



ICAO

*International Civil Aviation Organization*

**Ninth Meeting of the Common aeronautical Virtual Private Network Operations Group (CRV OG/9)**

Video Teleconference, 25 – 27 January 2022

**Agenda Item 3:** CRV OG Reference documents

### **CRV VoIP Dial Plan Adherence**

(Presented by name of Federal Aviation Administration/USA)

#### **SUMMARY**

This paper provides information about the VoIP dial plan as implemented in the CRV network.

## **1. INTRODUCTION**

- 1.1 This paper gives an overview of the Voice over Internet Protocol (VoIP) dial plan implemented in the CRV network.

## **2. DISCUSSION**

- 2.1 Voice traffic between Member states is carried throughout the CRV network utilizing VoIP, which transports voice in the form of IP packets.
- 2.2 Since ANSPs vary region by region, there are also differences in the way voice calls are initiated. A dialing plan was created to bridge the gap between these voice switches to allow seamless communications between the ANSPs.
- 2.2.1 The dial plan is a document that outlines the digits dialed from an originating site, how the digits are manipulated within the CRV network equipment, and the digits that are sent to the destination switch to allow the voice call to be completed.
- 2.3 Guidance for the dial plan is given in section 7 of the PCCW System Engineering Plan. The digits are manipulated by the CRV network routing equipment using the following format in the table below:

<b>Country</b>	<b>City</b>	<b>AA (E.164)</b>	<b>CC (ANSP)</b>	<b>OO (ANSP)</b>
USA	Oakland	1	5100	087
Australia	Brisbane	61	400	302

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- 2.3.1 There are three different sections that make up the digits format as they are transferred from one voice switch to the other voice switch within the CRV network.
- **AA:** Area Identifier utilizes the E.164 country code.
  - **CC:** This is the ANSP’s Centre Code
  - **OO:** ANSP’s operator position
- 2.3.2 E.164 is an international standard used for formatting and routing phone numbers globally. Combine the E.164 country code with each unique ANSP centre code and the particular operator position at the ANSP for a total of 8 digits used to create the dial plan for each call.
- 2.3.3 The table above uses “1” for the USA country code, “5100” to represent Oakland FAA Center, and “0xx” for a particular operator position, so “087” is Oakland OA-SEC-OC1 position.
- 2.3.4 Another example uses “61” for Australia’s country code, “400” to represent the Brisbane center, and “302” is an operator position.
- 2.3.5 The United States (FAA) has accepted responsibility for maintaining the CRV dial plan for all member states. Any updates/changes should be submitted to be added to the dial plan.

**3. ACTION BY THE MEETING**

- 3.1 The meeting is invited to
- a) note the information contained in this paper;
  - b) to provide update and maintain the dial plan; and
  - c) discuss any other relevant matters.