECH**

S. No	BETWEEN STATIONS	SPEED	TYPE OF CIRCUIT	VOICE/DATA	BBIS/BIS/AFTN/DSC
1	MUMBAI-KARACHI*	128KBPS	Serial Async/AFTN	VOICE	DSC
2	MUMBAI-KARACHI	64KBPS	X400 over TP0 IPS AMHS	DATA	BIS
3	MUMBAI-BEIJING	64KBPS	X400 over X.25 ATN TP4 AMHS	DATA	BBIS
4	MUMBAI-SINGAPORE	64KBPS	X400 over X.25 ATN TP4 AMHS	DATA	BBIS
5	MUMBAI-BANGKOK	64KBPS	X400 over X.25 ATN TP4 AMHS	DATA	BBIS
6	MUMBAI-COLOMBO	64KBPS	X400 over TP0 IPS AMHS	DATA	BIS
7	MUMBAI-KATHMANDU	64KBPS	X400 over TP0 IPS AMHS	DATA	BIS
8	MUMBAI-DHAKA	64KBPS	X400 over TP0 IPS AMHS	DATA	BIS
9	MUMBAI-MUSCAT	64KBPS	X400 over TC0-IPS/AMHS	VOICE & DATA	BIS
10	MUMBAI-YANGON	2MBPS	2 MBPS E1	VOICE/DATA	ADS-B
11	DELHI - LAHORE	64KBPS	DSC	VOICE	DSC
12	CHENNAI-KUALALUMPUR	64KBPS	TCP-IP/AFTN	VOICE	DSC
13	AMRITSAR - LAHORE	64KBPS	DSC	VOICE	DSC
14	MUMBAI-PARO		AMHS Over VPN/Broadband	DATA	AMHS
15	MUMBAI-NAIROBI		AMHS Over VPN/Broadband	DATA	AFTN