INTERNATIONAL CIVIL AVIATION ORGANISATION

TWELFTH MEETING ON THE IMPROVEMENT OF THE AIR TRAFFIC SERVICES IN THE SOUTH ATLANTIC

(Sal, Cape Verde, 15 – 17 December 2004)

Agenda Item 4: Communications

- VSAT networks: developments, consolidation, interoperability requirements

INTEROPERABILITY REQUIREMENTS

(Presented by ASECNA)

SUMMARY

The objective of the Working Paper aims to propose some guidelines dealing with the issue of interoperability in aeronautical VSAT networks

I -INTRODUCTION

The topic of interoperability in aeronautical VSAT network field is a key issue, which deserves to be addressed in relation to aeronautical applications constraints: availability, continuity, integrity, reliability and transfer delay.

I – IMPLEMENTATION REQUIREMENTS

The review of interoperability requirements should be be based on:

❑Integration

• use of a single satellite(figure 1)

❑Same satellite access

• use of direct access on permanent basis

CONCLUSION

Interconnection of networks

MEDSAT

MEVA

CAFSAT

COCESNA

IS10-02

REDD

AFISNET

SADC

INTERCONNECTION

FIGURE 1

❑same standard transmission mode

❑standard end user interfaces

- use of plug to plug compatible data and voice interfaces,

- use of standard technology,

- use of common telecommunications protocols

- allowing to route and to relay the messages in a transparent way,

- use of common mechanisms allowing to ensure the Quality of Service, transfer delay required and security of the end to end communications,

- one phone for the all directions for ATS/DS,
- the provisions of the G.114 and G 165 of the ITU-T standard,
- local monitor and control of nodes,
- distributed management network.

Anyway, these implementation requirements of interoperability issue, will be the subject of a call for tender.

VI - CONCLUSION

The meeting is invited to :

- take note of information provided in the working Paper;

- comment and take note on the implementation proposal of interoperability requirements;

- entrust a study group with tasks of drafting the terms of reference of on the subject .