



INTERNATIONAL CIVIL AVIATION ORGANIZATION
EASTERN AND SOUTHERN OFFICE

First Meeting of the AFI VSAT Networks Managers (AFI VSAT/1)
(Kwa-Zulu Natal, South Africa, 13 to 15 June 2011)

Agenda Item 4b: Sustainability Issues

SYSTEM MODERNIZATION

(Presented by ATNS)

<p>SUMMARY</p> <p>The working paper provides a high level outline of the system modernization planned by ATNS for the NAFISAT and SADC VSAT II networks</p> <hr/> <p>REFERENCE(S)</p>

1. INTRODUCTION

1.1. The SADC VSAT II and NAFISAT networks were commissioned in 2007 and 2008 respectively. By 2015 the NAFISAT and SADC2 and NAFISAT networks would have been operating for about 7 and 8 years.

1.2. ATNS has developed a network support program that ensures that the equipment is maintained and operating at optimum performance at all times. This not only results in a reliable service but also ensures that all components of the networks are kept in an optimal state and therefore an increased life-expectancy.

2. DISCUSSION

ATNS plans to conduct a study to establish the most feasible way to ensure that the present networks will be capable of managing any new requirements and services in the short term and beyond 2015. During the study the following advantages of the present networks will be taken into account:

- The network reliability has been proven in the field
- It can manage all planned services
- It is space segment efficient
- It is flexible – adding new circuits and terminals is uncomplicated

2.1. Evaluation of networks

Through constant evaluation and measuring of the network availability and taking into account the following issues, it will be possible to determine any trends and to predict the lifespan of the network.

- Maintenance cost for the networks are tracked on a regular basis to make accurate predictions;
- Statistics of failure of modules are recorded;
- Spares stock and repairs are tracked; and
- It is ensured that sufficient quantities are available for End-of-life spares as well as a mitigation strategy.

An in-depth evaluation will be conducted to establish the most cost effective way of upgrading and optimising the two networks, taking into account the predicted lifespan, advantages of the present network, etc.

2.2. Planned Future VSAT feasibility study

A number of aviation services can be provided in the short-term and it is envisaged that the SADC VSAT II and NAFISAT networks will be developed under the Value Added Services (VAS).

3. CONCLUSION

3.1 The meeting is invited to:

- a) Note the information provided in this working paper.
- b) Take the information into account during discussions.

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