

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 14:

Cyber-safety/security and resilience

DEVELOPMENT PROGRESS OF THE ICAO DOCUMENT 10169: AVIATION COMMON CERTIFICATE POLICY AND NEED OF TRUST FRAMEWORK INSTANCE FOR THE ASIA AND PACIFIC SWIM IMPLEMENTATION

(Presented by Singapore/ Civil Aviation Authority of Singapore)

SUMMARY

This working paper presents the development progress of the ICAO Document 10169: Aviation Common Certificate Policy (ACCP) and need of Trust Framework Instance (TFI) for the Asia and Pacific SWIM Implementation

1. INTRODUCTION

- 1.1 The Trust Framework Panel (TFP) was established to address cybersecurity issues in civil aviation operations. Currently, the TFP is focusing on developing three (3) guidance documents and one of them is the ICAO Doc 10169: Aviation Common Certificate Policy (ACCP).
- 1.2 The ACCP outlines how the X.509 Public Key Infrastructure (PKI) can be applied in civil aviation, including within the SWIM environment. It also describes the policies and certification practices that govern its use. The draft ACCP manual revolves around the concept of a Trust Framework Instance (TFI). The ACCP is expected to be published in December 2025.

2. DISCUSSION

- 2.1 During the First Working Session of the SWIM Implementation Pioneer Ad-hoc Group (SIPG WS/1), the need to establish a TFI to support SWIM implementation in the Asia and Pacific (APAC) region was raised. However, it was emphasised that SWIM is just one of several use cases requiring the establishment of TFI and that PKI is needed for all TFIs within APAC, not only for SWIM. Other use cases identified by the TFP include Controller Pilot Data Link Communication (CPDLC), Satellite Based Augmentation System (SBAS), Electronic Personal Licenses, etc. This suggests that PKI implementation should not be the sole responsibility of the SWIM Task Force (TF).
- 2.2 While the implementation approach for PKI within APAC region is still under discussion, SIPG WS/1 raised that, as the contributory body responsible for the APAC regional common network, the CRV OG should be informed of the development progress of the ACCP and need of TFI for the Asia and Pacific SWIM implementation.

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.
