

INTERNATIONAL CIVIL AVIATION ORGANIZATION

WESTERN AND CENTRAL AFRICA OFFICE

Twenty Second Meeting of the AFI Satellite Network Management Committee (SNMC/22)

(Lomé, Togo 15-19 December 2014)

<u>Agenda Item 2</u>: Review of operational and technical statistics of availability for AFISNET-supported links

(Presented by the secretariat)

SUMMARY

The purpose of this paper is to remind the meeting on the necessity to report on the status of operational statistics of availability for AFISNET -supported links.

Action by the meeting in paragraph 3

1. Introduction

The AFI/6 RAN meeting recommended that States operating AFTN arrange for the monthly recording of circuits performance charts and for the exchange of completed forms between the stations concerned with copy to relevant ICAO Regional Office. The AFI/7 RAN meeting endorsed this recommendation.

2. Discussion

2.1 Status of implementation of AFTN & ATS/DS circuits in the AFI region

The status of implementation of the Aeronautical Fixed Service (AFTN and ATS/DS) in the aim to satisfy ATM new requirements involving new organization of airspace has been considered by APIRG/18 & 19 meetings to be about to complete the achievement of the rationalized AFI Plan.

However in the precedent meetings the performance was reported to do not comply entirely everywhere with ICAO Annex X requirements.

2.2 Operational Performance Statistics

The availability figures of the AFTN main circuits and ATS/DS for the period of 2013 have not been able to be computed in the table by the Secretariat because of the lack of report from SNMC members

Despite the above mentioned AFI RAN recommendation and despite the various Conclusions and Decisions SNMC members are still not regularly submitting the required information in a timely manner. The Performance Data collection Form (**PDCF**) is attached in Appendix to this working Paper. Since its adoption by SNMC 19 and by APIRG 18 meetings its usage has not been daily undertaken by SNMC members.

Due to the difficulties faced by the Secretariat to collect the AFS statistics from States, it was found advisable to consider the implementation of a comprehensive database in particular for AFS-AFTN statistics management and monitoring in the AFI Region, based on the PDCF and other relevant former templates.

But the development of such tools has not been undertaken until yet.

3. Action by the meeting:

The meeting is invited to:

- a) Take note of the above information and urge States/Organizations to:
- b) Regularly report on the performance of AFISNET;
- c) Establish a realistic mechanism to ensure the collection and automation of AFISNET statistic data.

APPENDIX

Performance Data Collection Form

A-Global Static parameters

| Center | | Date | | | | | | | | | | |
|--|---|---------------------|--|--|--|--|--|--|--|--|--|--|
| Parameters | Values | Remarks | | | | | | | | | | |
| Fixed Parameters | | | | | | | | | | | | |
| Intelsat link Name | IS 901 @°E | | | | | | | | | | | |
| Transponder Number | 36/36 | | | | | | | | | | | |
| Satellite Earth Station Coordinates | LONG = ddd, mm O/E LAT = dd, mm N/S AZ = ddd, mm O/E EL = dd, mm N/S | Under WGS 84 Format | | | | | | | | | | |
| Antenna Type and Size | m | | | | | | | | | | | |
| Antenna Gain | Tx :dBi Rx :dBi | | | | | | | | | | | |
| SSPA type | X W | | | | | | | | | | | |
| Up Converter Frequency | MHz | | | | | | | | | | | |
| Down Converter Frequency | MHz | | | | | | | | | | | |
| В | -Global Dynamic parameters | | | | | | | | | | | |
| EIRP | | | | | | | | | | | | |
| G/T | | | | | | | | | | | | |
| C/N0 | | | | | | | | | | | | |
| BER | | | | | | | | | | | | |
| MTBF | | | | | | | | | | | | |
| MTTR | | | | | | | | | | | | |
| Para | ameter for Carrier Performance | | | | | | | | | | | |
| Carrier failure rate | | | | | | | | | | | | |
| C/N0 | | | | | | | | | | | | |
| BER | | | | | | | | | | | | |

C-Services Performance

Performance of AFTN

| Centre | : Accra | | | | | | | Da | ate / | | | | | | | | | | | | |
|---------|------------|-------------|---------|-----------------|-------|-----------------|---------|--------------------------|-------|----|----|----|----|----|----|----|----|----|---|----|--------|
| Country | Terminal I | Terminal II | Support | COM Protocol | Speed | Transit Time | Routing | Monthly Availability2011 | | | | | | | | | | | ¹ / ₂ Annual Average Availabili ty | | |
| | | | | | | | | 01 02 03 04 05 06 | | | | | | | | 06 | 1 | | | | |
| Ghana | Accra | Niamey | AFISNET | | | | | ТХ | RX | тх | RX | тх | RX | тх | RX | ТХ | RX | ТХ | RX | ТХ | R X |

Qualitative performance of ATS/DS

Centre :Kano

Date /

| Country | Terminal I | Terminal II | Support | Connexion Time | Nb of Attempts | One Way Latence Time | Call set up time | Voice Quality (1 to 5) | М | onthly | Avai | ilabilit | y2011 | L | ¹ ⁄2 Annual Average Availability |
|---------|------------|-------------|---------|-------------------|-------------------|-------------------------------|---------------------|---------------------------|----|-------------------|------|----------|-------|---|---|
| Nigeria | Kano | Niamey | AFISNET | | | | | | 01 | 01 02 03 04 05 06 | | | | | |
| | | | | | | | | | | | | | | | |

Qualitative performance of Future CNS Service s

| Country | Terminal 1 | Terminal II | Support | Provided Service | COM Protocol | Speed | Transit Time | Routing | Availability 2005-2010 | | | | | Remarks | |
|----------|------------|-------------|---------|---------------------|-----------------|-------|-----------------|---------|---------------------------|----|----|----|----|---------|--|
| | | | | | | | | | 05 | 06 | 07 | 08 | 09 | 10 | |
| Mauritus | Maurice | Ivato | AFISNET | AIDC | | | | | | | | | | | |
| Liberia | Roberts | Dakar | AFISNET | AMHS | | | | | | | | | | | |