



ICAO

International Civil Aviation Organization

**Twelfth Meeting of the Common aeRonautical Virtual
Private Network Operations Group (CRV OG/12)**

Denarau Island, Fiji, 23-26 January 2024

Agenda Item 4: CRV Governance

OUTCOMES OF AD-HOC GOVERNANCE MEETINGS

(Presented Airways New Zealand)

SUMMARY

This paper presents an update on the Ad Hoc Governance meetings.

1. INTRODUCTION

- 1.1 The Ad Hoc Governance Group has met twice since its creation from the 2023 CRV
- 1.2 Governance Workshop held in Bangkok 31 January 2023.

2. DISCUSSION

Terms of Reference

- 2.1 The terms of reference were reviewed and adopted as attached in Appendix A of this paper.

Governance Models

- 2.2 The group reviewed the presentations from PENS, REDDIG II and CRV regarding the different governance models. The discussions lead to trying to understand what problem we are trying to resolve.

Problem Statement

- 2.3 The Draft Problem Statement was reviewed and the second meeting focused predominantly on this. The result is an updated Draft Problem Statement. Both the original and the current drafts are attached as **Appendix B** and **C** respectively to this paper.

- 2.4 The second meeting also agreed to canvas the contributors to the Ad Hoc Governance group regarding the tasks members carry out on CRV on a daily basis. The results of this survey are attached as Appendix D to this paper.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) review the problem statement; and
- c) discuss any relevant matter as appropriate

TERMS OF REFERENCE
CRV OG Ad-hoc Governance Group

Objectives:

The Common aeRonautical Virtual Private Network Operations Group (CRV OG) Ad-hoc Governance Group is established to review and propose an enhancement required for an effective CRV Governance to support APAC/MID Member States.

Responsibilities:

The CRV OG Ad-hoc Governance Group shall:

1. Define the problem.
2. Clarify current CRV Governance model.
3. Review the REDDIG II and New PENS Governance models.
4. Discuss options for the CRV Governance model.
5. Document the options for a CRV Governance model detailing all aspects of the model.
6. Present the options and recommendation of a CRV Governance model to the CRV OG.
7. Support implementation of the CRV Governance model.

Considerations

The CRV OG Ad-hoc Governance Group will need to consider the following:

1. Current CRV ToR
2. Ongoing support Member States for CRV Implementation.
3. Future CRV usage for SWIM, future A/G IPS, Surveillance Data, AFTM, and Navigation data sharing, and voice service.
4. CRV Documentation – accessibility and availability, and administration of.
5. Cost – minimised, shared evenly, salaries, portals, tools.
6. Representation, membership, accessibility, expertise, responsibility and experience.

Composition:

Co-Chairs: CRV OG Co-Chairs.

Members:

1. States/Administrations of ICAO APAC
2. International organizations recognized by ICAO.

Liaison:

SWIM TF, CRV OG, ACSICG

Conduct of the work:

The CRV OG Ad-hoc Governance Group will meet quarterly and conduct its work preferably through web conferences, teleconferences, and other electronic means of communications.

The Group may meet *In Person* only if necessary.

Reporting:

The group will report at least annually to CRV OG.

Timelines:

The Group should complete assigned task in 3 years. CRV OG may provide extension to the group based on the requirements.

First Draft of Problem Statement

The advancement of the CRV is based on the input of a core group of CRV OG members. The list of tasks is increasing the more the network is operated. This requires more effort and faster turnaround on making decisions to make changes to the CRV network configuration and associated documentation.

We meet once per year to discuss, agree and endorse changes. This is slow. The four Ad Hoc Expert Subgroups have not met separately but met each time as a group for expediency.

The list of tasks is growing. CRV II is coming soon.

We need to change, to allow groups to act autonomously with ownership of actions, make decisions, and regular reporting without having to wait for an annual meeting to make the decisions and reliance on specific members.

The CRV OG uses the Co-Chairs and Secretariat as the points of contacts which can often create confusion from other taskforces and groups regarding who they should be talking to provide potential solutions.

Information and documentation need to be accessible by all.

The solution needs to consider and minimise any extra costs on member states.

What are our roles? What are our responsibilities? What are our expectations?

Problem Statement

Background

The CRV Network was created out of the need to replace legacy point to point half circuits between states with cost-effective telecommunications IP network connectivity with the aim to achieve ICAO current and future strategies of GANP ASBUs: B0-FICE, B0-NOPS, VoIP and B1-SWIM modules.

The initial focus was on the implementation of the network through a tender process managed by TCB and the CRV Taskforce, then implementation and migration of service via the CRV Operations Group. Some thought was given to the future, mostly ADS-B and Flow Management Data. SWIM was only a vague concept.

Associated documentation was created as part of the Tender or Implementation phases and held in an accessible portal maintained by Airways New Zealand.

Some focus is given to maintaining these documents but is challenging due to CRV OG members also having day jobs with their parent ANSPs.

To aid progress of the documentation four Ad Hoc Expert groups have been stood up representing Strategy, Design, Transition and Operations. The intention was for these groups to meet independently regularly to produce updates to the documentation between CRV OG meetings.

We also meet with other groups such as the SWIM TF regularly.

The Problem

1. The advancement of the CRV is based on the input of a core group of CRV OG members.
2. The list of tasks is increasing the more the network is operated. This requires more effort and faster turnaround on making decisions to make changes to the CRV network configuration and associated documentation.
 - a. IP Address management
 - b. Incident Management
 - c. Testing
 - d. Security improvements
 - e. Security Review
 - f. Operations Manual
 - g. Implementation Plan
 - h. Common Package update
 - i. Portal hosting – change?
 - j. Overview drawing updates
 - k. Implementation Plan updates
 - l. IPV6?
 - m. Memberships
 - n. TOR update?
 - o. Future services – IPVHF, Space Comms and ADSB
 - p. Better monitoring
 - q. Interconnects
3. We meet once per year to discuss, agree and endorse changes. This is slow.

4. The four Ad Hoc Expert Subgroups have not met separately but met each time as a group for expediency.
5. CRV II is coming soon.
6. Information and documentation need to be accessible by all.
7. As more ANSPs and other organisations join we need to have a RASCI to define our roles, responsibilities and expectations.
 - a. OG Members
 - b. Co-Chairs
 - c. National Contacts
 - d. Local Contacts
 - e. Service Provider
 - f. User- State
 - g. User Industry
 - h. ICAO Secretariat
 - i. ICAO Regional Office
 - j. ICAO TCB
8. Budgets are constrained.
9. Sustainability needs to be considered.
10. Some states are not engaging with CRV.
11. Unknown routine activities

We need to change, to allow groups to act autonomously with ownership of actions, make decisions, and regular reporting without having to wait for an annual meeting to make the decisions and reliance on specific members.

The CRV OG uses the Co-Chairs and Secretariat as the points of contacts which can often create confusion from other taskforces and groups regarding who they should be talking to provide potential solutions.

Current State

1. One Meeting per year with the full OG and the Service Provider.
2. Ad Hoc experts four times per year.
3. SWIM TF four times per year.
4. Ad Hoc Governance group four times per year.

Proposed State

1. One Meeting per year with the full OG and the Service Provider.
2. Experts four times per year.
3. Operations twelve times per year.
4. Other TF four times per year.
5. Governance group four times per year.
6. Service Provider four times per year.

List of Tasks related to CRV by ANSP

Name of State: Click or tap here to enter text.

Contact email: Click or tap here to enter text.

List of daily tasks:

List of Weekly Tasks:

List of Monthly Tasks:

Other Routine Tasks and its frequency:

Future Tasks:
