International Civil Aviation Organization

Fifth Meeting of the Asia/Pacific Air Traffic Management Automation System Task Force (APAC ATMAS TF/5)

Chengdu, China, 5 – 7 June 2024

Agenda Item 9: Review AIDC Implementation Status in APAC

PROGRESS AND PLAN OF AIDC IMPLEMENTATION IN THE REPUBLIC OF KOREA

(Presented by the Republic of Korea)

SUMMARY

This paper presents the status of AIDC implementation between Korea and adjacent countries, and the suggestion to implement AIDC between Incheon-Shanghai ACC

1. INTRODUCTION

1.1 AIDC is one of the top priorities of ICAO APAC Seamless Air Navigation Service Plans and is essential to reduce LHD (Large Height Deviation) and the workload of controllers. In response, the ROK has implemented AIDC with adjacent ACCs in order to improve the safety of air traffic control operations.

1.2 AKARA Corridors(A593), at the transfer point between ROK (Incheon ACC) and China(Shanghai ACC), is an area with an average of 1,000 flights per day as of 2019 and air traffic has now recovered to 40% compared to 2019. In order to reduce LHD, the implementation of AIDC between Incheon and Shanghai ACC is essential. Accordingly, the ROK proposes the implementation of AIDC between Incheon ACC and Shanghai ACC that has not yet been implemented.

2. DISCUSSION

2.1 The ROK has implemented AIDC between Incheon and Fukuoka, Daegu and Dalian. Meanwhile, the implementation of AIDC between Incheon and Shanghai is planned.

2.2 ROK’s Incheon ACC has completed the construction of an AIDC system to connect with Shanghai ACC in June 2023, and China announced at the APAC ATMAS TF/3 meeting in 2022 that it plans to implement AIDC between the Incheon and Shanghai ACC in the third quarter of 2023. But after that, discussions between the ROK and China on the implementation of the AIDC has not made progress.

2.3 ROK’s operation of AIDC links are CRV network and dedicated line. The means of transmitting AIDC messages between Korea and Japan were migrated successfully from IPLC(X.25) to CRV in Feb 2024.

2.4 ROK has implemented AIDC with adjacent ACCs as follow:

ROK ACC	Adjacent ACC	AIDC Messages used	Implementation Date	Transmission means
Incheon	Fukuoka (Japan)	CPL, EST, ACP, TOC, AOC, LAM, LRM	Feb. 2010	CRV (Feb. 2024~)
Daegu	Dalian (China)	ABI, EST, ACP, TOC, AOC, LAM, LRM	Mar. 2021	IPLC (TCP/IP)
Incheon	Shanghai (China)	ABI, EST, ACP, TOC, AOC, LAM, LRM (planned)	Planned	CRV or AFTN

Table 1. AIDC Implementation Status in ROK

2.5 If China could share with ROK the plans to start testing and target date, it will help ROK much better in the AIDC trial operation preparation.

2.6 The ROK will make every effort as a contracting country to improve the safety and efficiency of airspace users of the Incheon FIR through consultation with China and Japan.

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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