



ICAO

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WORKING PAPER

MEVA/TMG/29 — WP/07
07/12/14

Twenty-ninth MEVA Technical Management Group Meeting (MEVA/TMG/29)
Mexico City, Mexico, 9 to 12 December 2014

Agenda Item 4: MEVA III Implementation Activities
4.2 MEVA III Documentation Review and Approval

MEVA III DOCUMENTATION REVIEW AND APPROVAL

(Presented by MEVA III Task Force Rapporteur)

EXECUTIVE SUMMARY	
This working paper presents the status of development of the MEVA III documentation	
Action:	Suggested Actions are given in Section 3
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency
<i>References:</i>	<ul style="list-style-type: none">• Report of Twenty-seventh MEVA Technical Management Group Meeting (MEVA TMG/27) Meeting, ICAO NACC Regional Office, Mexico City, Mexico, 14 to 16 October 2013• ICAO State Letter EMX 1006, dated 29 October 2014

1. Introduction

1.1 Under Conclusion 27/09, the MEVA TMG Meeting approved the revised Terms of Reference of the MEVA II Task Force to include:

- a) assist the MEVA Members in coordination with the MEVA III Service Provider on the timely and efficient implementation of the MEVA III Network; and
- b) review and inform the MEVA TMG of all deliverable documents required by the MEVA III Network implementation. Review and approve those documents as required by the MEVA III RFP

1.2 As presented in working paper WP/05, the MEVA III Task Force reviewed in collaboration with COMSOFT the documentation provided during various teleconferences, email exchanges, and the MEVA III/TF/03 meeting.

2. Discussion

2.1 The results of these efforts are as follows:

- Chapter 1: VSAT-SDD - Chapter 1_SDD - Network Design Document_V1.5
A few changes still pending
- Chapter 1 Annex: VSAT-SDD - Chapter 1_MEVA III_Annex - SkyWAN System Description_V1.1
Approved by MEVA Members
- Chapter 2: VSAT-SDD - Chapter 2_MEVA III_Network-Overview_v1.7d
Approved by MEVA Members
- Chapter 3: VSAT-SDD_MEVA III_LB_V1.0
Approved by MEVA Members
- Chapter 4: VSAT-SDD - Chapter 4_MEVA III_Port Connections_V1.3
No further comment but changes in Chapter 1 impacts this document
- Chapter 5: VSAT-SDD - Chapter 5_MEVA III - Rack Drawings_V1.3
Approved by MEVA Members
- Chapter 6: VSAT-SDD - Chapter 6_MEVA III_Project Implementation Schedule_V5.6
Comments submitted to COMSOFT; Optimisation of dates
- Chapter 7: VSAT-SDD_MEVA III_TSP_V1.2
Comments submitted to COMSOFT
- Chapter 8; VSAT-SDD_MEVA III_TRP_V1.1
Under review by the Task Force
- Chapter 9: VSAT-SDD_MEVA III_Security Plan_V1.1
Under review by the Task Force
- Chapter 10: VSAT-SDD_MEVA III-Statistics Template_V1.1; VSAT-SDD_MEVA III_TicketSystem_V1.0
Under review by the Task Force
- Chapter 11: VSAT-SDD_MEVA III FAT-Procedure_Draft V1.0
Comments still need to be addressed.
SAT Procedures have not been delivered.
NAT Procedures have not been delivered.
- Chapter 12: VSAT-SDD_MEVA III_WebPage_V1.0
Under review by the Task Force
- Chapter 13 Glossary
To be delivered once all other chapters are completed.

2.2 The Task Force has recommended Chapter 1, 2, 4, 5, 6 to be approved by the MEVA Members. On 29 October 2014, ICAO NACC Office sent a letter to all MEVA Members (EMX 1006) asking them to take note of the Task Force recommendation and approve these documents.

2.3 A spreadsheet compiling the comments made by the Task Force and COMSOFT replies is attached to this working paper as Appendix.

2.4 The Task Force, according to its Terms of Reference, will continue to review the documentation to ensure a successful outcome to the MEVA III implementation. TF will review the documents available for review during the TMG/29 Meeting.

3. Suggested Actions

3.1 The Meeting is invited to:

- a) take note of the information provided in this working paper;
- b) request COMSOFT an immediate response to expedite the MEVA III documents for its review and approval;
- c) review and approve the documents reviewed during TMG/29; and
- d) take any other action as deemed necessary.

APPENDIX

Group 1	TF	COMSOFT	Status up to TMG/29
<p>VSAT-SDD - Chapter 1_SDD - Network Design Document_V1.5</p>	<p>3.3.1 (4) & (5) Data circuits (radar, AMHS, AFTN) have 1/3 of the bandwidth committed when they should have the 100% of their nominal bandwidth. Please explain how the performance of these circuits will be satisfy when all circuits are in use at the same time (worst case scenario) - total throughput - will adequate bandwidth be allocated?</p>	<p>We stated very clearly in the SDD that the bandwidth provided is sufficient for the MEVA III network needs. We received some questions from Cuba in order to explain the “algorithm” of the PAMA and DAMA bandwidth calculations stated the the related table of the SDD. Email: "The bandwidth provisions for the DAMA segment accommodate an average load of asynchronous AFTN (9.6kbps), AHMS (256kbps) and SWV (126kbps = 5 duplex channels). Radar is not part of the DAMA segment. Since a) the number of channels for switch voice traffic are is compliant with the 5% blocking requirement and b) the async AFTN segment is almost negligible We consider the AMHS segment for now: (1) we assume that all AMHS message would have the maximum length of 64kB, although the applications for such message length are not in use for the foreseeable future and the typical message size is more like 1kB or less as for AFTN messages presently. (2) such 64kB message is transferred in approximately 12 seconds over a 64kbps simplex link, which is used alternately for the message itself and for acknowledgments from the receiving end. (3) we assume that at all airports with AMHS there is one departure or arrival per 5 minute time slot causing 5 messages each to Atlanta and another 5 from Atlanta. Hence we would</p>	<p>TF awaiting new update from Comsoft</p>
	<p>2.4.2.1 (3) the note under the table should be removed and placed in a document to be agreed with the States concerned (Aruba and Venezuela). Correct the extension number for Caracas, which is 8050</p>	<p>8050 extension number corrected</p>	
	<p>2.4.2.1. (11) Need to include in the table the extension numbers for Bogota/Curaçao shoutdown: ComSoft to assign 2254 to Curacao and 4552 to Bogota Similarly, this shoutdown is not reflected in the Curaçao table, so it should be included. ACT 12/01 Curacao to validate Curacao/Bogota shoutdown. Curacao has validated the requirement</p>		
	<p>2.4.2.1 (12) Note (1) should be removed placed in a document to be agreed with the States concerned (Aruba and Venezuela).</p>		
	<p>2.4.2.2 (2) and 2.4.2.2 (6) Atlanta - Havana AFTN circuit rated at 19200kbps</p>	<p>As of the confirmed interface tables and tender documents the speed is mentioned as 9.600 kbs. Please advise if a bandwidth upgrade is needed. Contracts have to be adapted in case.</p>	

	2.4.2.2 (7) and (18) AMHS circuit Ethernet interface. ComSoft in their proposal indicated that this could be done. On several occasion and as shown in these minutes, ComSoft responded that it could be done. Comsoft is to comply to Ethernet to Serial capability. Impacts the 2.4.2.2 (2) table	Comsoft/Markus indicated that the implementation of the AMHS circuits with Ethernet at one end and serial at the other was problematic. The information given by COMSOFT is misleading. By confirming with the multiplexer manufacture we were updated that there is no technical way to convert the data from IP to serial.	
	2.4.2.2 (8) and (11) Add in the remarks column of the AIDC Data 16 Kbps circuits: Hardware only; no service The TF confirms COMSOFT to change in the Dominican Republic and Curacao tables to add "Hardware Only/No Service".		
	2.4.2.2 (11) Dominican Republic may request to change the interface of the AMHS circuit from V.35 to Ethernet. Please inform of the impact of this change?	COMSOFT informed that it is impossible to do so.	
	2.5.2 (2) Remove mention of Curacao antenna	Done	
	5.2.7.3 (10) Table 53. Considering the existence of data port in the Santo Domingo Node, a FAD 8400 BASE UNIT 4 Serial Ports UAC spare should be included.	ComSoft responded: This spare will be taken from the common spare pool, as well as the FAD 9230 and the SkyWAN IDU. Please refer to the statements given in Chapter 5.2.6 Spares Provisioning Requirements.	
VSAT-SDD - Chapter 1_MEVA III_Annex - SkyWAN System Description V1.1	None / Recommended for approval		Approved
VSAT-SDD - Chapter 2_MEVA III_Network-Overview_v1.7d	None / Recommended for approval		Approved
VSAT-SDD - Chapter 4_MEVA III_Port Connections_V1.3	2.4.2.2 (2) and 2.4.2.2 (6) Atlanta - Havana AFTN circuit rated at 19200kbps (related to Chapter 1)		TF awaiting new update from Comsoft
VSAT-SDD - Chapter 5_MEVA III - Rack Drawings_V1.3	None / Recommended for approval		Approved
VSAT-SDD - Chapter 6_MEVA III_Project Implementation Schedule_V5.6	Feasibility of the Dominican Republic/Haiti and Aruba/Curacao concurrent implementation		TF awaiting new update from Comsoft
	Optimization of the schedule as agreed in Conclusion MEVA/TF/03/06.		
	Made the neccessary adjustments for the best installation sequence to ensure optimum SAT/NAT testing		
	Activity in row 126 Curacao antenna installation is not needed anymore		
Group 2			
General	COMSOFT to include Chapter numbers in the name of the files similar to Group 1 documents		
Chapter 3 VSAT-SDD_MEVA III_LB_V1.0	The TF is concerned that power levels of MEVA II and MEVA III during the transition will overpower the BUC. COMSOFT needs to ensure consistency of this chapter with the Transition Plan.		For TF is OK, MEVA Members to approve
	Will the Link budgets be affected by Comsoft's answer to 3.3.1 (4) & (5) (see Group 1 above)		

<p>Chapter 7 VSAT-SDD_MEVA III_TSP_V1.2</p>	<p>Need to change 2.1.(4) It is ComSoft responsibility to ensure that MEVA II power levels are optimum for a succesful transition per RFP requirement (Attachement II Section D 5.5). Update with power adjustment information 2.1.2 (2) ComSoft should propose a backup Plan in case MEVA II power levels cannot be brought down to acceptable levels With respect to current power levels in the MEVA II networks; The TF noted that, currently, 4 nodes have a level too high for a successful transition to MEVA III. ACT12/02 COMSOFT is to provide a maximum power level that any MEVA II node should not be above to accommodate a successful transition</p>		<p>TF awaiting new update from Comsoft</p>
<p>Chapter 8 VSAT-SDD_MEVA III_TRP_V1.1</p>	<p>This document should be 1.2. Version 1.1 was presented at the TF/01 ComSoft updates concerning maintenance responsibilities (comments from TF/03 in v1.1) All date fields should refer to the Implementation Schedule and group # should be referenced in the Implementation Schedule</p>		<p>TF to review on TMG29</p>
<p>Chapter 9 VSAT-SDD_MEVA III_Security Plan_V1.1</p>	<p>Included the comments and observations made from the TF/03 Meeting report (identified wording changes, local monitoring security matters, etc.)</p>		<p>TF to review on TMG29</p>
<p>Chapter 10 VSAT-SDD_MEVA III_WebPage_V1.0 VSAT-SDD_MEVA III-Statistics Template_V1.1</p>	<p>ComSoft should provide full text of chapter 10 regarding what will be reported, reporting schedule, etc... per RFP requirements as commented in the TF/03 Meeting: Develop Ch 10 for all reporting matters (web trouble tickets, new revised monthly report template, blocked voice call attempts, sunoutages notifications, etc. Regarding the report template, ComSoft shall include the sections similarly as the current MEVA II Monthly report for information on: a) new circuits request & ongoing activities b) maintenace schedule c) implementations, activities and issues</p>		<p>TF to review on TMG29</p>
<p>Chapter 11 VSAT-SDD_MEVA III FAT-Procedure_Draft V1.0</p>	<p>2.9 Voice shout-downs: <ul style="list-style-type: none"> • Voice quality testing is missing. • Technically these calls should not be established. These are always-on voice line so there should be a test showing that the line is immediately available. • We need to be able to provide documentary evidence of the voice quality (and then be able to repeat the test at SAT). Suggest we use a voice loopback configuration with some specified voice quality equipment. </p>		<p>New FAT document received in 05 Dec, to be review by TF. TF to review on TMG29</p>

	<p>2.10 Switched voice lines:</p> <ul style="list-style-type: none"> • Voice quality testing is indicated but can you provided details on how it is performed? • We need to be able to provide documentary evidence of the voice quality (and then be able to repeat the test at SAT). Suggest we use a voice loopback configuration with some specified voice quality equipment. 		
	<p>2.11 Serial Link Test</p> <ul style="list-style-type: none"> • Transmit data/messages: Please provide details. • We need to be able to provide documentary evidence of the data transmission integrity (and then be able to repeat the test at SAT). Suggest we use a data loopback configuration with some test equipment that can verify that “bits-in” equals “bits-outs” over some period of time, or measure the number of bit errors. • The assumption is that HDLC Frames of data (not HDLC flags) are being transmitted over the satellite. Therefore it’s not exactly “bits-in” versus “bits-out” but more “data-in” equals “data-out”. 		
	<p>Include test items to validate the SNMP output TF clarification: the test requested is to verify that the local ports are functioning and that SMNP data is correct</p>	<p>This already included, since the monitoring system only works SNMP based. Please note that local monitoring is belonging to the specific country, as already described. COMSOFT will grant general monitoring access to through the global network monitoring system</p>	
<p>Chapter 11 SAT</p>	<p>SAT Procedures not yet delivered</p>		<p>TF awaiting new update from Comsoft</p>
<p>Chapter 11 NAT</p>	<p>NAT Procedures not yet delivered</p>		<p>TF awaiting new update from Comsoft</p>
<p>Chapter 12 MEVA Website</p>			<p>TF to review on TMG29</p>
<p>Chapter 13 Glossary</p>	<p>To be completed once all other chapter are approved</p>		