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**Thirtieth MEVA Technical Management Group Meeting (MEVA/TMG/30)**  
Oranjestad, Aruba, 27 to 29 May 2015

**Agenda Item 3:           Operation and Performance of the MEVA III Network and Pending Transition Matters**

**3.3       Review of Transition Issues**

**PROPOSED PROCEDURE FOR COST SHARING FOR NEW MEVA III CIRCUITS  
IMPLEMENTATION AND FOLLOW-UP TO PENDING MEVA III CIRCUITS  
IMPLEMENTATION**

(Presented by Task Force Rapporteur)

EXECUTIVE SUMMARY	
This working paper proposes a procedure for the cost sharing definition when the addition of circuits, voice and data, are required in the MEVA III Network.	
<b>Action:</b>	Suggested Actions are presented in Section 3.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• Twenty-ninth MEVA Technical Management Group Meeting (MEVA/TMG/29) Report</li><li>• COMSOFT Additional circuit proposal</li></ul>

**1.           Introduction**

1.1           Under Conclusion MEVA TMG/29/06 *Bandwidth Cost Sharing for Additional MEVA III Circuits*, the MEVA Members agreed that, considering bandwidth increases may be required for new MEVA III circuits; the cost (\$500) of each 100 kHz bandwidth increment be equally shared among all Members.

1.2           Furthermore, under Conclusion MEVA TMG/29/07 *Procedure for MEVA III Management for Additional MEVA III Circuits*, the Members assigned to the Task Force the development of a procedure to plan, manage, inform and approve new circuits requirements including bandwidth increase and communication requirements.

**2.           Discussion**

2.1           The MEVA Members specified a few requirements upon which the procedure must be based. These requirements are detailed in paragraph 4.1.13 of the TMG/29 report as follows:

- a) the MEVA Network Coordinator supported by the MEVA TMG, will be the focal point for requesting new circuits and officially communicating the request to COMSOFT.
- b) For distributing the cost when a new 100kHz of bandwidth needs to be added to satisfy new circuits, the Members reached the agreement that the cost of each 100kHz of additional bandwidth should be share equally among all MEVA Members
- c) Evaluation for new circuits, shall be every quarter as needed using the monthly report information (Erlang B blocking probability and bandwidth availability)
- d) advanced planning in this matter is a must to be applied to anticipate new bandwidth

2.2 The TMG/29 Meeting, under CONCLUSION MEVA TMG/29/05 *Additional Circuit Document*, requested from COMSOFT a document that contains the prices and conditions applicable for additional circuits and valid during the lifetime of the MEVA III Network.

2.3 As instructed by the TMG, the Task Force drafted a procedure and COMSOFT submitted the document containing pricing and conditions. The procedure is attached to this working paper as **Appendix A** and the prices and conditions document as **Appendix B**.

### 3. Suggested actions

3.1 The Meeting is invited to:

- a) review the attached procedure and its appendix (appendices A and b);
- b) include examples as needed; and
- c) consider the procedure for approval.

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## APPENDIX A PROCEDURE FOR ADDITIONAL MEVA III CIRCUITS

1. Once a new data or voice circuit requirement is identified, the MEVA Member is to inform the MEVA III Coordinator of this new requirement, providing as a minimum:
  - Type of circuit (voice/data),
  - interface required,
  - bandwidth/speed required,
  - voice signaling/ data protocol required,
  - expected date of implementation.
  
2. The MEVA III Coordinator will consolidate the requirements coordinating with the MEVA III Service Provider:
  - monthly (starting the date of the last MEVA III monthly report) or;
  - when a new 100kHz of bandwidth is received as needed
  
3. The MEVA III Coordinator will notify the Service Provider on the new requirement:
  - a) If enough bandwidth is available in the existing MEVA III operating bandwidth then:
    - i. The Service Provider will confirm that the requirement can be implemented without addition bandwidth.
    - ii. The MEVA III Coordinator will inform the requesting MEVA Member(s) to coordinate the implementation with the Service Provider
  
  - b) If enough Bandwidth is not available:
    - i. The MEVA III Coordinator will request, from the Service Provider, the cost of bandwidth increase
    - ii. The MEVA III Coordinator will inform (by email) all MEVA Members of the increase, in which billing cycle the increase is to occur, and request their approval.
    - iii. Once agreed by all the TMG Members, the MEVA III Coordinator will notify the Service Provider to increase the bandwidth at the agreed date.
  
  - c) An evaluation by the Service Provider will be done if enough interfaces (hardware) are available at the MEVA nodes involved in the new requirements:
    - i. If enough interfaces are available no impact in existing leasing costs will be done.
    - ii. If additional interfaces (hardware) are needed, the Service Provider will inform of its costs to the related MEVA Members
  
4. The MEVA III Coordinator will report at each MEVA TMG Meeting or as soon as possible for any activity if and when it occurs.

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## **VSAT-MEVA III**

### **Proposal - Additional Circuits**

**V1.0/23.04.2015**

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## Revision History

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V1.0	23.04.2015	Initial Version submitted as response	

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## 1 General

- (1) With reference to the requirement of the MEVA III Task Force and Member States, COMSOFT prepared and submit the following price proposal implementing additional service circuits and related tasks (e.g. installation, etc.), based on the situation that existing network equipment is available and can be used or new equipment is needed.
- (2) In the case, of no additional equipment is required to implement a new service circuit, COMSOFT developed a special Bandwidth/Budgetary Calculator, which is attached to this document in form of an Excel sheet.
- (3) The offered prices are valid for the period of the MEVA III network operation – **60 months**.

# 1 Detailed Price List

(1) COMSOFT is providing a price breakdown of the following items.

- Pricing per 100 kHz of additional bandwidth
- Pricing for each services (voice, 9.6kbps data, 64kbps data, etc.)
- Pricing for the lease of each piece of equipment
- Pricing for the installation of additional equipment
- Bandwidth/Budgetary Calculator

## 1.1 Price – Additional Bandwidth (100 kHz)

(1) As general fact, the purchase of additional bandwidth is based on 100 kHz steps and there is no availability of less bandwidth than 100 kHz. This is a worldwide regulatory of the satellite operators.

(2) Therefore, please receive the following proposal on this specific inquiry.

**Space Segment 100 kHz (minimal bookable unit) - 500,00 USD**

## 1.2 Price – Additional Service Circuits

(1) **The offered prices for each service in the MEVA III Network are calculated on the worst case assumption.**

(2) This leads into result that the following price offer includes the space segment, related network services and necessary hardware upgrade for adding additional circuits.

(3) **Please Note!**

There is the possibility to modify the pricing of additional circuits, according to the on-site available equipment. There is the chance that pricing can be reduced significantly.

(4) The offered detailed prices are valid the extension of the existing MEVA III Network sites. In the case there will be a requirement for a complete new site (e.g. British Virgin Islands) dedicated turnkey offer will be made.



i. **Additional FXS Channel**

Pos.	Description	MRC (in US\$)	Duration (Month)	MRC Total (in US\$)
01.	Service (Circuits)	150,00	60	9.000,00
02.	Space Segment	500,00	60	30.000,00
03.	Equipment Lease site #1	125,75	60	7.545,00
04.	Equipment Lease site #2	125,75	60	7.545,00

Pos.	Description	MRC (in US\$)	Duration (Month)	MRC Total (in US\$)
01.	Option 1 Year (Contract Prolongation)	780,00	12	9.360,00
02.	Option 2 Year (Contract Prolongation)	747,50	24	17.940,00
03.	Option 3 Year (Contract Prolongation)	715,00	36	25.740,00
04.	Option 4 Year (Contract Prolongation)	682,50	48	32.760,00
05.	Option 5 Year (Contract Prolongation)	650,00	60	39.000,00

ii. **Additional VHF-PTT Channel**

Pos.	Description	MRC (in US\$)	Duration (Month)	MRC Total (in US\$)
01.	Service (Circuits)	150,00	60	9.000,00
02.	Space Segment	500,00	60	30.000,00
03.	Equipment Lease site #1	147,50	60	8.850,00
04.	Equipment Lease site #2	147,50	60	8.850,00

Pos.	Description	MRC (in US\$)	Duration (Month)	MRC Total (in US\$)
01.	Option 1 Year (Contract Prolongation)	780,00	12	9.360,00
02.	Option 2 Year (Contract Prolongation)	747,50	24	17.940,00
03.	Option 3 Year (Contract Prolongation)	715,00	36	25.740,00
04.	Option 4 Year (Contract Prolongation)	682,50	48	32.760,00
05.	Option 5 Year (Contract Prolongation)	650,00	60	39.000,00

iii. **Additional Serial Channel PAMA up to 16 kbps**

Pos.	Description	MRC (in US\$)	Duration (Month)	MRC Total (in US\$)
01.	Service (Circuits)	150,00	60	9.000,00
02.	Space Segment	500,00	60	30.000,00
03.	Equipment Lease site #1	125,75	60	7.545,00
04.	Equipment Lease site #2	125,75	60	7.545,00

Pos.	Description	MRC (in US\$)	Duration (Month)	MRC Total (in US\$)
01.	Option 1 Year (Contract Prolongation)	780,00	12	9.360,00
02.	Option 2 Year (Contract Prolongation)	747,50	24	17.940,00
03.	Option 3 Year (Contract Prolongation)	715,00	36	25.740,00
04.	Option 4 Year (Contract Prolongation)	682,50	48	32.760,00
05.	Option 5 Year (Contract Prolongation)	650,00	60	39.000,00

iv. **Additional DAMA AMHS IP Channel 64 kbps**

Pos.	Description	MRC (in US\$)	Duration (Month)	MRC Total (in US\$)
01.	Service (Circuits)	150,00	60	9.000,00
02.	Space Segment	500,00	60	30.000,00
03.	Equipment Lease site #1	107,50	60	6.450,00
04.	Equipment Lease site #2	107,50	60	6.450,00

Pos.	Description	MRC (in US\$)	Duration (Month)	MRC Total (in US\$)
01.	Option 1 Year (Contract Prolongation)	780,00	12	9.360,00
02.	Option 2 Year (Contract Prolongation)	747,50	24	17.940,00
03.	Option 3 Year (Contract Prolongation)	715,00	36	25.740,00
04.	Option 4 Year (Contract Prolongation)	682,50	48	32.760,00
05.	Option 5 Year (Contract Prolongation)	650,00	60	39.000,00

### 1.3 Price – Lease of Equipment (itemized)

- (1) COMSOFT will provide the following additional price offer on the lease for each equipment component, which will be used in the MEVA III VSAT Network.

Pos.	Qty	Description	MRC (in US\$)
01.		<b>Modem Equipment</b>	
	1	- IDU 7000 MASTER	552,50
	1	- IDU 2570 BASE	285,00
	1	- SKYWAN LICENSE FRAME RELAY PORT	12,00
	1	- SKYWAN LICENSE 8PSK	12,00
	1	- SKYWAN LICENSE MESH TOPOLOGY	95,00
	1	- CABLE INT. RS232 TERMINAL SKYWAN IDU	2,25
	1	- CABLE INT. X21 DCE IDU-FAD92XX/93XX/8400	3,25
	1	- DIAL IN MODEM SET SKYWAN IDU 7000/7000C	3,50
02.		<b>Multiplexer Equipment</b>	
	1	- FAD 9230 BASE UNIT UAC	107,50
	1	- FAD 9220 BASE UNIT UAC	75,00
	1	- FAD 8400 BASE UNIT 4 SERIAL PORTS UAC	55,00
	1	- FAD 8400 BASE UNIT 8 SERIAL PORTS UAC	77,50
	1	- FAD 92X0 DUAL FXS MODULE	18,25
	1	- FAD 92X0 QUAD FXS MODULE	35,00
	1	- FAD 92X0 QUAD PTT (E&M) MODULE +48V/-48V	40,00
	1	- FAD 92X0 DUAL SERIAL INTERFACE MODULE	18,25
03.		<b>RF Equipment</b>	
	1	- RFT 5040 STANDARD C-BAND 40W	180,00
	1	- MOUNTING KIT STD. RFT 5000 C-BAND	22,00
	1	- POWER SUPPLY 350W FPS 5000 AC/DC	30,00
	1	- MOUNTING KIT MAST FOR FPS 5000	3,00
	1	- LNB-C PLL 3.625-4.2 GHz / F-CON EXT REF	12,75
	1	- FILTER WG, RADAR ELIMINATION W. TRF C-BD	15,25
	1	- IFL GROUNDING KIT RFT 5000	3,00
	1	- 10 MHZ REFERENCE SOURCE TYPE 7551	32,50
	1	- RCU 5000 SET C-BD SW02	380,00
	1	- RCU 5000 WG KIT ANTENNA ESC37 C-BAND	30,00
	1	- 1385 3.8M C-Band Tx/Rx Antenna (GDST-1385C.LIN-CO.WR137), incl. NPMM-Baird (BAIR-PXH-T-1075x3-RP)	470,70

## 1.4 Price – Installation of additional Equipment (Services)

- (1) Based on the above quotation for additional services, COMSOFT offers the following installation prices related to each service.

i. **Additional FXS Channel**

Pos.	Description	Qty	NRC (in US\$)	NRC Total (in US\$)
01.	Installation	2	2.100,00	4.200,00

ii. **Additional VHF-PTT Channel**

Pos.	Description	Qty	NRC (in US\$)	NRC Total (in US\$)
01.	Installation	2	2.100,00	4.200,00

iii. **Additional Serial Channel PAMA up to 16 kbps**

Pos.	Description	Qty	NRC (in US\$)	NRC Total (in US\$)
01.	Installation	2	2.100,00	4.200,00

iv. **Additional DAMA AMHS IP Channel 64 kbps**

Pos.	Description	Qty	NRC (in US\$)	NRC Total (in US\$)
01.	Installation	1	2.100,00	2.100,00

## 1.5 Bandwidth/Budgetary Calculator

- (1) COMSOFT understood that the required prices for additional circuits will be used for budgetary calculations of the respective MEVA III Member States. Therefore, COMSOFT developed a customized **Bandwidth/Budgetary Calculator**, which will be submitted attached to this response.
- (2) The Bandwidth/Budgetary Calculator can be also used in the case no additional equipment is needed to implement a new service circuit.
- (3) This specially developed tool below (example) is attached as Excel sheet to this document.

Pos.	Description	Qty	MRC (in US\$)	ext. MRC	MRC (in US\$)	Duration (Months)	MRC Total (in US\$)
01.	<b>Network Access</b>						
	incl. <u>Spare Parts (Pool)</u>	3	150,00	450,00	<b>450,00</b>	60	<b>27.000,00</b>
	incl. <u>Services</u>						
02.	<b>Circuit Charges</b>						
	AFTN 9.6kbps synch	1	87,39	87,39		60	
	AFTN 2.4kbps	0	8,74	0,00		60	
	ATS Voice	0	113,61	0,00		60	
	Voice (DAMA)	1	10,49	10,49		60	
	AMHS 64kbps (serial)	1	419,48	419,48		60	
	<b><u>TOTAL</u></b>				<b><u>1.000,00</u></b>		<b><u>60.000,00</u></b>
03.	<b>Equipment Lease</b>						
	Have to be calculated on seperatetely on each case	3	N/A	N/A	N/A	60	N/A

Bandwidth/Budgetary Calculator (Example)