



ICAO

*International Civil Aviation Organization***Eighth Meeting of Aeronautical Communication Service Implementation Co-ordination Group of APANPIRG (ACSICG/8)**

Video Tele-Conference, 21 – 23 June 2021

**Agenda Item 4:** Review report of Seventh Meeting of the Asia/Pacific ATS Inter-Facility Data - Link Communication Implementation Task Force (APA TF/7)

**UPDATE AIDC IMPLEMENTATION STATUS**

(Presented by Airports Authority of India)

**SUMMARY**

This paper presents the details of AIDC implementation status within, as well as with neighboring ATSU's of India. Technical, procedural and operational glitches experienced during tests & trials and actions taken for debugging are briefly explained in the attachment with this IP

**1. INTRODUCTION**

1.1 AIDC implementation in India comprises operationalizing AIDC data exchange between four Flight Information Regions (FIRs) within India viz., Chennai, Mumbai, Delhi & Kolkata and 13 adjacent International FIRs viz., Lahore, Karachi, Muscat, Sanaa, Mogadishu, Seychelles, Mauritius, Maldives, Colombo, Jakarta, Kuala Lumpur, Yangon, Dhaka and Kathmandu.

1.2 India is working towards effective implementation since inception and consequently AIDC data exchange is operational between major domestic ATS units besides ATS units of neighboring international FIRs. Data exchange is successful with many ATSU's and plans are underway to operationalize AIDC between few other major ATSU's in phased manner.

**2. DISCUSSION**

2.1 Currently, India is using APAC AIDC ICD version 3 in ATS Automation systems installed at various ATS units. The latest update on AIDC Implementation is attached with this paper as Annexure – I.

2.2 Implementation within India:

2.2.1 Trials have been carried out successfully between various ATS units within India as listed below. AIDC messages are exchanged on a real-time basis between these stations.

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- I. Delhi: Ahmedabad, Varanasi, Nagpur
- II. Chennai: Mumbai, Kolkata, Trivandrum, Mangalore, Trichy, Hyderabad, Bengaluru
- III. Kolkata: Chennai, Nagpur, Varanasi, Guwahati
- IV. Mumbai: Chennai, Ahmedabad, Nagpur

2.2.2 AIDC operations between Chennai - Mumbai; Delhi - Nagpur; Delhi - Ahmedabad have been put into regular operations. AIDC between Delhi and Varanasi will be put into operation shortly, after signing of LOA, which has been delayed due to prevailing COVID-situation.

### 2.3 Implementation with Neighboring States

#### 2.3.1 Trials with following ATSUs of neighboring FIRs have been completed:

- I. Chennai & Kuala Lumpur (Malaysia) –
- II. Chennai & Male (Maldives)
- III. Chennai & Colombo (Sri Lanka)
- IV. Chennai & Yangon (Myanmar)
- V. Mumbai & Male (Maldives)
- VI. Mumbai & Mogadishu
- VII. Mumbai & Muscat
- VIII. Ahmedabad & Karachi (Pakistan)
- IX. Delhi & Lahore (Pakistan)
- X. Kolkata & Yangon (Myanmar)

2.3.2 India is keen to conduct operational trials between Kolkata-Dhaka (Bangladesh), Mumbai-Karachi (Pakistan), Chennai-Jakarta (Indonesia) and Varanasi-Kathmandu (Nepal) subject to readiness from the concerned states. AIDC between Karachi-Delhi will not be necessary due to restructuring of FIRs. ATSUs of Seychelles and Sana (Muscat) do not have a compatible ATM Automation system for AIDC coordination with Mumbai ATSU.

2.3.3 India is engaged towards entering into contract with M/s PCCW (CRV Service provider in APAC region) for CRV in Q3 2021 and Service readiness by Q4 2021 in line with CRV contract and service readiness by counterpart BBIS states. This would provide with a robust and reliable communication media for AIDC data interchange with the adjoining FIRs of neighboring countries

**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

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**Annexure – 1**

**AIDC Implementation Status in India**

**A. With International ATSUs**

AIDC Pairing Stations		Implementation Status: <i>Operational/ Under Test Trials/ Planned</i>	LOA Status: <i>Signed/ Under negotiation</i>	Effective date of: <i>Operations/ Test Trials/ PDC (for planned)</i>	Remarks: <i>Issues faced if any/ Mitigation</i>
ATSU-1	ATSU-2				
Mumbai	Male	Trials conducted successfully	Final Signing of LOA delayed due COVID-19		Operational. LOA to modified to make AIDC the primary mode of coordination. Joint Safety assessment for implementation of AIDC between Mumbai/Male conducted in April, 2021.
Mumbai	Muscat	Technical Tests conducted. In February-March, 2021	Under negotiation		1. Tests partially successful. 2. Required adaptation changes made at Mumbai. 3. No confirmation from Muscat of having made the changes.
Mumbai	Seychelles		-	-	ATSU-2 not equipped with suitable system
Mumbai	Mogadishu	-Technical Tests conducted.	-	-	Technical issues identified are being coordinated with each other.
Mumbai	Sana	-	-	-	ATSU-2 not equipped with suitable system
Mumbai	Karachi	Under Test Trials	Under negotiation		Pakistan is currently doing technical trials between Lahore and Delhi ACCs in first phase. Will take up trials between Karachi and Mumbai in Second phase.
Chennai	Kuala Lumpur (Malaysia)	Operational	LOA signed on 26th May 2021 effective from 1st June 2021	15-05-2017	ABI and EST messages without voice confirmation. CDN is done with voice confirmation. TOC / AOC implemented w.e.f 1st Jan 2021.
Chennai	Colombo (Sri Lanka)	Under testing	--	PDC will be planned after Colombo addresses the issues	Colombo would start trials after commissioning of new ATM automation system.
Chennai	Male (Maldives)	Test Trials successful	Final Signing of MOA delayed due COVID-19		Operational. LOA to modified to make AIDC the primary mode of coordination. Joint Safety assessment for implementation of AIDC between Chennai / Male conducted in April, 2021.
Chennai	Jakarta (Indonesia)	--	--	--	AIDC Functionality Status at Jakarta not known.
Chennai	Yangon (Myanmar)	Under testing	--	Testing commenced	• Incorrect reference number in Counter CDN by both systems.

				from January, 2018	<ul style="list-style-type: none"> <li>Issue observed at Chennai end have been addressed by the OEM.</li> <li>Issue projected to Yangon and Yangon has intimated that, they will inform Chennai for conducting the Test, as soon as they are ready.</li> </ul>
Kolkata	Yangon	Under Test Trial	Not signed	Q4 2018	Most of the message exchanges were successful.
Kolkata	Dhaka		Not signed	Not determined	No AIDC capable system at Dhaka.
Kolkata	Kathmandu		Not signed	Not determined	No AIDC capable system at Kathmandu.
Delhi	Lahore	2 Phases of technical trials conducted in March-April, 2021.	Under negotiation		Technical test results and data being analyzed at both ends and coordination being done.
Ahmedabad	Karachi (OPKC)	Under Test Trials	Signed	Automatic AIDC messages exchanged between VAAH & OPKC	Karachi ACC would conduct test trials in third phase after completing AIDC trials with Delhi and Mumbai.
Trivandrum	Male	Test Trials conducted in October 2017	LOA for trials signed	Not decided	Male ACC has been successfully receiving AIDC messages from Chennai, Trivandrum and Mumbai. But, Male has identified some issues in generating EST messages for flights departing from Male—only ABI messages are generated automatically.

**B. Between major Domestic ATSUs**

AIDC Pairing Stations		Implementation Status: <i>Operational/ Under Test Trials/ Planned</i>	LOA Status: <i>Signed/ Under negotiation</i>	Effective date of: <i>Operations/ Test Trials/ PDC (for planned)</i>	Remarks: <i>Issues faced if any/ Mitigation</i>
ATSU-1	ATSU-2				
Mumbai	Chennai-UHS	Operational	Signed	01-08-2017	--
Mumbai	Chennai-UML	Operational	Signed		--
Mumbai	Chennai-UBL	Operational	Signed		--
Mumbai	Chennai-UTV	Operational	Signed		--

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Chennai	Mumbai	Operational	Signed		Over continent airspace AIDC without voice confirmation. Over Oceanic airspace AIDC with voice confirmation.
Chennai	Kolkata	Trial Operations. Phase-2 trial in progress.	Signed	November, 2019	The ICAO route truncation indicator is not supported by INDRA system. 80% of the time AIDC message exchanges are successful. 20% failure is due to timeout.
Kolkata	Chennai				
Delhi	Ahmedabad	Operational	LOA Signed	Q2 2020	Operational
Ahmedabad	Delhi				
Delhi	Varanasi	Trial successful			All Technical issues sorted out. AIDC message exchanges are successful. Final LOA to be signed shortly.

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