



ICAO

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**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

AMHS UPGRADE AND CRV IMPLEMENTATION STATUS

(Presented by Republic of Korea)

SUMMARY

This paper presents the progress of AMHS upgrade as well as the status and the plan of CRV implementation in the Republic of Korea.

1. INTRODUCTION

1.1 Despite the recent COVID-19 pandemic, the Republic of Korea has continued to implement CRV and cooperated with related countries, including China and Japan.

1.2 Accordingly, we established a new AMHS to exchange aviation information between neighboring countries using CRV, which is also used in the Korea-Japan air control voice communication network.

1.3 This paper shares AMHS improvement and CRV implementation status, as well as the implementation plans of the Republic of Korea.

2. DISCUSSION

2.1 As discussed at the 9th meeting of CRV in 2022, the Republic of Korea completed the POT with China and Japan in July and December of 2022, respectively, by establishing a new AMHS (Extended version). Subsequently, the CRV conversion with both countries was completed successfully in November and December of 2022. I would like to take this opportunity to express my gratitude to both countries for their cooperation.

States	IOT	POT	Cut-Over
China	Completed (Dec 2021)	Completed (July 2022)	Completed (Nov2022)
Japan	Completed (Dec 2021)	Completed (Dec 2022)	Completed (Dec 2022)

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2.2 As the connection with China and Japan was converted to AMHS/CRV, we discussed with the countries whether to maintain the existing Korea-China, Korea-Japan AFTN connection. After discussions, the existing AFTN connection with Japan was terminated, and the AFTN connection with China will be maintained until the end of 2023.

2.3 In addition, Korea and Japan have been jointly promoting CRV conversion of air control voice communication networks since 2020. Currently, we have completed CRV conversion for 11 channels and plan to convert 7 channels in 2023.

ATC	2021	2022	2023
Daegu ACC	2CH	3CH	4CH
Incheon ACC	1CH	5CH	3CH

2.4 In the Republic of Korea, air traffic and aeronautical data usage between countries have decreased sharply due to the COVID-19 pandemic since 2020. Aeronautical data usage is expected to rise when the COVID-19 pandemic comes to an end, and the aeronautical data exchange between countries will also run smoothly.

Applications	Package	Bandwidth	Current usage
DATA (AMHS)	A	2Mbps	10~20kbps
VOICE (Incheon ACC)	C+	2Mbps	580~660kbps
VOICE (Daegu ACC)	C+	2Mbps	480~550kbps

2.5 The Republic of Korea has been promoting CRV implementation since 2019 and achieved fruitful results. Currently, we are preparing for the next-generation weather information IWXXM data transmission test between countries and are working to establish CRV-based SWIM. The Republic of Korea will continue to make efforts to participate in and contribute to CRV implementation in the Asia-Pacific region.

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
