

# INTERNATIONAL CIVIL AVIATION ORGANIZATION

# Sixteenth Meeting on the improvement of Air Traffic Services over the South Atlantic (SAT/16)

Recife, Brazil 04 to 06 May 2011

Agenda Item 3: Communications, Navigation and Surveillance/ Air traffic management (CNS/ATM) systems Development of an Interface Control Document (ICD) for AIDC exchanges in the SAT region

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# **SUMMARY**

This working paper deals with the need for SAT Area Control Centers (ACC) to develop and/or to adopt Interface Control Document (ICD) regarding ATS Inter-Facility Data Communications (AIDC) implementation as stated in SAT15/16 conclusion.

### 1. INTRODUCTION

1.1 ADS-C and CPDLC services have been implemented by the majority of EUR-SAM corridor ACC since 2009.

1.2 As benefits gained from this implementation, it can be noted the automatic and regular ADS position reports from aircraft, visualization by ATC of aircraft trajectories, large reduction of HF voice communications (and HF congestion) and constraints resulting in propagation conditions.

#### 2. DISCUSSIONS

2.1 These benefits have significantly allowed to reduce ATC workload.

2.2 Nevertheless, due to the important traffic in South Atlantic (SAT) region and its continuous growth, ATC-to-ATC coordinations (ATS/DS) are still contributing to ATC workload.

2.3 The large number of ground-to-ground voice coordinations increases the risk of wrong coordinations which are a great concern within SAT region.

2.4 ATC-to-ATC coordination account for a large proportion of large height deviations (LHD) occurring in this region particularly during peak period.

2.5 SAT/15/16 conclusion recommends SAT States to implement ATS Inter-facility Data Communications (AIDC) messages interchange to reduce human errors in coordination operations between adjacent centers.

2.6 AIDC will provide capability to exchange data between ATS units in support of critical ATC function (notification, coordination and transfer). It will also permit to implement automatic communication between ATC systems to improve efficiency and accuracy for ATS providers.

2.7 This implementation will allow thus to increase safety level in SAT area by decreasing ATC workload and then LHD occurrences.

2.8 Therefore AIDC implementation within SAT region needs technical and operational specifications and procedures between ACCs concerned.

2.9 So policy, ATS coordination messages set to be used, errors messages handling, communication and support mechanisms (protocols) need to be defined in order to ensure that inter-facility messages exchange between ACC equipped with automated ATS systems are harmonized to a common standard.

### 3. ACTION BY THE MEETING

- 3.1 The meeting is invited to :
  - a) Agree to the need for SAT region to establish common procedures regarding AIDC implementation in support of critical ATC function;
  - b) Agree to elaborate or/and to adopt an interface control document (ICD) for AIDC developing process and protocols for exchanging data between ACCs in SAT region.