



International Civil Aviation Organization
CAR/SAM Regional Planning and Implementation Group (GREPECAS)
**First Meeting of the Communications, Navigation, and Surveillance / Air
Traffic Management Subgroup (CNS/ATM/SG/1)**
(Lima, Peru, 15-19 March 2010)

Agenda Item 2: Review of Global and CAR/SAM CNS/ATM Developments

ADS-C/CPDLC Operation in the Atlantico ACC

(Presented by Brazil)

Summary

The purpose of this working paper is to present the ADS-C/CPDLC operation in the Atlantico ACC, and to begin discussions on a strategy to increase the number of aircraft and crews qualified for ADS-C/CPDLC operations.

References:

- Report of the SAMIG/4 meeting, and
- Report of the GREPECAS/15 meeting.

1. Background

1.1 At the GREPECAS 15 meeting held in Rio de Janeiro, in October 2008, the Brazilian Administration officially presented the National ATM Operational Concept (CONOPS). This document was developed based on the new edition of the Global Air Navigation Plan for CNS/ATM Systems that resulted from a complete updating of the parameters of the Global ATM Operational Concept.

1.2 Subsequently, the Brazilian CONOPS was presented to the national aeronautical community and, based on the important suggestions received it has now become the main strategic planning reference for the implementation of CNS/ATM systems in the Brazilian Airspace Control System (SISCEAB).

1.3 The main CNS/ATM systems to be implemented in the short and medium term include the ADS-C/CPDLC at the Atlantico ACC (ACC-AO).

2. Analysis

Implementation of ADS-C/CPDLC at the ACC-AO

2.1 The ADS-C functionality is operationally available since 23/10/2008, the main benefit being the fact that equipped aircraft do not need to report their position at compulsory reporting points.

2.2 The CPDLC functionality was implemented on 30/07/2009. Its main benefit is the reduction of controller and pilot workload, thus increasing the capacity of the system.

2.3 Despite the implementation of the new system, the ACC-AO continues providing conventional control and separation, since non-equipped aircraft still use the HF system.

2.4 The main challenge for the Brazilian Administration during the implementation of the new system has been the training of air traffic controllers and aeronautical station operators designated to perform the new function. Initially, the new controllers were certified to operate the ACC-AO using the HF system. Subsequently, there was extensive training on the use of the new tool. Finally, a 30-day transition period was scheduled to adjust to the new operational model.

2.5 In addition to issues concerning the training of air traffic controllers and aeronautical station operators, the use of this new control system relies on the qualified aircraft and crews making the connection to the ADS-C/CPDLC system. Currently, the percentage of aircraft connected to the system is 70% of flights in the EUR/SAM Corridor. In this respect, it is necessary to work together with the airlines in order to increase this percentage with a view to the introduction of new operational improvements, such as the 30 NM longitudinal/lateral separation.

3. **Suggested Action**

3.1 The Meeting is invited to:

- a) review the information contained in this working paper;
- b) analyse means to obtain information on the status of the fleet and crews for ADS-C/CPDLC operations; and
- c) begin studies to define a strategy for increasing the percentage of aircraft/crews qualified for ADS-C/CPDLC operations.

- END -