INTERNATIONAL CIVIL AVIATION ORGANIZATION

SIXTH MEETING OF THE APIRG COMMUNICATIONS SUB-GROUP (COM/SG/6)

(Nairobi, 24 - 26 September 2002)

Agenda Item 4 : Aeronautical Fixed Service

EXTENSION OF THE CAFSAT NETWORK

(Presented by IATA)

Introduction

1. Though in general the AFI AFTN is performing well, the non-implementation, low reliability or low capacity of a small number of circuits convey to many users an undeserved bad image of the communication system in AFI. These are:

    a) Circuit Niamey Algiers – not implemented or highly unreliable; affects all AFTN exchanges between Europe and Central Africa;
    b) Circuit Accra/Niamey – unreliable; Met and AIS information reaching end users erratically;
    c) Circuit Cairo/Nairobi – goes through periods of very low availability
    d) Circuit Nairobi/Johannesburg – very low speed, unable to meet traffic demand, resulting in very high transit times. Occasionally aircraft arrive at destination before the flight plan.

2. Less critical but also affecting overall AFTN performance are:

    a) Circuit Brazzaville/Johannesburg – not implemented; for the moment, traffic rerouted via Dakar/JNB
    b) Circuit Brazzaville/Nairobi – not implemented. Traffic routed via Addis/Niamey;
    c) Dakar/JNB: this circuit provides invaluable relief to the lack of the routing JNB/Brazzaville/Niamey/Algiers. Availability has been patch, though, and costs are high. We would suggest the performance of this invaluable circuit be strengthened.
    d) Circuit JNB/SAM: traffic is routed via Dakar, so there is a single point of failure on the AFI/SAM exchanges.

A way forward

3. The meeting is aware of the implementation of the CAFSAT network, which now provides reliable voice and data communications along the EURO/SAM corridor. IATA is of the view that the extension of the CAFSAT network to a number of

key locations would provide a reliable and cost-effective means of solving some of the major AFTN connection requirements, and also some essential ATS/DS links.

4. In so far as AFI is concerned, the CAFSAT network is already implemented in Casablanca, Dakar, Johannesburg and Sal. Johannesburg is in the process of installing the link. This will allow for the implementation of the JNB/SAM links for the reinforcement of the JNB/DKR circuit. It is also our understanding that within the AEFMP group it has also been agreed to implement a CAFAT station in Algiers.
5. Given this scenario, IATA would propose the extension of the CAFSAT network to Abidjan, Accra, Brazzaville and Luanda. This would bring the following benefits:
    a) Implementation of the Brazzaville/Johannesburg circuit avoiding the cumbersome and expensive scenario being envisaged up to now of exchanging terminals and doubling the recurrent space- segment costs;
    b) Implementation of an Algiers/ASECNA network link, via Dakar. This would, in our view adequately meet the operational requirements, but ASECNA could consider implementing a CAFSAT in Niamey, if it wishes to keep Niamey as the interface centre; this would have an added advantage of implementing the ATS/DS link in Algiers/Niamey.
    c) Improvement of the reliability of the Accra connections, once again via Dakar, with the Niamey option remaining open as above.
    d) Implementation of ATS/DS links amongst FIRs Luanda/Brazzaville/Accra/Abidjan/JNB/Brasil (Atlantico FIR), all of which are ANP requirements.

Action by the meeting

9. The meeting is invited to :

Agree to recommend the extension of the CAFSAT Network to Abidjan, Accra, Brazzaville and Luanda, as proposed above.