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 10: Review the requirement of CRV for SWIM
- Subscriber
- GEMS
- ANSP

THE COLLECTING OF REQUIREMENTS

(Presented by Airways New Zealand)

SUMMARY

This paper presents a possible form for collecting the requirements when adding a new service to the CRV Network

1. INTRODUCTION

1.1 Discussions at the various CRV OG and Ad Hoc meetings has raised the need to know what a new applications requirements are for connecting to the network. Bandwidth being the primary concern.

1.2 This issue is especially evident in the discussions with the SWIM Taskforce.

2. DISCUSSION

2.1 In the CRV Operations Manual we have noted specific parameters the CRV Network Performs under. These are:

a. Bandwidth
b. Latency
c. Packet Loss
d. Jitter
e. QoS
f. Connectivity

2.2 These parameters were established and developed through the Tender process.

2.3 To ensure new services and applications provide the CRV OG with sufficient information to make a decision on any potential changes to the CRV Network, we need to ask the application owner to provide those details. This is where the argument becomes circular.

2.4 To reduce the back and forth that occurs when trying to establish requirements, a form

is required to describe the parameters that the CRV Network performs under, validation from the application or service owner that these parameters are acceptable or not and if not acceptable, the application or service owner is to provide in detail what is required.

2.5 A proposed example of the form is in Appendix A

2.6 The timeline for confirming the form and the subsequent requirements for SWIM is as follows:

30 January 2024 create the form.
1 February 2024 send form to Ad Hoc Expert Design group for comment and feedback. Also send to SWIM Taskforce Team Leaders for filling in the form.
April 2024 – Review the form in the Ad Hoc Expert meeting
June 2024 – SWIM Trial
August/September 2024 – Face to Face Workshop on requirements, SWIM Trial review and Ad Hoc Expert meeting.

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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Current Network Capabilities The information below describes the parameters of the CRV network. Please note that some parameters is specific to the region the state is located in. These parameters are goverened by the APAC CRV OG and as such cannot be changed without the permission of the APAC CRV OG as changes may have an impact on network performance and SLA with the Service Provider.			**What is required?** Please complete this section for the adding of new services to the APAC CRV network to allow the APAC CRV OG to determine any changes to the current parameters.		
				Please indicate Yes for acceptable or No for Not acceptable. If not acceptable, please provide the details of what is required in the next column.	**Explanation if not acceptable** Plesae describe in detail the proposed requirements.
Bandwidth	considered a range of bandwidths. Any bandwidth required beyond those considered in the price schedule is available and requires consideration by the CRV National Point of Contact and PCCWG.	64kbps 128kbps 256kbps 512kbps 1024kbps 2048kbps	**Bandwidth**		
Latency (ms) the average round trip delay between two sites.	**Locations**	**Average Round Trip Delay**	**Latency**		
	Within the cities specified in Asia (On-net/Off-net)	200			
	Within the cities specified in Oceania (On-net/Off-	200			
	Between the cities specified in Middle East & Europe (On-net/Off-net)	200			
	Within the cities specified in Europe (On-net/Off-	200			
	Other cities combination not specified above	600			
Jitter (ms)	Voice application	15	**Jitter**		
	Data application	250			
Packet Loss			**Packet Loss**		
Quality of Service Queue	**Service class name**	**DSCP Name**	**Quality of Service Queues**		
	Voice	EF			
	ADS-B	CS4			
	AFTN, ATN.	AF21			
	All traffic not otherwise defined	DF			
Connectivity	1: 1 via Point to point via GRE		**Connectivity**		
			Data Transfer Size/Message size		
			Data Transfer Rate		