



INTERNATIONAL CIVIL AVIATION ORGANIZATION
WESTERN AND CENTRAL AFRICA OFFICE
Twentieth Meeting of the AFI Satellite Network Management Committee
(SNMC/20)
(Abuja, Nigeria 08-12 October 2012)

Agenda Item 3: Implementation of Special AFIRAN meeting recommendations 6/19

Planning, implementation and operation of very small aperture terminal (VSAT) networks in the AFI Region
(Presented by the secretariat)

SUMMARY

The purpose of this paper is to analyze the status of implementation of AFI/RAN

Conclusion 6/19: Planning, implementation and operation of very small aperture terminal (VSAT) networks in the AFI Region that calls for regular meetings of all AFI networks managers

Reference:

Report of SP AFI RAN Meeting

Conclusions of the First Joint Meeting of the AFI Aeronautical VSAT Networks Managers (AFI/VSAT/1)

Summary of conclusions of the Review Meeting of the Task Force on the Development of a Regional Project on an AFI Integrated Aeronautical Telecommunication Infrastructure (AFI VSAT/TF/RM)

Action by the meeting in paragraph 3

1. Introduction

The AFI RAN meeting held in Durban, South Africa from 24 to 29 November 2008 formulated **Conclusion 6/19: Planning, implementation and operation of very small aperture terminal (VSAT) networks in the AFI Region** that calls for regular meetings of all AFI networks managers and reads as follows:

Conclusion 6/19: Planning, implementation and operation of very small aperture terminal (VSAT) networks in the AFI Region:

That

all entities involved with planning, implementation and operation of very small aperture Terminal (VSAT) networks in the AFI Region hold regular joint meetings under the auspices of ICAO regional offices for the purpose of harmonization and eventual realization of a seamless AFI communication network supporting all present and future communications, navigation, and Surveillance (CNS) Systems

Since Durban meeting, many actions have been undertaken by States/Organizations with ICAO regional Offices WACAF & ESAF support to implement this conclusion.

2. Discussion

2.1 The first Joint Meeting of the AFI Aeronautical VSAT Networks Managers (AFI VSAT/1) was held in the Conference Room of the Fairmont Zimbali Lodge in Kwa-Zulu Natal, South Africa, from 13 to 15 June 2011.



2.2 The meeting reviewed and analyzed the characteristics and performance of existing aeronautical VSAT networks, examined interface issues, maintenance and cooperation arrangements, bandwidth requirements for current and future applications, development plans, and discussed the development of a regional project aimed to achieving a modernized, interoperable, sustainable and integrated network, together with a related project document in order to support the search for funding for its implementation.

2.3 The meeting also addressed issue pertaining to the sustainability of AFISNET and CAFSAT.

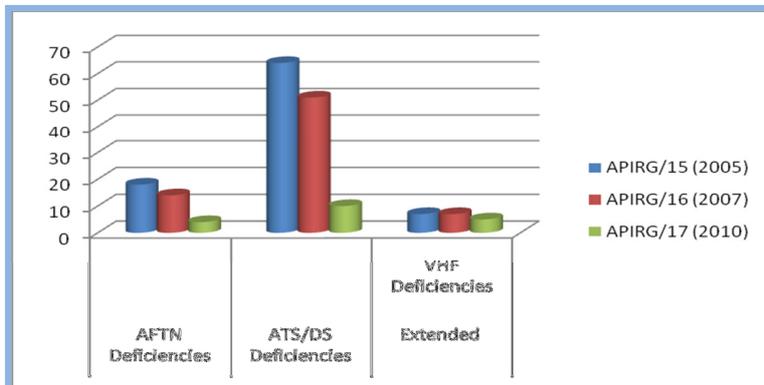
In particular, AFISNET States/administrations were called upon through conclusions 1/4, 1/5, 1/6 and 1/7 to:

- *establish common network management and control systems with shared responsibilities;*
- *harmonize their maintenance policies in order to enhance the availability and reliability of these networks;*
- *pursue their efforts in achieving fully modernized networks;*
- *establish formal arrangements for the efficient management of the interconnections implemented between the various aeronautical VSAT networks;*
- *ensure that sufficient resources are made available in order to:*
 - a) continuously maintain an acceptable level of performance of these VSAT networks; and*
 - b) achieve a high degree of interoperability with other AFI VSAT networks while transitioning towards an integrated ATN infrastructure.*

2.4 The meeting proposed the establishment of a Task Force to address issues related to the development of a regional project aimed to enhance the overall performance of AFI aeronautical VSAT networks, and converge towards a consolidated regional ATN infrastructure. The meeting nominated ATS (South Africa), ASECNA and Kenya to respectively lead a Technical, Financial and Administrative Team. The entire report of the meeting can be downloaded at http://icao.int/esaf/meetings/2011/AFI_VSAT1.

2.5 A review Meeting of the Task Force on the Development of a Regional Project on an AFI Integrated Aeronautical Telecommunication Infrastructure (AFI VSAT/TF/RM) was held in Dakar, Senegal, from 3 to 5 October 2011. The meeting reviewed the study developed by the Task Force Teams and tasked the Secretariat to amend the Terms of Reference of the Task Force in order to reflect the ICAO guidelines for the establishment of a multinational facility/service as contained in the Regional Air Navigation Plan (AFI ANP, Doc 7474) and other relevant guidance material. The summary of conclusions of this meeting can be downloaded at http://icao.int/wacaf/meetings/2011/AFI_VSAT

The fourth CNS/SG meeting held in Dakar from 24 to 29 July 2011 (with list of Conclusions/Decisions presented in **Appendix A**) recognized the positive impact of VSAT technology in the resolution of air navigation deficiencies within the AFI Region as illustrated in the graphic below - *Communications deficiencies between APIRG/15 (2005) and APIRG/17 (2010)*:



The meeting acknowledged the need for a coordinated regional plan for the migration of the AFI AFS infrastructure towards an integrated regional/interregional digital communication network as a multinational facility/service (AFI/7, Conclusion 10/6c), and proposed the establishment of a dedicated Task Force aiming to coordinating a regional plan, taking advantages of lessons learnt from other ICAO regions' experiences in implementing integrated regional communications networks.

The second Joint Meeting of AFI Aeronautical VSAT Networks Managers held in Douala, Cameroon, from 28 February to 1st March 2012 urged all AFI VSAT networks managers to:

- Adopt a four-level approach to report on network performance assessment, as well as the Performance Data Collection Forms (PDCF), in order to establish a common performance monitoring methodology;
- Provide all necessary support to the implementation of Resolution COM6/24 (WRC-12) aimed at securing international protection of aeronautical frequency spectrum and;
- Incorporate in ANSPS work programmes, activities related to its implementation, including participation in studies and regional meetings as required, under the coordination of ICAO Regional Offices.

APIRG/18 (Kampala, Uganda, 27-30 March 2012) established the task force with the terms of reference shown at **Appendix B** by Decision 18/28 that reads as follows:

Decision 18/28: Establishment of a Task Force for the AFI Aeronautical VSAT Networks Regional Project

That a Task Force be established to address issues related to the development of a regional project aimed to enhance the overall performance of AFI aeronautical VSAT networks, and converge towards a consolidated regional ATN infrastructure, with the terms of reference shown at Appendix 3.4H to this report.

3. Actions by the meeting

The meeting is invited to:

- a) Take note of the above information
- b) Encourage States/Organizations to:
 - ✓ Implement the Conclusion/Decisions derived from the outcome of the meetings of the Task Force for the AFI Aeronautical VSAT Networks Regional Project;
 - ✓ Pursue their effort to actively participate in the future activities of the Task Force