



## 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

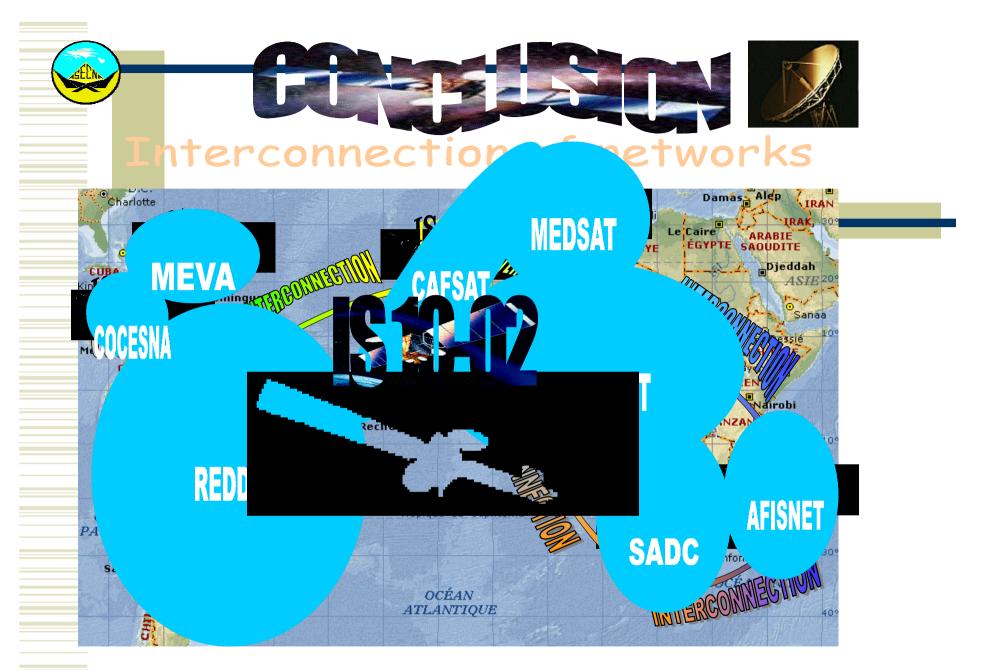


FIGURE 1

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- 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.