



## INTERNATIONAL CIVIL AVIATION ORGANIZATION

### AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP COMMUNICATIONS, NAVIGATION AND SURVEILLANCE SUB-GROUP THIRD MEETING CNS/SG/3

(Nairobi, Kenya, 26-30 April 2010)

(Presented by ASECNA)

#### SUMMARY

The present Working Paper gives a progress report on the implementation of rationalized ATS/DS Plan in ASECNA area. For the shortcomings and deficiencies still existing in the establishment of the involved circuits, ASECNA proposes solutions to overcome them.

Agenda Item 4: **Aeronautical Fixed Service status in ASECNA**

#### **ATS/DS circuits achievement and status**

##### **1. Introduction**

In the framework of the improvement of the aeronautical telecommunications services, ASECNA pursued the implementation of ATS/DS circuits in order to eliminate the shortcomings and deficiencies still existing. The interconnection between AFISNET and NAFISAT-SADC-2 and the close cooperation between AFISNET members allowed to clear some a majority of deficiencies.

However the efforts in a cooperative/proactive approach are to be continued, regarding the deficiencies still affecting the aeronautical telecommunication services.

*According to the RAN AFI/7 recommendations 5/23 and 9/2 , regarding the use of VSAT technology for the implementation and improvement of the AFS circuits, ASECNA carried out and expedited its VSAT installation stations schedule , in order to eliminate the noted shortcomings and deficiencies.*

##### **2. Discussion**

###### **□ Implementation of ATS/DS circuits**

Table1 in appendix points out that:

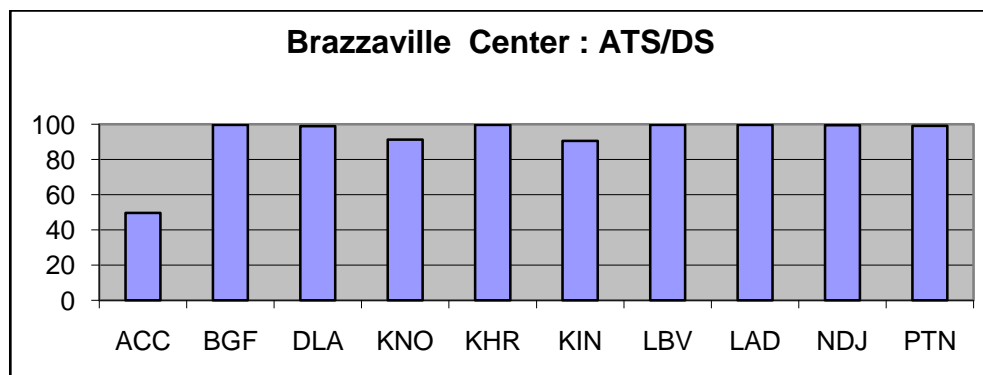
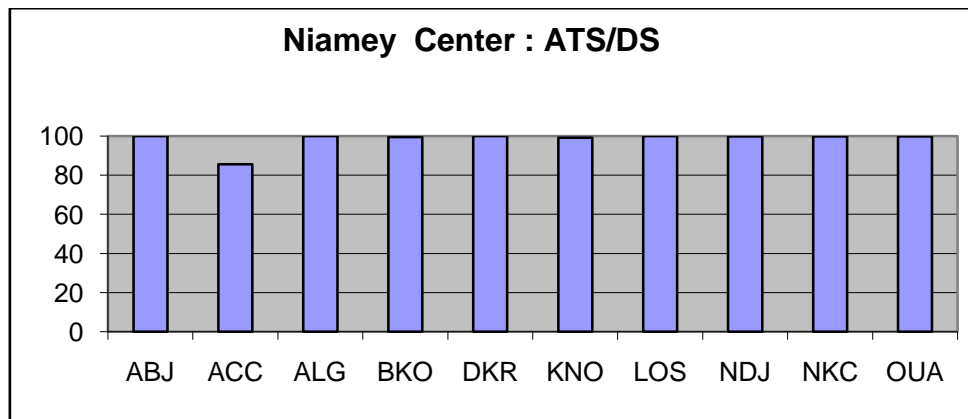
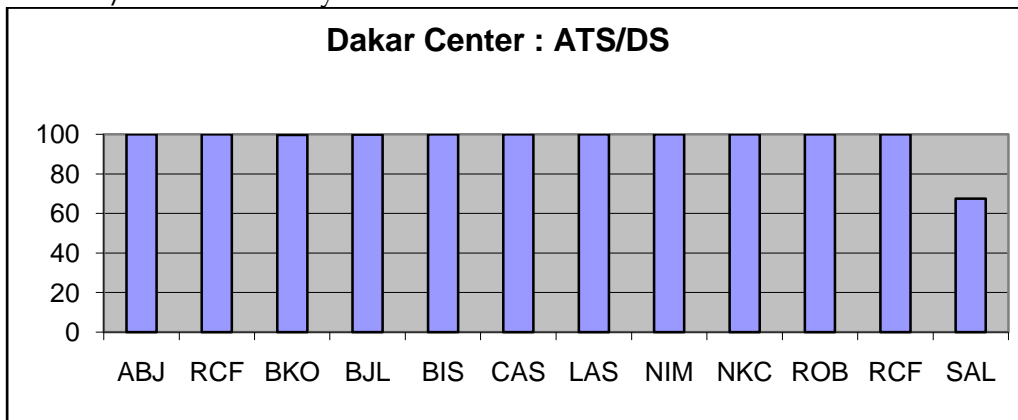
- ✓ For 124 AFI Plan required circuits, in ASECNA area, 118 circuits are implemented for a realization rate of about 95%;
- ✓ About 28 bilateral circuits have been achieved in order to satisfy ATC requirements taking into account the real flow of air traffic and the airspace topology.
- ✓ Most of the 6 remaining non implemented circuits are in the step of technical discussions between the involved parties and will be implemented very soon;

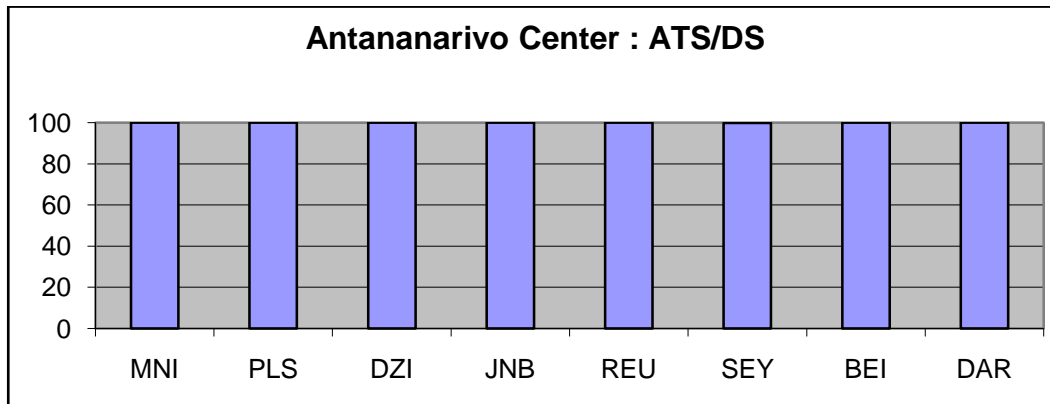
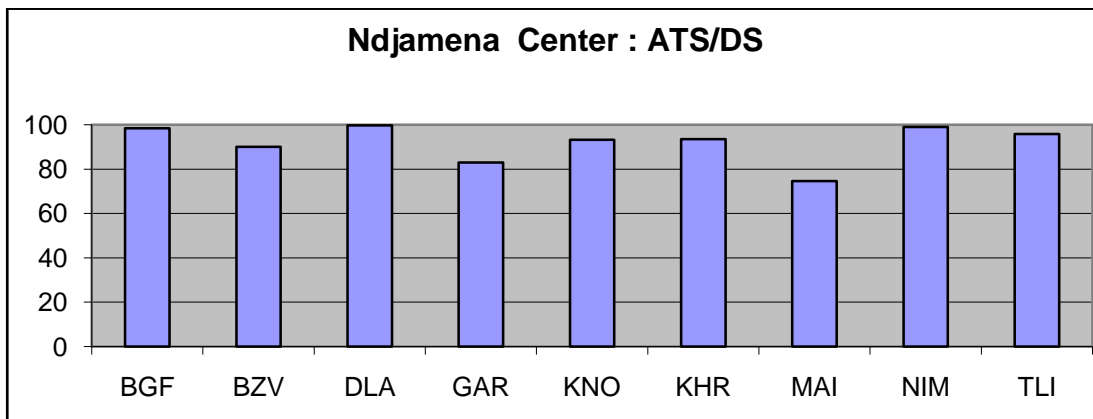
In the other hand, alternative means are provided to ATC so that flights coordination are operated between neighbouring centres.

□ **ATS/DS circuits Performances**

ATS/DS circuits performances evaluation **does not follow any standardization.**

Figure 1 Shows ATS/DS availability evaluation recorded from the ASECNA Main centres





It can be noted that some deficiencies remain and must be cleared out as soon as possible to avoid or increase the risk of non coordinated flight in the area.

□ **Back up facilities**

To ensure the continuity of ATS vocal coordination ASECNA provided his centre with INMARSAT phone and with PSTN line. The list of ATS/DS Backup means in ASECNA Centres is available;

**ASECNA CENTRES PHONE NUMBERS**

| Centre      | SATPHONE         | CCR/CIV/TWR PSTN      |
|-------------|------------------|-----------------------|
| Abidjan     | 00 870 763041714 | 00 (225) 21 27 64 39  |
| Bamako      | 00 870 763041718 | 00 (223) 20 93 58     |
| Bangui      | 00 870 763041722 | 00 (236) 61 33 80     |
| Brazzaville | 00 870 763041726 | 00 (242) 82 01 75     |
| Cotonou     | 00 870 763041730 | 00 229 30 76 35       |
| Dakar       | 00 870 763041734 | 00 (221) 820 07 05    |
| Douala      | 00 870 763041738 | 00 237 342 77 34      |
| Ivato       | 00 870 763041742 | 00 (261) 20 22 581 16 |
| Libreville  | 00 870 763041746 | 00 (241) 73 21 04     |
| Lomé        | 00 870 763041750 | 00 228 226 50 62      |
| Malabo      | 00 870 763041754 | 00 240 9 22 01        |
| N'Djamena   | 00 870 763041758 | 00 (235) 52 42 62     |
| Niamey      | 00 870763041762  | 00 (227) 73 35 86     |
| Nouakchott  | 00 870 763041766 | 00 (222) 29 32 10     |
| Ouagadougou | 00 870 763041770 | 00 (226) 50 31 16 41  |

### 3. CONCLUSION

The meeting is invited to:

- note the realization rate for the ATS/DS circuits implemented in ASECNA area (under its full responsibility), which are a question of vital importance for the air navigation service
- Encourage States/organizations to pursue their efforts to carry out the implementation of the remaining ATS/DS circuits;
- Call for the appropriate ICAO Instruments to find the suitable methodology of measurement of the performances of ATS/DS

**AFI ATS/DS PLAN IMPLEMENTATION STATUS IN ASECNA**

| COUNTRY       | COM CENTER  | REQUIRED CIRCUITS |                                                                                      | IMPLEMENTED CIRCUITS |      | NON IMPLEMENTED CIRCUITS | BILATERAL IMPLEMENTED CIRCUITS |                                       | NEW CIRCUITS TO BE IMPLEMENTED                 |
|---------------|-------------|-------------------|--------------------------------------------------------------------------------------|----------------------|------|--------------------------|--------------------------------|---------------------------------------|------------------------------------------------|
|               |             |                   |                                                                                      |                      |      |                          |                                |                                       |                                                |
| BENIN         | COTONOU     | 3                 | ACCRA - LAGOS - LOME                                                                 | 3                    | 100% |                          | 2                              | NIAMEY- LOME                          | OUAGADOUGOU                                    |
| BURKINA       | OUAGA       | 6                 | ABIDJAN ACCRA BAMAKO BOBO NIAMEY<br><b>NIAMTOUGOU</b>                                | 5                    | 83%  | <b>NIAMTOUGOU</b>        |                                |                                       | LOME-COTONOU                                   |
|               | BOBO        | 4                 | ABIDJAN ACCRA BAMAKO OUAGA                                                           | 4                    | 100% |                          |                                |                                       |                                                |
| CAMEROUN      | DOUALA      | 7                 | BATA BRAZZA KANO LAGOS LIBREVILLE<br>MALABO NDJAMENA                                 | 7                    | 100% |                          | 1                              | YAOUNDE                               | BANGUI                                         |
| CENTRAFRIQUE  | BANGUI      | 3                 | BRAZZA <b>GBADOLITE</b> NDJAMENA                                                     | 2                    | 67%  | <b>GBADOLITE</b>         |                                |                                       | DOUALA                                         |
| COMORES       | MORONI      | 1                 | TANA                                                                                 | 1                    | 100% |                          | 4                              |                                       | DAR ES SALAM-BEIRA-<br>DZAOUZDI-<br>SEYCHELLES |
| CONGO         | BRAZZAVILLE | 10                | ACCRA BANGUI DOUALA KANO<br>KHARTOUM KINSHASA LIBREVILLE<br>LUANDA NDJAMENA SAO TOME | 10                   | 100% |                          |                                | -MALABO                               | BATA                                           |
| COTE D'IVOIRE | ABIDJAN     | 7                 | ACCRA BAMAKO BOBO DAKAR NIAMEY<br>OUAGA CONAKRY                                      | 7                    | 100% |                          | 4                              | BISSAU-LUAN-<br>NOUAKCHOTT-<br>BOUAKE |                                                |
| GABON         | LIBREVILLE  | 8                 | ACCRA BATA BRAZZA DOUALA KANO<br>LAGOS MALABO SAO TOME                               | 8                    | 100% |                          | 2                              | MWENGUE- PORT<br>GENTIL               |                                                |
| GUINEE EQUAT. | MALABO      | 3                 | BATA DOUALA LIBREVILLE                                                               | 3                    | 100% |                          |                                |                                       |                                                |
|               | BATA        | 3                 | DOUALA LIBREVILLE MALABO                                                             | 3                    | 100% |                          |                                |                                       |                                                |
| GUINEE BISSAU | BISSAU      | 3                 | BANJUL CONAKRY DAKAR                                                                 | 3                    | 100% |                          | 1                              | ABIDJAN                               |                                                |
| MADAGASCAR    | IVATO       | 8                 | BEIRA DAR ES SALAM DZAOUZDI<br>JOBURG PLAISANCE MORONI SAINT<br>DENIS SEYCHELLES     | 8                    | 100% |                          | 2                              | MAHAJANGA,<br>TOAMASINA               |                                                |
| MALI          | BAMAKO      | 7                 | ABIDJAN BOBO DAKAR GAO MOPTI<br>OUAGADOUGOU ROBERTS                                  | 7                    | 100% |                          | 2                              | NIAMEY-NOUKCHOTT                      |                                                |
|               | GAO         | 3                 | BAMAKO MOPTI NIAMEY                                                                  | 3                    | 100% |                          |                                |                                       |                                                |
|               | MOPTI       | 2                 | GAO BAMAKO                                                                           | 2                    | 100% |                          |                                |                                       |                                                |

|              |            |            |                                                                                                                                         |            |            |             |           |                                                  |                    |
|--------------|------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-------------|-----------|--------------------------------------------------|--------------------|
| MAURITANIE   | NOUAKCHOTT | 2          | DAKAR NOUADHIBOU                                                                                                                        | 2          | 100%       |             | 4         | BAMAKO-ABIDJAN<br>LAS PALMAS<br>CASABLANCA ALGER |                    |
|              | NOUADHIBOU | 4          | DAKAR LAS PALMAS NOUAKCHOTT<br>DAKHLA                                                                                                   | 3          | 75%        | DAKHLA      |           |                                                  |                    |
| NIGER        | NIAMEY     | 9          | ABIDJAN ACCRA ALGER DAKAR GAO<br>KANO NDJAMENA OUAGA TRIPOLI                                                                            | 9          | 100%       |             | 3         | BAMAKO LAGOS<br>ZINDER                           | LOME-COTONOU-OUAGA |
| SENEGAL      | DAKAR      | 15         | ABIDJAN ALGER BAMAKO BANJUL<br>BISSAU CASA ROBERTSFIELD<br>FREETOWN LAS PALMAS NIAMEY<br>NOUADHIBOU NOUAKCHOTT SAL RECIFE<br>ROCHAMBEAU | 13         | 86%        | ROCHAMBEAU  | 1         | LUANDA                                           |                    |
| TCHAD        | NDJAMENA   | 9          | BANGUI BRAZZA DOUALA GAROUA KANO<br>KHARTOUM MAIDUGURI NIAMEY TRIPOLI                                                                   | 9          | 100%       |             | 2         | ALGER- SAHR                                      |                    |
| TOGO         | LOME       | 3          | ACCRA COTONOU NIAMTOUGOU                                                                                                                | 3          | 100%       |             |           |                                                  | OUAGADOUGOU-NIAMEY |
|              | NIAMTOUGOU | 3          | ACCRA LOME OUAGADOUGOU                                                                                                                  | 2          | 67%        | OUAGADOUGOU |           |                                                  |                    |
| <b>TOTAL</b> |            | <b>124</b> |                                                                                                                                         | <b>118</b> | <b>95%</b> |             | <b>28</b> |                                                  |                    |