

International Civil Aviation Organization

ICAO

Eighth Meeting of the Common aeRonautical Virtual Private Network Operations Group (CRV OG/8)

Video Teleconference, 17 – 19 May 2021

Agenda Item 6: Review and update the AMHS/ATN Implementation Status table and the APAC CRV Implementation Table

CURRENT STATUS AND CONVERT PLAN TO CRV BETWEEN KOR-JPN

(Presented by name of Republic of Korea)

SUMMARY

This paper presents the current implementation status and plans to extend the CRV Service for the direct speech circuit between Republic of Korea and Japan.

1. INTRODUCTION

1.1 Since the Common aeRonautical Virtual private network service have invited to ICAO APAC Region as a new network based MPLS, Republic of Korea has examined the implementation of CRV with counterpart states. Republic of Korea would like to share the status of CRV implementation and a future plan for the CRV VoIP with Japanese ATS.

2. DISCUSSION

2.1 In 2020, 5 Direct Speech Circuits were connected between Republic of Korea (Daegu and Incheon) and Japan as below.

KOR	JPN	LINE TYPE	BAND WIDTH	REMARK
DAEGU ACC	TOKYO DA, VP ¹	Leased Line	256k	
	FUKUOKA DA, VP			
	ATMC		64k	
INCHEON ACC	Okino - West DA, VP	Leased Line	128k	
	West - Kushu DA, VP			

Table 1. KOR-JPN voice network (2020)

¹ DA: Direct Access, VP: Voice Page

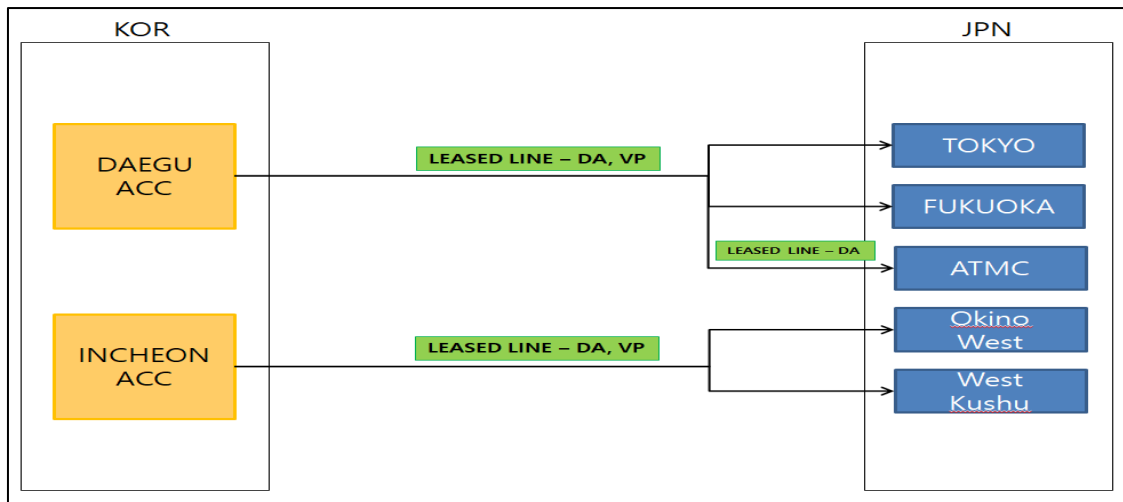


Figure 1. KOR-JPN voice network (2020)

2.2 (2021) Current status of connections for voice. Since a new ACC in KOBE, Japan was constructed, Two CRV VoIP connections are implemented between Daegu and Incheon in Republic of Korea, and KOBE in Japan as bellow (Table 2 and Figure 2).

KOR	JPN	LINE TYPE	BAND WIDTH	REMARK
DAEGU ACC	TOKYO DA, VP	Leased line	256k	
	FUKUOKA DA, VP			
	ATMC		64k	
	KOBE DA, VP	CRV	256k	New (Mar, 2021)
INCHEON ACC	Okino-West DA, VP	Leased line	128k	
	West-Kushu DA, VP			
	KOBE DA	CRV	256k	New (Mar, 2021)

Table 2. KOR-JPN Network Composition (2021)

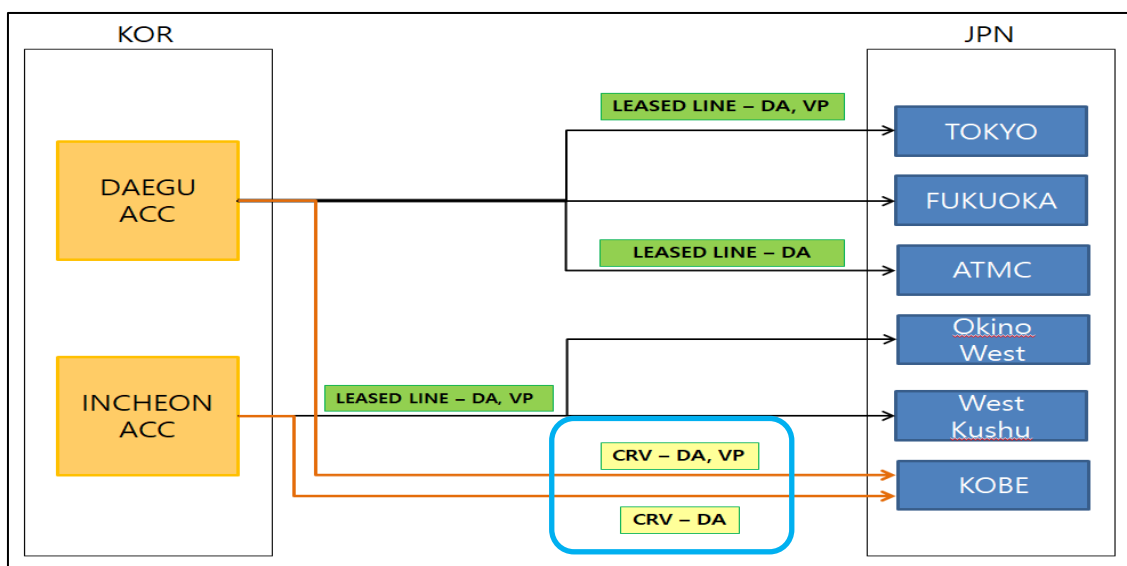


Figure 2. KOR-JPN Network Composition (2021)

2.3 (2022) Plan to convert to CRV – Korea and Japan are going to convert the existing networks to CRV.

KOR	JPN	LINE TYPE	Band width	REMARK
DAEGU ACC	TOKYO DA, VP	Leased Line	256k	
	FUKUOKA DA, VP	CRV	1 M	Convert (Feb. 24 TH . 2022)
	ATMC			Convert (Feb. 24 TH . 2022)
	KOBE DA, VP	CRV		New (Mar, 2021)
INCHEON ACC	Okino-West DA, VP	CRV	1 M	Convert (Feb. 24 TH . 2022)
	West-Kushu DA, VP			Convert (Feb. 24 TH . 2022)
		KOBE DA	CRV	

Table 3. KOR-JPN Network Plan to convert to CRV (2022)

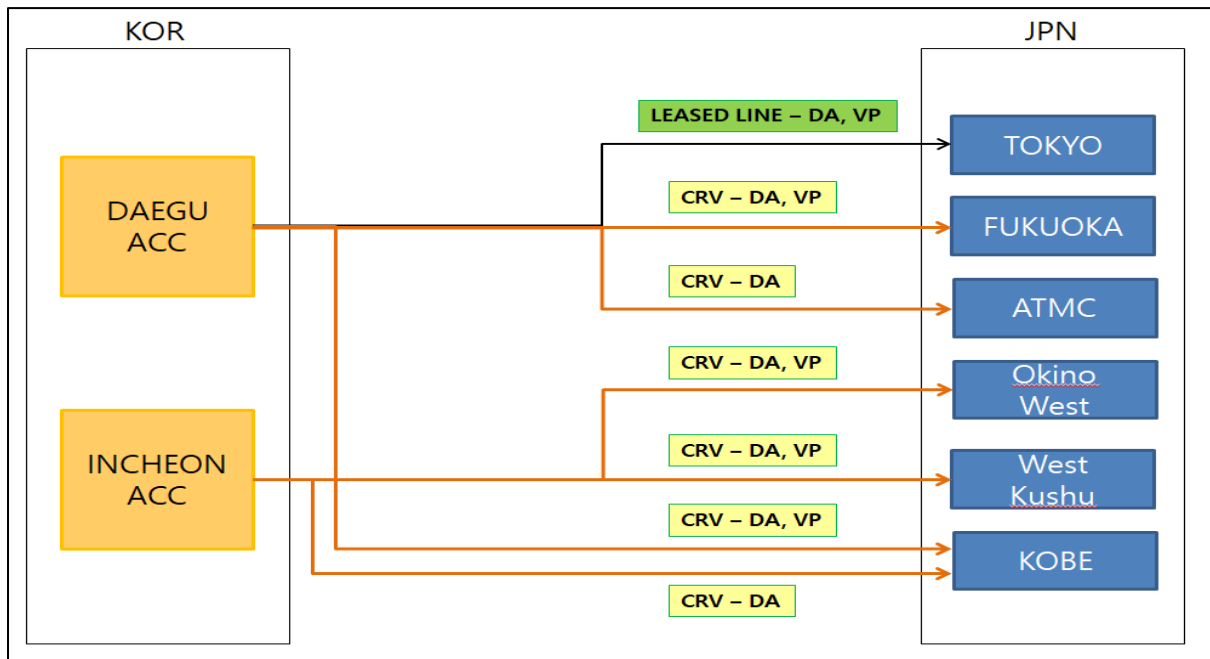


Figure 3. KOR-JPN Network Plan to convert to CRV (2022)

2.4 (2023) Additional installation to CRV and terminated Tokyo network.

KOR	JPN	LINE TYPE	BAND WIDTH	REMARK
DAEGU ACC	TOKYO DA, VP	Leased Line	-	Cut-off (Sep, 2023)
	FUKUOKA DA #2, VP #2	CRV	2 M	New (Sep, 2023)
	FUKUOKA DA #3, VP #3			New (Sep, 2023)

Table 4. KOR-JPN Network Plan to convert CRV (2023)

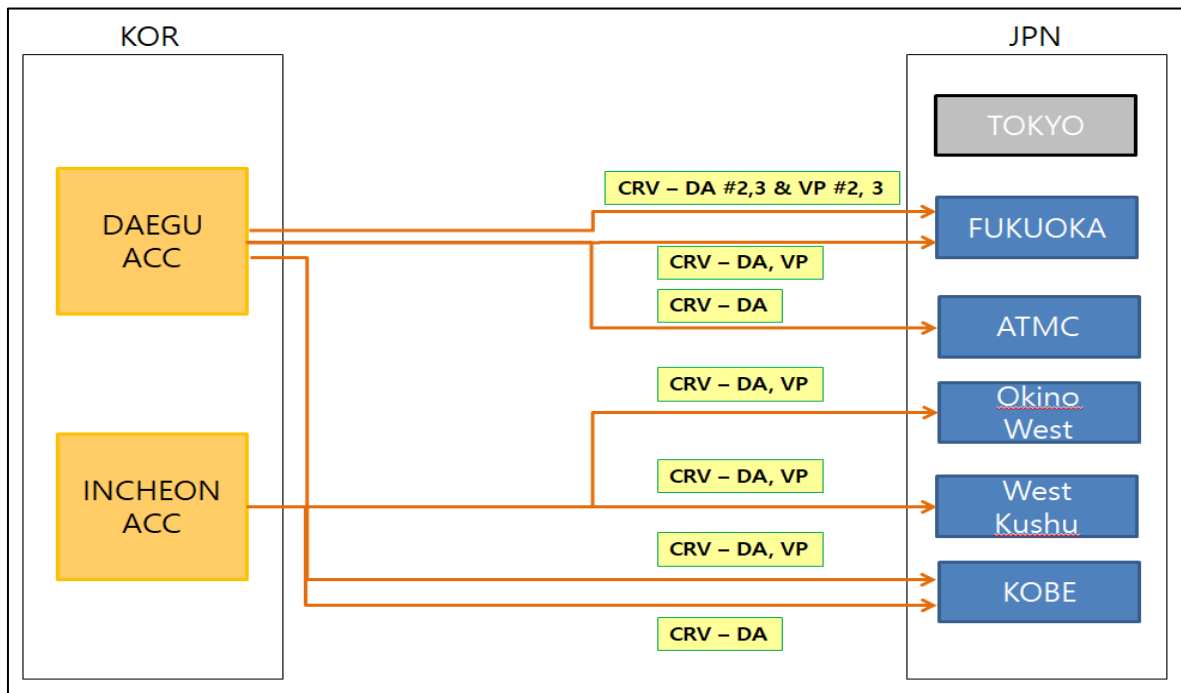


Figure 4. KOR-JPN Convert plan from the leased lines to CRV network (2023)

2.5 The plan mentioned above, will be progressing well with Japanese active cooperation. Republic of Korea would like to thank to Japan.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper.
