International Civil Aviation Organization

Thirteenth Meeting of the Common aeRonautical Virtual Private Network Operations Group (CRV OG/13)
Wellington, New Zealand, 05-08 March 2025

Agenda Item 4: CRV OG Reference documents
- CRV OG Operations Manual
- CRV Implementation Plan
- Outcomes of Ad-hoc expert Strategy, Design, Transition and, Operations Groups
- Outcomes of Joint CRV OG Ad-hoc Expert and SWIM TF TLs Meetings

CRITERIA TO ADD A NEW SERVICE IN THE OPERATIONS MANUAL

(Presented by New Zealand)

SUMMARY

This paper presents a procedure to connect a non-ANSP system into the CRV for data communication. If accepted, this proposed procedure will be included into the CRV OG Operations Manual.

1. INTRODUCTION

1.1 The CRV OG/12 meeting determined the need to develop a procedure to support a generic new non-ANSP system connection to the CRV, in addition to the existing AMHS and VoIP services. This proposed procedure, if accepted at this meeting, will be incorporated into the CRV OG Operations Manual.

2. DISCUSSION

2.1 The CRV provides Ground-to-Ground ATS voice and data telecommunications between ATC Centers (operated by ANSPs) throughout the geographical area of the Asia Pacific (APAC) Region. These ATC Centers coordinate the movement of air traffic throughout the Flight Information Regions (FIRs) of the Asia Pacific Region.

2.2 The introduction of any new non-ANSP system connecting to the CRV should be to provide information in direct support of air traffic movements managed by ANSPs. Any proposed non-ANSP system user should be sponsored by an existing CRV member, who will be the first customer of the non-ANSP system's services.

2.3 The role of the CRV OG should be to review the new service(s) being provided as a suitable use of the CRV, specifically including an evaluation of the cyber-security risk posed by the new system connection.

2.4 If the review of the new system is satisfactory, the CRV-OG should establish an MOU/LOA with the new non-ANSP system, with the sponsoring ANSP being the first user. Subsequent ANSP users will be additional signees to this MOU/LOA.

2.5 New Data System Connection to CRV users:

a) Develop a security assessment of the new non-ANSP system
b) Determine if alternative routing or diversity is required
c) Determine the criteria for alternative routing and diversity (application versus network)
d) Coordinate with respective CRV members to ensure bandwidth sufficiency if alternative routing or diversity is required
e) Sponsoring ANSP is required to establish a GRE tunnel with the new non-ANSP system
f) Update GRE tunnels to respective users if alternative routing is required
g) Increase the sponsoring ANSP's access bandwidth, as required, (peak and off-peak times): coordinate requirement from the new non-ANSP system
h) Determine the new system IP address either from the system owner or using the private IPv4 addresses that have been assigned by ICAO for the region
i) Provide the CRV vendor with each user's new system IP address subnet(s), to be advertised through the GRE tunnel
j) Perform an operational acceptance test between sponsoring ANSP with the sponsored new data system which should include, but not limited to ping test, application (the new non-ANSP system) test, bandwidth test including other GRE tunnels if required
k) The sponsoring ASNP is responsible for accepting the new service if it has performed satisfactorily for a minimum of 24 hours
l) CRV vendor should update the respective SEPs
m) Inform ICAO, CRV OG, and respective ICAO groups of new routing to be recorded in various documents (e.g., Telecommunication Infrastructure Routing, etc.)

2.6 It's recommended that when a new data system is joining the CRV, an Interface Control Document be developed by the new non-ANSP system with input from CRV OG experts, to support requirements of sections 2.5.a through 2.5.j.

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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