INTERNATIONAL CIVIL AVIATION ORGANIZATION   **SAT21-WP/12**

WESTERN AND CENTRAL AFRICAN OFFICE

**Twenty first Meeting on the Improvement of Air Traffic Services over the
South Atlantic (SAT/21)**

(Lisbon, Portugal d'Ivoire, 8-10June 2016)

Agenda Item 3:   *Communications, navigation and surveillance (CNS) (By CNS Working
Group)*

Follow up the implementation of AMHS and AIDC interconnection amongst the SAT ACCs

(Presented by secretariat)

SUMMARY
This working paper presents the current situation on the interconnection of the ATS Message Handling System (AMHS), the interconnection of automated systems between adjacent ACCs, and the goals expected in the short term regarding associated indicators and metrics.

References
• Global Air Navigation Plan (GANP 4th Ed.));   • AFI, EUR & SAM Regional Air Navigation Plans;   .

ICAO Strategic Objectives:	*A - Safety* *C - Environmental Protection and Sustainable Development of Air Transport*

1.   **Background**

1.1   The previous SAT meetings examined the status of implementation of AMHs and AIDC in the involved States of ICAO AFI, EUR and SAM Regions.

1.2   It appears that in the SAM Region, the interconnection of AMHS and AIDC   system has made progress since the approval of the priorities implementation by the SAM Civil Aviation Authorities through the Declaration of Bogotá in the RAAC/13 (Bogotá Colombia 4-6 December 2013).

1.3   In the AFI Region the coordination of the implementation of AMHS is undertaken through the AFI AMHS Implementation Task Force (AFI/AMHS/I/TF) established by APIRG/17 under its Conclusion 17/17: Creation of an AMHS Implementation Task Force. The implementation of AIDC was agreed by APIRG under its Decision 18/38- Planning and implementation of ATN Applications. Furthermore APIRG has recently adopted a project planning and implementation approach for the regional Air Navigation Plan approach that may result in integrated ground ground communication regional projects.

2.   **Discussion**

AMHS interconnection

2.1   Since 2005, the SAM Region started a plan to migrate the Aeronautical Fixed Service Network (AFTN) to AMHS. To date, practically all SAM States count with an AMHS implemented,

2.2   In the AFI Region progress has been noted in the implementation of AMHS.

2.3   The objective of AMHS interconnection is to replace the current AFTN circuits by new AMHS links   that permit the transmission of a greater number of information (ATS data) at a higher speed, through the satellite based networks (AFISNET, CAFSAT and REDDIG II).
Interconnection of AIDC system

2.4   The interconnection of AIDC systems between adjacent ACCs have the objective of reducing the aeronautical incident risks generated by voice coordination activities between ACC centres and, at the same time, improve the planning phases for a more efficient flight control from/to the corresponding Flight Information Regions (FIR).

2.5   Follow-up to the interconnection of AIDC systems is being carried out at the SAM/IG meetings, through which guidelines have been drafted in support of this implementation, as well as missions to States, to be found in the ICAO SAM website, under the electronic documents section.

2.6   Trials have been/are being conducted in the AFI Region

The tables attached summarized AMHS and AIDC capabilities available in the SAT ACCs

2.7   Operational benefits in AMHS and automated systems (radar data and AIDC exchange) interconnection

2.7.1   Successful AMHS and automated systems interconnection, through AIDC will permit a greater supporting data integrity for the application of reduced separation, which directly translates into an increase in flow capacity between sectors or through the FIR limits.

2.7.2   Reduced separation can also be used to offer, with greater frequency, flight levels closer to the optimum; in certain cases, this also translates into a lesser wait en-route and, as a consequence, a greater efficiency. From it, controller workload is reduced. In addition, safety will be increased through the mitigation of incidents caused in operational errors related with flight reporting, coordination and transfer between adjacent FIRs.

3.   **Action by the meeting**

3.1   The Meeting is invited to:

    a) Take note of the information presented; and
    b) Amend/Update the AMHS and AIDC implementation tables
    c) Develop bilateral Plans for the interconnection of AMHS and AIDC systems

- - - - - -