



*International Civil Aviation Organization*

## NORTH-EASTERN AFI VSAT NETWORK (NAFISAT)

### SUPERVISORY COMMITTEE NINTH MEETING

(Nairobi, Kenya, 19-20 March 2014)



## SUMMARY OF DISCUSSIONS

*Prepared by the ICAO Eastern and Southern African Office*

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## SUMMARY OF DISCUSSIONS

### 1 Introduction

1.1 The Ninth Meeting of the North Eastern Africa-Indian Ocean (AFI) VSAT Network (NAFISAT) Supervisory Committee was held in Nairobi, Kenya from 19 to 20 March 2014, at the premises of the United Nations Office at Nairobi, United Nations Avenue, Gigiri, Kenya. This was held back-to-back with the meeting of the NAFISAT Study Group (established in March 2013) which took place on 18 March 2014 at the same venue.

### 2 Opening and Welcome Remarks

2.1 Mr. Meshesha Belayneh, ICAO Regional Director for Eastern and Southern African Office opened the meeting and expressed his pleasure by warmly welcoming the delegates to the Ninth Meeting of the NAFISAT Supervisory Committee, on behalf of the President of the ICAO Council, Dr. Benard Olumuyiwa Aliu, the Secretary General, Mr. Raymond Benjamin, and all his colleagues at the ICAO Regional Offices accredited to AFI States.

2.2 He recalled that the NAFISAT Network was established and implemented in 2007 pursuant to Conclusion 13/15 of the AFI Planning and Implementation Regional Planning Group (APIRG), in order to enhance aviation safety through elimination of communications deficiencies. APIRG is particularly encouraged by the improved reliability and performance of aeronautical telecommunications in NAFISAT States since 2007.

2.3 Mr. Belayneh mentioned that the APIRG was pleased to report to APIRG/19 meeting positive agreement reached by the NAFISAT Participating States, the Air Traffic and Navigation Services Company Limited of South Africa (ATNS) and the International Air Transport Association (IATA), aimed at extending the arrangement governing the NAFISAT Network until 2022. Formalization of this agreement will support the continued and effective provision of air traffic management (ATM) services, pursuant to APIRG Conclusion 18/27 calling for sustainability of aeronautical VSAT networks.

2.4 Finally, Mr. Belayneh highlighted the role of VSAT networks in the regional implementation of ICAO Aviation System Block Upgrades (ASBUs), as well as the need for States to protect the VSAT frequency band (3.400/4.200 GHz) through efficient regulatory and technical measures and support ICAO position at the International Telecommunication Union (ITU) World Radiocommunication Conference 2015 (WRC-15).

### 3 Confirmation of the Chairperson

3.1 Mr. Moses Lusambili from the ICAO Flight Information Service for Somalia (FISS) Project was confirmed as Chairperson of the NAFISAT Supervisory Committee, based on the relevant provisions contained in the NAFISAT Memorandum of Understanding.

## 3.2 Secretariat

3.2.1 Mr. Prosper Zo'o Minto'o, Deputy Regional Director, ICAO Eastern and Southern African Office, was the Secretary of the meeting in accordance with Article 6 of the NAFISAT Memorandum of Understanding.

## 4 Attendance

4.1 Twenty-seven (27) participants from 9 (nine) ICAO Contracting States (Egypt, Ethiopia, Kenya, Libya, Seychelles, Somalia (FISS), Sudan, Tanzania and Uganda) and from the Network Service Provider (ATNS and IATA) attended the meeting. The list of participants is provided at **Appendix A** to this Summary of Discussions.

## 5 Apologies/Absent

5.1 Apologies were received from Djibouti, Eritrea, Saudi Arabia and Yemen.

5.2 Absent: None.

## 6 Adoption of Agenda

6.1 The following Agenda was adopted by the meeting:

1. Matters Arising
  - a) Review of Network Operation and Performance
  - b) APIRG Conclusions and Decisions relevant to the NAFISAT network
  - c) NAFISAT Network Upgrade
  - d) VSAT Registration
  - e) Preparation for the ITU WRC-15
  - f) Financial Statements (2013/2014) and Budget (2014/2015)
2. Review of the Draft Proposals for Amendment to the NAFISAT Memorandum of Understanding
3. Date and Venue of the Next Meeting
4. Any Other Business
5. Approval of Records of Meeting

6.2 The Working Papers and Information Papers submitted under the various Agenda Items are accessible from the ICAO Public Website (<http://www.icao.int/esaf>).

## 7 Discussion of the Agenda Items

### 7.1 Matters arising

#### 7.1.1 Review of Network Operation and Performance

##### Network Operation

7.1.1.1 The meeting noted the successful maintenance of the system, which was achieved through the continuous commitment and assistance of the relevant States.

7.1.1.2 The occurrences reported to the ATNS Fault Reporting Centre (FRC) between April 2013 and February 2014, were provided as follows:

**Total: FRC = 137**

	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Total
FRC	10	12	12	11	10	17	6	16	13	14	16	137
Corrective	5	10	8	9	5	8	2	8	5	6	8	74
Preventative	1	1	0	1	2	2	0	1	1	1	0	10
No Fault	3	0	1	1	1	4	3	5	4	1	3	26
External	1	1	3	0	2	3	1	2	3	6	5	27

Corrective – 74  
Preventative – 10  
No Fault found – 26  
External – 27

7.1.1.3 The following were noted:

- a) An increase in the occurrences reported to FRC and more specifically related to RFT, IDU and MEMOTEC (multiplexer) failures.
- b) Increased of failure of RFT units, RF switches, UPS, Multiplexer (MEMOTEC) and IDU resets.
- c) An agreement with the OEM has been reached to increase the capacity of the spares and the turnaround time of repairs to ensure the continuation of availability of the identified spares as well as meeting the Network service Level Availability.
- d) The obtaining of LOI's and Visas has improved and difficulties were dealt with on an individual basis with the relevant States.
- e) The custom clearance of equipment and spares has received great effort and support from some States. Isolated instances were reported where it is still a lengthy process. Some States require the involvement of a local shipping agent for the custom clearance of equipment and results in increase of costs and also delays in having the equipment and

spares cleared even if ATNS supplies a list of spares with the serial numbers prior to travel.

- f) The involvement of Civil Aviation Authorities is crucial in the speedy process of custom clearance.

7.1.1.4 Concerning the interoperability and interconnectivity of VSAT networks in the AFI Region, the meeting noted that ATNS was performing maintenance and monitoring of interconnections between NAFISAT and SADC VSAT II, and between NAFISAT and AFISNET. The following availability rates for these interconnections were achieved during the period April 2013/February 2014.

	Availability
NAFISAT - SADC interconnectivity	99.91%
NAFISAT - AFISNET interconnectivity	99.99%

**Network Performance**

7.1.1.5 The meeting noted that, from April 2013 to February 2014, the average network availability was 97.81% due to problems encountered in Jeddah during May/August 2013. Without Jeddah in equation, the average availability rate was 99.97%.

7.1.1.6 The availability rates for AFTN and ATS/DS links during the same period are provided below:

AFTN CIRCUIT AVAILABILITY										
Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
99.99	93.68	85.70	85.69	94.19	99.83	99.99	99.94	99.98	99.86	99.99

Average = 96.26%

ATS/DS CIRCUIT AVAILABILITY										
Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
99.98	95.32	89.43	89.34	95.71	99.74	99.98	99.96	99.97	99.87	99.98

Average = 97.21%

**Four-level reporting structure**

7.1.1.7 The meeting recalled that APIRG/18 agreed to the four-level methodology for the monitoring and reporting of VSAT networks performance, based on the use of the Performance Data Collection Forms (PDCFs) by States. These levels are defined as follows:

- a) Level 1 captures the space segment of the network.
- b) Level 2 captures the RF and related equipment.
- c) Level 3 captures the multiplexer or interfaces.
- d) Level 4 captures the end user equipment.

7.1.1.8 **Appendix B** to this Summary of Discussions provides an illustration of the four-level reporting structure.

7.1.1.9 The meeting noted that ATNS was applying all necessary systems to capture all parameters required to produce the 4 different levels of statistics.

7.1.9 It was also noted that a template for the capturing of Level 4 outages for ATS/DS and AFTN services was distributed to States for their feedback with regards to end user outages in order to assist in capturing the Level 4 statistics.

7.1.1.10 However, the NAFISAT system with its current configuration is not capable of producing all the parameters required. Statistics are recorded and extracted on the ATNS MMS against the 4 levels but only faults reported to ATNS FRC are recorded on level 4. The meeting agreed that this functionality should be included in future upgrades of the NAFISAT system.

## **7.1.2 APIRG Conclusions and Decisions relevant to the NAFISAT network**

7.1.2.1 The meeting was presented with a list of APIRG/19 Conclusions and Decisions of relevance to the NAFISAT Supervisory Committee, as provided at **Appendix C**, for reference and guidance in its work programme.

## **7.1.3 NAFISAT Network Upgrade**

7.1.3.1 ATNS provided the meeting with important information related to the upgrade of the NAFISAT network, including the schedule, training requirements, standard remote site upgrade, site surveys, upgrade procedure requirements and transition of services.

7.1.3.2 Table below shows the planned implementation schedule for the upgrade of the NAFISAT and SADC-VSAT II upgrades. The meeting noted that it was planned to award the contract for the upgrade by July 2014, and expected that the work would be finalized in May 2015 - followed by a 12 month period of beneficial use. **Appendix D** to this Summary of Discussions shows the SADC VSAT II and NAFISAT Upgrade Implementation Schedule.

## **7.1.4 VSAT Registration (of Earth Stations)**

7.1.4.1 It was recalled that fixed satellite services (FSS) C-band operates in a non-aeronautical frequency band and as a result, it is not protected to the same level as other safety of life (SoL) services, although remote sites connected to the VSAT network offer the aviation industry with the SoL services. Therefore, it is important that VSAT frequency assignments that may have international implications in each NAFISAT member state be registered with their national telecommunications authorities.

7.1.4.2 Although it is the responsibility of each NAFISAT Member State to register the VSAT frequencies, a preliminary investigation has indicated that very few services are

registered. The meeting noted that, as part of the network upgrade, ATNS will assist Member States with the technical information required to ensure the successful registration of the VSAT earth stations, as a first step in the protection of safety-of-life services provided by NAFISAT network. This information will be available by mid-2015 after the upgrade, to allow States to register the VSAT earth stations.

7.1.4.3 States were requested to complete the registration process before the ITU World Radio communication Conference in November 2015.

### **7.1.5 Preparation for the ITU WRC-15**

7.1.5.1 The meeting was briefed on the ICAO position for the ITU WRC-15, and proposals for modifications to the draft CPM text in response to WRC-15 agenda item 9.1, issue 9.1.5 on Resolution 154 (WRC-12): *Consideration of technical and regulatory actions in order to support existing and future operation of fixed-satellite service earth stations within the band 3 400-4 200 MHz, as an aid to the safe operation of aircraft and reliable distribution of meteorological information in some countries in Region 1*. Detailed information on proposed changes was provided to participants.

### **7.1.6 Financial Statements 2013/2014 and 2014/2015 Budget**

#### ***Financial Report***

7.1.6.1 The meeting was presented with the NAFISAT Project Financial Summary of Discussions for the period ending 31 March 2013, and noted the improvements made in the presentation of the financial statements.

7.1.6.2 The meeting particularly noted that NAFISAT finances are audited as part of the ATNS' annual statutory audit, and additional agreed-upon procedures are performed by Independent Auditors.

7.1.6.3 **Appendix E** to this Summary of Discussions provides the Statement of financial performance (E1), the Statement of financial position (E2) and the Statement of cash flows (E3).

7.1.6.4 Following the presentation of the financial report 2012/2013, the meeting noted that the NAFISAT network obtained an unqualified audit opinion as part of the ATNS annual statutory audit, and that no exceptions were raised in terms of the agreed upon procedures performed.



## ***Budget 2014/2015***

7.1.6.5 ATNS provided a financial forecast to the period ending 31 March 2014, and presented the proposed 2014/2015 budget for approval by the NAFISAT Supervisory Committee. Forecast information was based on 10 months' actual data extrapolated to the full financial year, and the current economic environment and cost containment efforts were taken into consideration when the budget was prepared.

7.1.6.6 **Appendix F** to this Summary of Discussions provides the Budget assumptions (F1), Income statement (F2) and Administrative costs (F3).

7.1.6.7 Following discussions and further clarifications on the information provided, the Budget 2014/2015 was approved by the NAFISAT Supervisory Committee.

## **7.2 Review of the Draft Proposals for Amendment to the NAFISAT Memorandum of Understanding**

7.2.1 The Secretariat recalled that, at its 8th Meeting, the NAFISAT Supervisory Committee established a Study Group with the terms of reference provided at **Appendix G** to this Summary of Discussions. The Study Group was assigned the following tasks:

- 1) Analyze possible solutions to ensure the continuity and sustainability of the NAFISAT network in the long term, taking due account of the Network Provider's proposal;
- 2) Analyze the NAFISAT MoU and proposing amendments thereto in order to ensure that it conforms to ICAO's guidelines on the establishment and provision of a multinational air navigation facility/service; and
- 3) Prepare a report to assist the Civil Aviation Authorities (CAAs) of the participating States in making informed deliberations about the long term future of the NAFISAT network.

7.2.2 The work of the Study Group was expected to be presented to a High Level Meeting of the NAFISAT Member States (DGCAs), in order to address APIRG/18 Conclusion 18/27 calling upon the participating States to establish administrative and funding arrangements in a timely manner in order to ensure that AFS requirements continue to be met. The outcome of this meeting was to be presented to the 19th Meeting of the APIRG (APIRG/19) in October 2013.

7.2.3 The meeting was pleased to note that, pursuant to APIRG Conclusion 18/27, the NAFISAT Participating States, the Air Traffic and Navigation Services Company Limited of South Africa (ATNS) and the International Air Transport Association (IATA), had agreed to extend the current arrangement governing the NAFISAT Network until 2022. The APIRG/19 Meeting was informed of this very positive development.

7.2.4 The meeting recognized that the Study Group's work had suffered from some administrative challenges, including the lack of response to the ICAO State letter requesting member States to formally designate their representatives in the group.

7.2.5 However, the meeting noted with appreciation the initiative taken by some representatives from NAFISAT Participating States (Egypt, Ethiopia, Kenya, Tanzania and Uganda) and the Chairperson of the NAFISAT Supervisory Committee, to initiate the work assigned to the

Study Group through informal meetings and electronic correspondence. The results achieved were provided to the Secretariat and shared with the Network provider (ATNS, IATA), for comments and inputs. A formal meeting of the Study Group was held on 18 and 19 March 2014, with the participation of ATNS, IATA and other States as observers, in preparation for the 9<sup>th</sup> Meeting of the NAFISAT Supervisory Committee.

7.2.6 The meeting therefore reviewed the draft amendments to the NAFISAT Memorandum of Understanding (MoU) prepared by the Study Group, and agreed on the amendments proposals to be submitted to the States.

7.2.7 The meeting also recognized that additional work was needed to finalize the draft MoU, including the development of relevant appendices to support the provisions. Accordingly, it was agreed that a meeting of the Study Group was to be coordinated as soon as possible to enable the completion of this additional work.

## **8 Date and Venue of the Next Meeting**

8.1 The next meeting of the NAFISAT Supervisory Committee will be held between during the 1<sup>st</sup> Quarter of 2015. The date and venue will be communicated to members in due course.

## **9 Any other business**

9.1 The meeting did not discuss any other business under this agenda item.

## **10 Approval of Records of Meeting**

10.1 Due to time constraints, the records of the meeting were not approved during the meeting.

## **11 Closure of Meeting**

11.1 The meeting was closed on 20 March 2014 at 17h30 (local time).

## **APPENDICES**



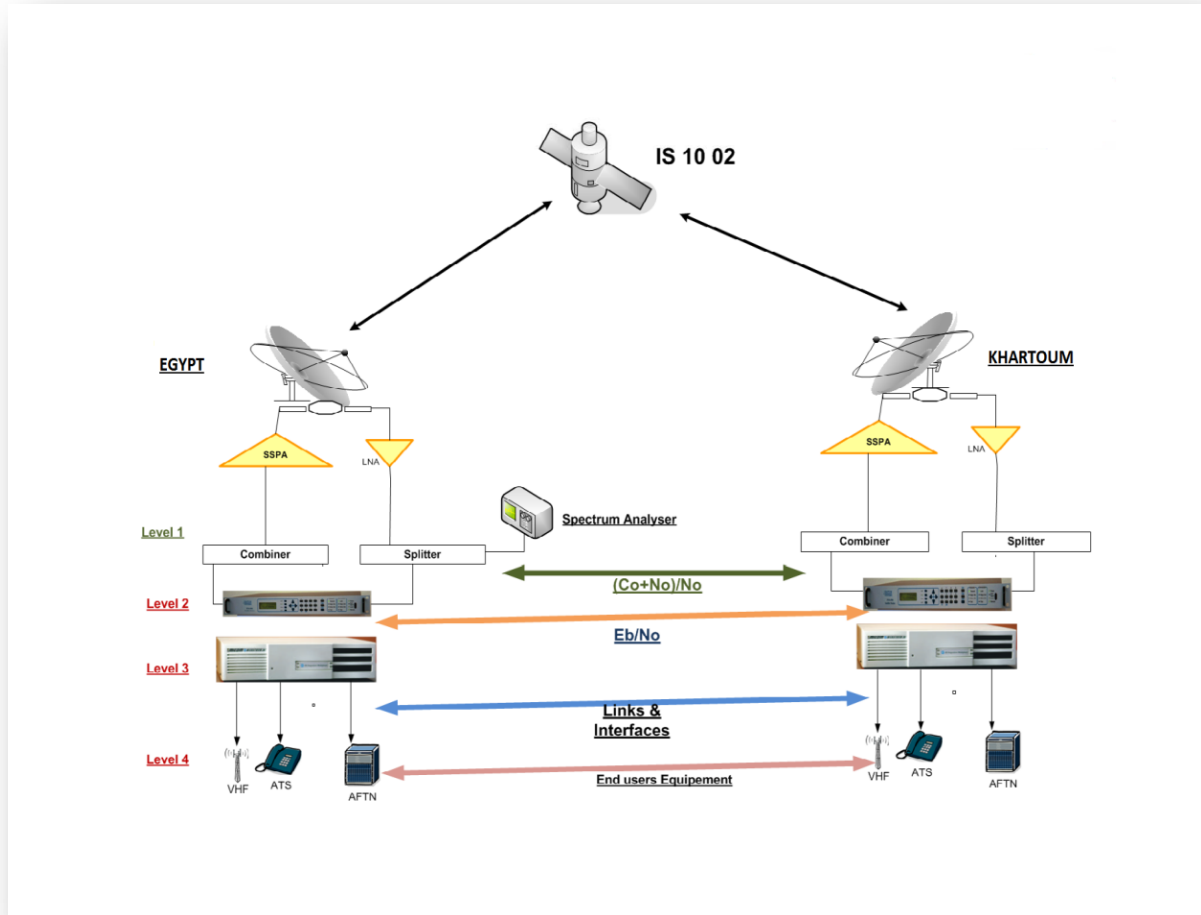
**APPENDIX A - LIST OF PARTICIPANTS**

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## APPENDIX B - FOUR-LEVEL REPORTING STRUCTURE FOR AFS





**APPENDIX C - CONCLUSIONS/DECISIONS OF APIRG/19 RELEVANT TO NAFISAT**

Conclusion/ Decision no.	Title of Conclusion/Decision	Text of Conclusion/Decision	Responsibility	Deliverable
1	2	3	4	5
Conclusion 19/02:	Follow-up to AN-Conf/12 Recommendations by States and International Organizations	That the States and International Organizations take follow-up action as appropriate on the applicable recommendations of the AN-Conf/12.	States & International Organizations	Implementation of AN-Conf/12 Recommendations
Conclusion 19/04:	Regional priorities and targets for Air navigation	<p>That:</p> <p>a) States establish, consistent with Recommendation 6/1 of the Twelfth Air Navigation Conference, priorities and targets for air navigation by May 2014;</p> <p>b) States share successful initiatives among each other;</p> <p>c) PIRGs utilize specific interface groups, where required, for addressing the harmonization of air navigation plans in adjacent regions; and</p> <p>d) The Secretariat develop a coordination mechanism between the APIRG and the RASG-AFI to ensure consistency of action and avoid overlap.</p>	<p>States</p> <p>States APIRG</p> <p>APIRG and RASG-AFI Secretaries</p>	<p>National air navigation plans with priorities</p> <p>Sharing of experience Interregional coordination</p> <p>Consistent air navigation and safety programmes</p>



Conclusion/ Decision no.	Title of Conclusion/Decision	Text of Conclusion/Decision	Responsibility	Deliverable
1	2	3	4	5
		<p>e) ICAO continually provide capacity building through workshops and seminars to AFI States and regional stakeholders as the needs arise in the different levels of ASBUs; and</p> <p>f) The African Civil Aviation Commission (AFCAC), Regional Economic Communities and Financial institutions to provide their support and assist States the implementation of the AFI Regional Air Navigation System Implementation Action Plan.</p>	<p>ICAO</p> <p>AFCAC RECS</p>	<p>Workshops and Seminars held on ASBUs</p> <p>Implementation of Air Navigation Plan elements</p>
Conclusion 19/25:	Implementation of Voice over IP for ATS/DS	That: AFI States implement Voice over IP (VoIP) as an evolution of the current point-to-point ATS/DS system, and conduct coordinated trials on VoIP prior to operational use.	States	VoIP trials for ATS/DS



Conclusion/ Decision no.	Title of Conclusion/Decision	Text of Conclusion/Decision	Responsibility	Deliverable
1	2	3	4	5
Conclusion 19/31:	Interoperability of AFI Aeronautical Surveillance Systems	<p>That, in order to enable seamless ATM operation within the AFI Region:</p> <p>a) States and service providers take the necessary steps to ensure interoperability of the existing aeronautical surveillance systems and facilitate surveillance data sharing;</p> <p>b) AFCAC be requested to support the continuous provision of aeronautical surveillance services along the areas of routing identified by the APIRG through an integrated surveillance system; and</p> <p>c) ICAO continue to assist AFI States' initiatives towards the implementation of an integrated aeronautical surveillance system, through seminars, workshops and technical coordination meetings</p>	States	Interoperability of surveillance systems

Conclusion/ Decision no.	Title of Conclusion/Decision	Text of Conclusion/Decision	Responsibility	Deliverable
1	2	3	4	5
Conclusion 19/32:	Coordination between CAAs and National Telecommunicatio n Regulatory Authorities	That States establish a coordination framework and procedures between national Civil Aviation Authorities and Telecommunications Authorities with the assistance of the ICAO Regional Offices as required, in order to facilitate efficient provision, operation and protection of aeronautical frequency spectrum.	States	Coordination process between CAAs and Telecommunication Authorities



Conclusion/ Decision no.	Title of Conclusion/Decision	Text of Conclusion/Decision	Responsibility	Deliverable
1	2	3	4	5
Conclusion 19/34:	Support to ICAO Position for WRC- 15	That States support the ICAO position for ITU WRC- 15 by:  a) incorporating the ICAO position in the national position to WRC-15;  b) coordinating this position with all aviation stakeholders (CAAs, ANSPs, Air Operators, Airport Operators, etc.); and  c) Ensuring regular and active participation of Civil Aviation Representatives dealing with aeronautical spectrum issues (such as AFI FMG focal points) in WRC-15 preparatory activities at regional/global level and during the Conference.	States	Support to ICAO Position for WRC- 15
Decision 19/35:	Implementation of Performance Data Collection Forms for AFS	That the best practices adopted by APIRG for Aeronautical Fixed Services (AFS) be amended to include the Performance Data Collection Forms (PDCFs) shown at Appendix 3.4A to this report.	States	Harmonization of AFS performance measurement



Conclusion/ Decision no.	Title of Conclusion/Decision	Text of Conclusion/Decision	Responsibility	Deliverable
1	2	3	4	5
Conclusion 19/36:	Harmonization of the collection of the statistics on the performance of the VSAT Networks	<p>That as from 1 January 2014, in order to harmonize the monitoring, collection and reporting of technical and operational data on Aeronautical Fixed Services (AFS) characteristics and performance, States should:</p> <p>a) Apply the four-level assessment model including space segment, radiofrequency equipment, modulators/demodulators, end-user equipment; and</p> <p>b) use the software tools available in their processing systems to increase accuracy of the reported data, and facilitate comparative analysis of these data.</p>	States	Uniform AFS performance monitoring and report



## APPENDIX D - SADC VSAT II & NAFISAT UPGRADE IMPLEMENTATION SCHEDULE

SADC VSAT and NAFISAT Upgrade: Brief Schedule				2014					2015					2016												
Task Name	Duration	Start	Finish	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
<b>SADC2 and NARSAT Upgrade</b>	<b>473 days</b>	<b>Mon 14/07/14</b>	<b>Wed 16/05/04</b>																							
Award of Contract	0 days	Thu 14/07/03	Thu 14/07/03																							
ATA Training Equipment Upgrade	26 days	Wed 14/07/30	Wed 14/09/03																							
Commencement of OEM Training	30 days	Thu 14/09/04	Wed 14/10/15																							
Central Training (States)	28 days	Mon 14/10/27	Wed 14/12/03																							
Site Surveys	48 days	Wed 14/07/30	Fri 14/10/03																							
Manufacturing	49 days	Mon 14/10/06	Thu 14/12/11																							
Packing	31 days	Fri 14/12/12	Fri 15/01/23																							
Delivery	45 days	Fri 15/01/02	Thu 15/03/05																							
Implementation and testing	55 days	Fri 15/01/23	Thu 15/04/09																							
Transition process	15 days	Fri 15/04/10	Thu 15/04/30																							
Final Network Acceptance	7 days	Fri 15/05/01	Mon 15/05/11																							
Period of Beneficial Use	262 days	Tue 15/05/12	Wed 16/05/11																							

**APPENDIX E1 - STATEMENT OF FINANCIAL PERFORMANCE**

	<b>Actual USD \$</b>	<b>Budget USD \$</b>	<b>Variance USD \$</b>	<b>Variance %</b>
<b>Revenue</b>				
Nafisat Revenue	2 988 150	3 081 278	-93 128	-3%
Foreign Exchange gain	215 720	0	215 720	100%
Other Revenue	194 294	178 965	15 329	9%
<b>Total Revenue</b>	<b>3 398 164</b>	<b>3 260 243</b>	<b>137 921</b>	<b>4%</b>
<b>Expenditure</b>				
Operational Expenses	1 508 090	1 726 658	218 568	13%
Salaries & Related Costs	361 476	405 000	43 524	11%
Traveling Expenses	152 047	130 952	(21 095)	-16%
Telecommunications Expenses	142 621	127 972	(14 649)	-11%
Administration Costs	777 223	820 938	43 715	5%
Electronic Maintenance	74 723	241 796	167 073	69%
<b>Overhead Expenditure</b>	<b>427 761</b>	<b>431 044</b>	<b>3 283</b>	<b>1%</b>
Depreciation	427 761	431 044	3 283	1%
<b>Total Expenditure</b>	<b>1 935 851</b>	<b>2 157 702</b>	<b>221 851</b>	<b>10%</b>
Profit/(Loss) Before Funding	1 462 313	1 102 541	(83 930)	-8%
Net Funding	25 896	71 675	45 779	64%
<b>Net Profit/(Loss) Before Tax</b>	<b>1 436 417</b>	<b>1 030 866</b>	<b>405 551</b>	<b>39%</b>
Taxation	402 197	288 642	(113 555)	-39%
<b>Net Profit/(Loss) After Tax</b>	<b>1 034 220</b>	<b>742 224</b>	<b>291 996</b>	<b>39%</b>

**APPENDIX E2 - STATEMENT OF FINANCIAL POSITION**

	<b>March 2013 US \$</b>	<b>March 2012 US \$</b>
<b>ASSETS</b>		
<b>Non-Current Assets</b>		
Property, Plant and Equipment	886 717	1 232 097
	<u>886 717</u>	<u>1 232 097</u>
<b>Current Assets</b>		
Trade and Other Receivables	807 408	402 103
Cash and Cash Equivalents	5 879 940	3 050 714
	<u>6 687 348</u>	<u>3 452 817</u>
<b>TOTAL ASSETS</b>	<b><u>7 574 065</u></b>	<b><u>4 684 914</u></b>
<b>EQUITY AND LIABILITIES</b>		
Retained Earnings	3 150 529	2 116 309
<b>Total Equity</b>	<u>3 150 529</u>	<u>2 116 309</u>
<b>LIABILITIES</b>		
<b>Long-Term Liabilities</b>		
Borrowings	-	366 845
Deferred Income Tax Liabilities	112 126	108 559
	<u>112 126</u>	<u>475 405</u>
<b>Current Liabilities</b>		
Trade and Other Payables	3 237 706	1 209 846
Current Income Tax Liabilities	461 468	388 202
Borrowings	366 413	463 937
Provisions for Other Liabilities and Charges	245 823	31 216
	<u>4 311 410</u>	<u>2 093 201</u>
<b>Total Liabilities</b>	<u>4 423 536</u>	<u>2 568 606</u>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b><u>7 574 065</u></b>	<b><u>4 684 914</u></b>

### APPENDIX E3 - STATEMENT OF CASH FLOWS

	<b>2013</b>
<b>Operating Activities</b>	<b>US \$</b>
Cash receipts from customers	2 777 139
Cash paid to suppliers and employees	734 376
Cash generated from operations	3 511 515
Finance Costs	(35 920)
Finance revenue received	10 025
Income tax	(325 363)
<b>Net cash flow from operating activities</b>	<b>3 160 257</b>
<b>Investing Activities</b>	
Purchase of property, plant and equipment	(82 381)
<b>Net cash flow from investing activities</b>	<b>(82 381)</b>
<b>Financing Activities</b>	
Repayment of borrowings	(464 369)
<b>Net cash flow from financing activities</b>	<b>(464 369)</b>
Net increase in cash and cash equivalent	2 613 508
Cash and Cash equivalent at beginning of year	3 050 713
Net foreign exchange difference	215 720
<b>Cash and Cash equivalent at end of year</b>	<b>5 879 941</b>

## APPENDIX F1 - BUDGET ASSUMPTIONS

Description	Budget
Tariff rate per FIR Crossings	USD 10.00
Traffic Growth Movement	5.0%
Foreign Exchange rate	R 10.30
Consumer Price Index (CPI)	7.3%
Tax rate	28%

## APPENDIX F2 - INCOME STATEMENT

DESCRIPTION	A	B	C	D	E	(E-A)	F
	2013/14	2013/14	2013/14		2014/15		
	FY Forecast	FY Budget	Var	Var	FY Budget	Var	Var
	\$	\$	\$	%	\$	\$	%
Nafisat Revenue	2 994 220	2 902 307	91 913	3.2%	3 143 931	149 711	5.0%
Sundry Revenue	194 924	194 924	-0	0.0%	194 924	0	0.0%
<b>Total Revenue</b>	<b>3 189 144</b>	<b>3 097 231</b>	<b>91 913</b>	<b>3.0%</b>	<b>3 338 855</b>	<b>149 711</b>	<b>4.7%</b>
Operational Expenses	1 784 360	1 885 507	-101 147	-5.4%	1 928 156	143 796	7.5%
Salaries & Related Costs	347 711	424 652	-76 941	-18.1%	373 094	25 383	7.3%
Traveling Expenses	120 000	120 000	0	0.0%	132 000	12 000	10.0%
Telecommunications Expenses	171 839	143 817	28 022	19.5%	181 634	9 795	5.7%
Administration Costs	950 782	939 733	11 049	1.2%	997 806	47 024	4.7%
Electronic Maintenance	194 027	253 886	-59 859	-23.6%	243 622	49 595	25.6%
Professional Fees	0	3 419	-3 419	-100.0%	0	0	0.0%
Overhead Expenditure	430 506	390 232	40 274	10.3%	456 212	25 705	5.6%
Depreciation	430 506	390 232	40 274	10.3%	456 212	25 705	6.0%
<b>Total Expenditure</b>	<b>2 214 866</b>	<b>2 275 739</b>	<b>-60 873</b>	<b>-2.7%</b>	<b>2 384 368</b>	<b>169 501</b>	<b>7.7%</b>
Profit/(Loss) Before Funding	974 278	821 492	152 786	18.6%	954 488	-19 790	-2.0%
Total Funding	-917	31 522	-32 439	-102.9%	-1 073	-156	17.0%
Net Profit/(Loss) Before Tax	975 195	789 970	185 225	23.4%	955 560	-19 634	-2.0%
Taxation	273 054	221 192	51 863	23.4%	267 557	-5 498	-2.0%
<b>Net Profit/(Loss) After Tax</b>	<b>702 140</b>	<b>568 778</b>	<b>133 362</b>	<b>23.4%</b>	<b>688 003</b>	<b>-14 137</b>	<b>-2.0%</b>

## APPENDIX F3 - ADMINISTRATIVE COSTS

Description	A	B	C	D	E	(E-A)	F
	2013/14 FY Forecast	2013/14 FY Budget	Var (\$)	Var(%)	2014/15 FY Budget	Var (\$)	Var(%)
Bad Debts	117 498	119 773	2 275	1.9%	129 248	11 750	10.0%
Bank Charges	4 088	5 270	1 182	22.4%	4 387	298	7.3%
Commission Paid	56 775	51 461	-5 314	-10.3%	59 441	2 665	4.7%
Management Fees	318 914	309 723	-9 191	-3.0%	333 886	14 971	4.7%
Indirect Costs	304 194	304 194	0	0.0%	321 533	17 339	5.7%
Pre-Implementation Costs	109 312	109 312	0	0.0%	109 312	0	0.0%
IATA Management Fees	40 000	40 000	0	0.0%	40 000	0	0.0%
<b>Total</b>	<b>950 782</b>	<b>939 733</b>	<b>-11 049</b>	<b>-1.2%</b>	<b>997 806</b>	<b>47 024</b>	<b>4.7%</b>

## **APPENDIX G - TERMS OF REFERENCE OF THE NAFISAT STUDY GROUP**

### **1. Background**

- 1.1 The APIRG/18 Meeting (March 2012) noted that the funding arrangements concluded between the NAFISAT Member States and the Network Provider (ATNS, IATA) to cover the cost of equipment, installation, maintenance, space segment and administration of the NAFISAT network would be terminated in 2015. APIRG Conclusion 18/27 requested the Member States to establish administrative and funding arrangements in a timely manner in order to ensure that technical and operational requirements for AFS continue to be met.
- 1.2 The 8th Meeting of the NAFISAT Supervisory Committee recognized the need for a New Framework to govern the oversight, management and operation of the network, and accordingly established a Study Group to prepare this New Framework.
- 1.3 The results and proposals developed by the Study Group will be presented to a High Level Meeting of the NAFISAT Member States (DGCAs) for review and endorsement.

### **2. Responsibilities**

- a) Review and analyse the current Framework governing the supervision, management and operation of the NAFISAT network;
- b) Conduct a detailed analysis of the NAFISAT MoU against ICAO's Guidelines on the establishment and provision of a multinational air navigation facility/service as contained in the Manual on Air Navigation Services Economics (ICAO Doc 9161);
- c) Identify possible solutions to ensure the continuity and sustainability of the NAFISAT network in the long term, incorporating the extension of the current arrangements until 2022; and
- d) Prepare a comprehensive report to assist Member States in making informed deliberations about a continuous, sustainable and long term NAFISAT network, to be part of an integrated regional telecommunication infrastructure.

### **3. Composition**

- 3.1 The Study Group is composed of the following NAFISAT Member States listed in alphabetical order:
  - Egypt;
  - Ethiopia;
  - Kenya;
  - Tanzania; and
  - Uganda.
- 3.2 The Study Group will coordinate its work with the Network Provider.
- 3.3 The other NAFISAT Member States wishing to do so may contribute to the Study Group's work as observers.
- 3.4 The Chairperson of the NAFISAT Supervisory Committee and the ICAO Eastern and Southern African Office support the work of the Study Group.

### **4. Working Methods**

- 4.1 The Study Group may designate, as necessary, ad-hoc sub-groups to work on specific topics and activities.
- 4.2 The Study Group will coordinate and progress on its works as follows to maximize efficiency and reduce costs: electronic correspondence, written correspondence, telephone calls and teleconferences.

**- END -**