

International Civil Aviation Organization

MIDANPIRG Communication, Navigation and Surveillance Sub-Group

Seventh Meeting (CNS SG/7) (*Cairo, Egypt, 31 May – 02 June 2016*)

Agenda Item 4:

CNS Planning and Implementation in the MID Region

MID IP NETWORK

(Presented by the Secretariat)

SUMMARY

This paper presents a progress report on the MID IP Network Project.

Action by the meeting is at paragraph 3.

REFERENCES

- MAEP SC/2 Report
- MAEP Board/2 Report
- MIDAMC STG/3 Report
- MID IP Network Workshop

1. INTRODUCTION

1.1 The Second meeting of the MID Region ATM Enhancement Programme Steering Committee (MAEP SC/2) was held at the ICAO MID Regional Office in Cairo, Egypt, 20-22 October 2015.

1.2 The MID IP Network Workshop was held at the ICAO MID Regional Office in Cairo, Egypt, 24-25 January 2016.

1.3 The Third meeting of the MIDAMC Steering Group (MIDAMC STG/3) was held at the ICAO MID Regional Office in Cairo, Egypt, 26-28 January 2016.

1.4 The Second meeting of the MAEP Board (MAEP Board/2) was held at the ICAO MID Regional Office in Cairo, Egypt, 11-13 April 2016.

2. **DISCUSSION**

2.1 The meeting may wish to recall that the MAEP SC/2 meeting reviewed the MID IP Network Project Proposal Document developed by the MID IP Network Action Group, and was apprised of the progress made in the implementation of the Common Regional Virtual Private Network Programme (CRV) in the APAC Region. In this respect, it was highlighted that CRV Task Force was created end 2013 under APANPIRG. The CRV became a programme that would expectedly procure a safe and secured IP-based transportation service for the CRV users from 2017

onwards through a common contractual framework. This common contractual framework is based on a sealed tender process to successfully recommend a supplier. It is currently ongoing and will be finalized expectedly by July 2016. The ongoing sealed tender process makes it possible for all MID States, and more users, to join this initiative.

2.2 The meeting may also recall that the challenges related to the implementation of the IP Network Project, the cost-benefit analysis and preliminary safety analysis. These have been carried out in the APAC Region and the procurement process is implemented through an ICAO TCB project. An Expert was appointed to support the Call for Tender Process for the selection of the Telecommunication Service Provider (CRV supplier). It is highlighted that the CRV users will have to sign individual service contract (based on a template) with the CRV supplier. The CRV procurement includes all ICAO MID States as potential users.

2.3 The following three scenarios for the development and implementation of the MID IP Network were discussed by the MAEP SC/2 meeting:

- a) MID Region drives its own IP-based network project and uses CRV procurement framework for all regional and interregional connections.
- b) MID Region drives its own IP-based network project and uses CRV procurement framework only for interregional connections along the major traffic flows.
- c) MID Region drives its own IP-based network project and does not use at all the CRV procurement framework.

2.4 The MAEP SC/2 meeting agreed that scenario (a) is the best scenario for the development and implementation of the MID IP Network and that close coordination with APAC through the ICAO Bangkok Regional Office should be carried out in order to use the CRV procurement framework for the implementation of the MID IP Network. Accordingly, the MAEP SC/2 meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 2/3: MID IP NETWORK PROJECT

That,

- a) the MID IP Network Project use the procurement framework of the APAC Common Regional Virtual Private Network Programme (CRV);
- b) States be urged to confirm their commitment to go ahead with the implementation of the MID IP Network using the APAC CRV procurement framework, and provide necessary information; and
- c) a joint APAC/MID IP Network Workshop be organized as soon as possible (early 2016) to address all issues related to the implementation of the MID IP Network.

2.5 Based on the above, the ICAO MID Regional Office issued State letter (AN 6/31.4-15/312 4 November 2015) and organized the MID IP Network Workshop (Cairo, 24-25 January 2016) with the support of the APAC Region. The Workshop addressed all issues related to the development and implementation of the MID IP Network using the CRV procurement framework.

2.6 In connection with the above, it was highlighted that a structure for managing the network once commissioned will need to be established (governing body). In the APAC Region, a CRV Operations Group (CRV-OG) will be established and States/Administrations will have to join

the CRV-OG before signing an individual service contract with the selected supplier. The MIDAMC STG/3 meeting agreed to the need for a similar structure (CRV-OG) in the MID Region.

2.7 The MIDAMC meeting reviewed the MID IP Network Workshop recommendations at **Appendix A** and agreed that the CRV to be renamed as Common aeRonautical VPN (CRV) in order to represent both Regions.

2.8 The meeting may wish to note that five (5) States (Bahrain, Egypt, Jordan, Saudi Arabia and UAE) conducted an initial basic local CBA.

2.9 Based on the MAEP SC/2, *Draft Conclusion 2/3: MID IP Network Project*, the ICAO MID Regional Office issued a State Letter to seek States commitment to the MID IP Network and to provide necessary information. In this respect, the meeting reviewed and updated the table of replies and urged all States to join the CRV.

2.10 Based on all the above, the MID AMC STG/3 meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 3/3: MID IP NETWORK PROJECT (CRV)

That,

- a) the MID IP Network Project be renamed as Common aeRonautical VPN Network (CRV) in order to be one common IP Network with the APAC;
- *b)* States that did not confirm their commitment to join the CRV, be urged to do so before **1 March 2016**; and
- c) ICAO to support States for the conduct of the local CBA, provided that the States send their information to the ICAO MID Regional Office by **1 March 2016**.

2.11 The ICAO MID Regional Office sent a follow-up State letter Ref.: ME 3/2.2.1 - 16/056 dated 15 February 2016. Appendix B shows the list of Sates that confirmed their commitment to the MID IP Network (CRV).

2.12 The meeting may wish to note that all bids have entered the clarification process regarding formal, technical and financial criteria. A face to face meeting with CRV Pioneer States was held from 22 to 24 March 2016 in Singapore to conduct the technical evaluation. One more meeting on 09-10 May 2016 took place to finalize the evaluation and qualified bidders invited to a close session for final clarifications.

2.13 The meeting may wish to note that the requirement for the implementation of the IP Network does not require a lot of investment in hardware, software, and or training. The following are major requirements:

- suitable Routers hardware with the appropriate software and ports;
- installation of suitable telecom line(s) in the equipment room;
- suitable electrical outlet with UPS;
- training of engineer(s) and operator;
- join the CRV Operation Group; and
- signature of contract with the Service provider.

2.14 The second meeting of the MAEP Board noted that the CRV Framework accommodates the necessary legal framework for all States, where it is possible to adapt the individual service contract between States and the selected common service provider to the national laws and regulation. Furthermore, the selected common service provider will be responsible for dealing with the national telecommunication service providers in the States and may require standard support letter from the State.

2.15 Based on all the above, the MAEP Board/2 meeting agreed to the following MAEP Board Conclusion:

MAEP BOARD CONCLUSION 2/7: MID IP NETWORK PROJECT (CRV)

That,

- a) the procurement framework of the APAC Common Regional Virtual Private Network Programme (CRV) be used for the implementation of the MID IP Network Project use ;
- *b) the MID IP Network Project be renamed as Common aeRonautical VPN Network (CRV) in order to be one common IP Network with the APAC;*
- c) States, that have not yet confirmed their commitment to join the CRV, be urged to do so before 10 May 2016; and
- *d)* further to the successful completion of the procurement process conducted in the APAC Region, States be urged to engage with the recommended supplier to establish individual service contracts.

2.16 As a follow-up to the above Conclusion, the ICAO MID Regional Office sent State Letter ME 3/4-16/129 dated 26 April 2016, to the States that have not confirmed their commitment to the project to do so and provide the necessary details for the CBA.

2.17 The MAEP Board/2 meeting urged all States to join the CRV in order to gain the maximum benefits from the project. It was underlined that States not joining the project will have to connect to the network through an appropriate interface.

2.18 In accordance with the new MAEP structure for the management of the MID projects, the meeting agreed that the MIDAMC Steering Group act as the project manager for the MID IP Network, and will have similar activities and responsibilities to the APAC CRV Operation Group.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) urge States that have not yet confirmed their commitment to join the CRV; and
- b) discuss the ways and means for the implementation of the MID IP network.

APPENDIX A

MID IP NETWORK WORKSHOP RECOMMENDATIONS

- The Regional IP Network is to be named "Common aeRonautical VPN (CRV)" and be implemented under developed CRV framework as a priority.
- The benefits from implementation of the CRV could only be realized when majority of the States join the network. Accordingly, to maximize the benefits all MID States are urged to join the CRV.
- MID States are urged to conduct the Local CBA taking into consideration the safety assessment and provide all information to ICAO MID Regional Office by the end of February 2016.
- ICAO MID Regional Office to support the CBA and Safety assessment through teleconference with the focal points after receiving the Local CBA from the States by March 2016.
- The CRV will have to be interconnected with other Regional Networks (PENS, MEVA etc.).
- The APAC and MID Region to establish their own CRV Operational Groups to manage the CRV in their Regions.
- One Interregional OG Meeting Co-chaired by both Regions is conducted once a year and/or when needed.
- The CRV framework to consider in the design two regional networks with one service provider for both APAC and MID Regions, to the extent possible.

APPENDIX B MID IP Network Project Replies to State Letter: AN 6/31.4-15/312 and ME 3/2.2.1 – 16/056

State	Name/Title	Contact Details (Tel./Fax/Mobile/Email)	IP Network equipment room Coordinates	Commitment/ No of Location
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	Yaseen Hassan AlSayed Head Aeronautical Telecomm Network	Fax: +973 17329966 Tel: +973 17321183 Email: y.alsayed@caa.gov.bh	Technical Room coordination point: 2616N 05038E	
Egypt	Mr. Mohamed Ramzy Mohamed Abdallah Director of AFTN/AMHS Technical Department	Tel: +202 22657981 +201007736780 Email: Mrma_eg@yahoo.com	Building Name: Cairo Air Navigation Center (CANC) Address: NANSC Company – Cairo	
	Eng. Haitham Mohamed Ahmed Eldosoki Director of AIM Technical Department	Tel: +202 22650781 +201007810781 Email: Haitham.mohamed@nansceg.net	30° 07' 01.0" N + 31°23'42.4" E	
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State	Name/Title	Contact Details (Tel./Fax/Mobile/Email)	IP Network equipment room Coordinates	Commitment/ No of Location
		Mobile: +961 3 280 299 Email: msaad@beirutairport.gov.lb		
Libya				
Oman				
Qatar				
Saudi Arabia	Ibrahim bash Senior Systems Engineer Automation Engineering Branch	Fax: +966 12 671 9041 Tel: +966 12 671 7717 Ext 1119 Mobile: +966 50 567 1231 Email: ibasheikh@gaca.gov.sa		(3 sites) (Riyadh, Jeddah and Dammam)
Sudan	Eng. Yasir Eltayeb Sidahmed	Fax: +249 183 770001 Tel: +249 183 782701 Email: yasirts@gmail.com		Y (1)
Syria				
UAE	Greg Kurten A/Director CNS Communication, Navigation and Surveillance	Fax: +971 2 599 6872 Tel: +971 2 599 6860 Email: gegkurten@szc.gcaa.ae	The co-ordinates are as follows: 24° 26' 41.82" N 54° 36' 35.46" E The working number at site is 00971 2 5996900	
	Shahzad Chaudhary Senior CNS Engineer Communication, Navigation and Surveillance	Fax: +971 2 599 6872 Tel: +971 2 599 6865 Email: shahzad@szc.gcaa.ae		
Yemen				

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