



Agenda Item 2: Optimization of the SAM airspace

b) Actions to standardize the longitudinal minimum separations between en-route aircraft

REVIEW OF THE LETTER OF OPERATIONAL AGREEMENT BETWEEN BRAZILIAN ACCs AND ACCs IN STATES PROVIDING ATS IN NEIGHBOURING FIRs

(Presented by Brazil)

SUMMARY	
<p>This working paper presents a proposal for the updating of Letters of Operational Agreement or Memoranda of Understanding between Brazilian ACCs and the ACCs responsible for the provision of ATS in neighbouring FIRs, with a view to the implementation of the 20 NM separation in environments without radar surveillance, and of 10 NM at locations with radar surveillance, if necessary, and only for transfers to the Brazilian FIRs.</p>	
REFERENCES:	
<ul style="list-style-type: none">- Report of the SAM ATSRO/5 meeting;- Report of SAM/IG/12, SAM/IG/18 and SAM/IG/19 meetings;- Programme for the optimisation of the ATS route network of the South American Region;- PANS/ATM (Doc 4444); and- Letters of Operational Agreement between the ACCs involved.	
ICAO strategic objectives:	<ul style="list-style-type: none"><i>A - Safety</i><i>B - Air navigation capacity and efficiency</i><i>E - Environmental protection</i>

1 Introduction

1.1 In accordance with Doc 4444 - *Air Traffic Management* (PANS-ATM), Chapter 10 (Coordination), paragraphs 10.1 and 10.2, ATC units should establish procedures for coordination between the control positions of adjacent air traffic service units, with the purpose of defining and applying standard procedures, in addition to specific procedures based on the characteristics of each Flight Information Region.

1.2 In this sense and in addition to the above, every time a new route is implemented that involves the airspaces of the FIRs subject to the procedures agreed upon in an letter of operational agreement (LOA) between the ACCs involved, the LOA should be duly updated in order to meet the requirements of the newly implemented route.

2 Discussion

2.1 Doc 4444 indicates in paragraph 5.4.2.3.3.1 that a 20 NM separation minimum will be applied provided each aircraft uses the same waypoint, when both aircraft are using GNSS and the separation is verified through simultaneous GNSS readings from the aircraft, at frequent intervals to ensure that the separation minimum is not infringed. It is important to highlight that Doc 4444, paragraph 5.4.2.3.1, also establishes that the 20 NM longitudinal separation requires that direct controller-pilot VHF speech communication be maintained while such separation is used.

2.2 The SAM/IG/15 meeting noted that reduction of the longitudinal separation from 10 minutes, or 80 NM, directly to a 20 NM separation in a conventional environment, could have a significant impact on the operational procedures currently applied. The meeting deemed it advisable to analyse a gradual reduction during a first phase, considering a 40 NM longitudinal separation reduction. Accordingly, since May 2015, the letters of agreement are being gradually updated for the application of a 40 NM separation.

2.3 Accordingly, two years after the transition from 80 to 40 NM separation, and taking into account the current VHF communication infrastructure, the proposal is presented for adjustments to be made as necessary to the coordination procedures between the Amazonico and Curitiba ACCs and the Asuncion ACC, Bogota ACC, Cayenne ACC, Georgetown ACC, La Paz ACC, Lima ACC, Maiquetia ACC, Montevideo ACC, Paramaribo ACC and Resistencia ACC, with a view to applying 20 NM separation, if necessary, only at the transfer points to the Brazilian FIRs. Likewise, in airspaces that have radar surveillance, a 10 NM longitudinal separation is proposed.

2.4 Furthermore, the Meeting could take this opportunity to update and include other items that may be deemed necessary in order to guarantee the safety of flights between airspaces covered by the Letters of Agreement or Memoranda of Understanding.

3 Suggested action:

3.1 The Meeting is invited to:

- a) take note of the information provided in this working paper;
- b) update and sign Letters of Agreement and/or Memoranda of Understanding involving Brazilian ACCs and the ACCs responsible for the provision of ATS in the neighbouring FIRs, for the application of the 20 NM separation minimum in airspaces with no radar surveillance; and
- c) update and sign letters of agreement and/or memoranda of understanding involving Brazilian ACCs and the ACCs responsible for the provision of ATS in neighbouring FIRs, for the application of the 10 NM separation minimum in airspaces with radar surveillance.