



- Agenda Item 2: Optimization of the SAM airspace**
- a) **PBN en-routes**
 - b) **PBN in Terminal Areas**
 - c) **PBN proceedings**

**ICAO assistance to encourage the exchange between SAM and CAR adjacent States
with a view to subscribing corresponding Operational Agreements**

(Presented by Venezuela)

SUMMARY	
This working paper aims to request from ICAO Regional Office in Lima and its member States, to provide their good offices to promote necessary contacts in order to finalize operational agreements between SAM and CAR Regions adjacent States.	
REFERENCES:	
- Air Navigation Implementation Plan Period 2017-2019 - Conclusion SAM/IG//15-4: Reduction of the longitudinal separation between aircraft in the SAM airspace	
ICAO Strategic Objectives:	A - <i>Safety</i> B - <i>Air navigation capacity and efficiency</i> D - <i>Economic Development of Air Transport</i>

1. **Introduction**

1.1 During the Fifteenth Workshop/Meeting of the SAM Implementation Group (SAM/IG/15), Conclusion SAM/IG/15-4 was adopted: *Reduction of the longitudinal separation between aircraft in the SAM airspace:*

That, taking into account the operational benefits to be gained from reducing the longitudinal separation of aircraft in the SAM airspace, States:

- a) *investigate the possibility of reducing the longitudinal separation of aircraft at 40 NM between adjacent FIRs using the Mach number technique;*
- b) *their application be included in the Letters of Operational Agreement; and*
- c) *the Secretariat include this implementation in the GREPECAS ATFM Project and its Action Plan.*

1.2 During the SAM/IG/16 meeting, the application of a 40 NM longitudinal separation between aircraft at the same flight level in FIR boundaries, with compliance targets of 50% for 2016, 100% for 2017 and gradually at short and medium term, reducing longitudinal separation to 20 NM (second semester 2018) and subsequently to 10 NM (100% for the second semester 2019), was assessed in accordance with the requirements of ICAO Doc 4444.

1.3 All this is reflected as well in the Air Navigation Implementation Plan Period 2017-2019 and framed in ASBU BO-CCO and BO-COO: *Improve efficiency and flexibility in climb and descent profiles through the application of Continuous Climb Operations (CCO) and Continuous Descent Operations (CDO) 2017-2019.*

1.4 During the SAM/IG/17 Workshop/Meeting, under Agenda item 2, the results obtained regarding PBN harmonization, modernization and implementation at the ICAO/IATA/CANSO meeting for the CAR Region were discussed, highlighting the following: *States and air navigation services providers (ANSPs) of the CAR and SAM Regions agreed to revise the Letters of Operational Agreement (LOAs) by 30 November 2016 in order to introduce the applicable longitudinal separation minimum of 40 NM or 20 NM between transferred air traffic operating in the CAR FIRs and the adjacent SAM FIRs.*

1.5 It may also be mentioned that the SAM/IG/15 meeting also considered that, since longitudinal optimization procedures were established in Doc 4444 PANS ATM, they could be implemented as long as the Letters of Operational Agreement between different adjacent FIRs were reviewed.

2. Discussion

2.1 Venezuela, due to its geographic location, limits to the north with FIRs associated with ICAO CAR Region.

2.2 During SAM/IG meetings, Venezuela has expressed its support for the 40 NM longitudinal reduction proposal for GNSS-equipped aircraft and in this sense, has undertaken some activities with the adjacent States to the south, east and west, namely:

- Operational Agreement with Amazonico FIR;
- Memorandum of Understanding with Barranquilla FIR and Bogota FIR;
- Letter of Operational Agreement with Georgetown (pending for signature).

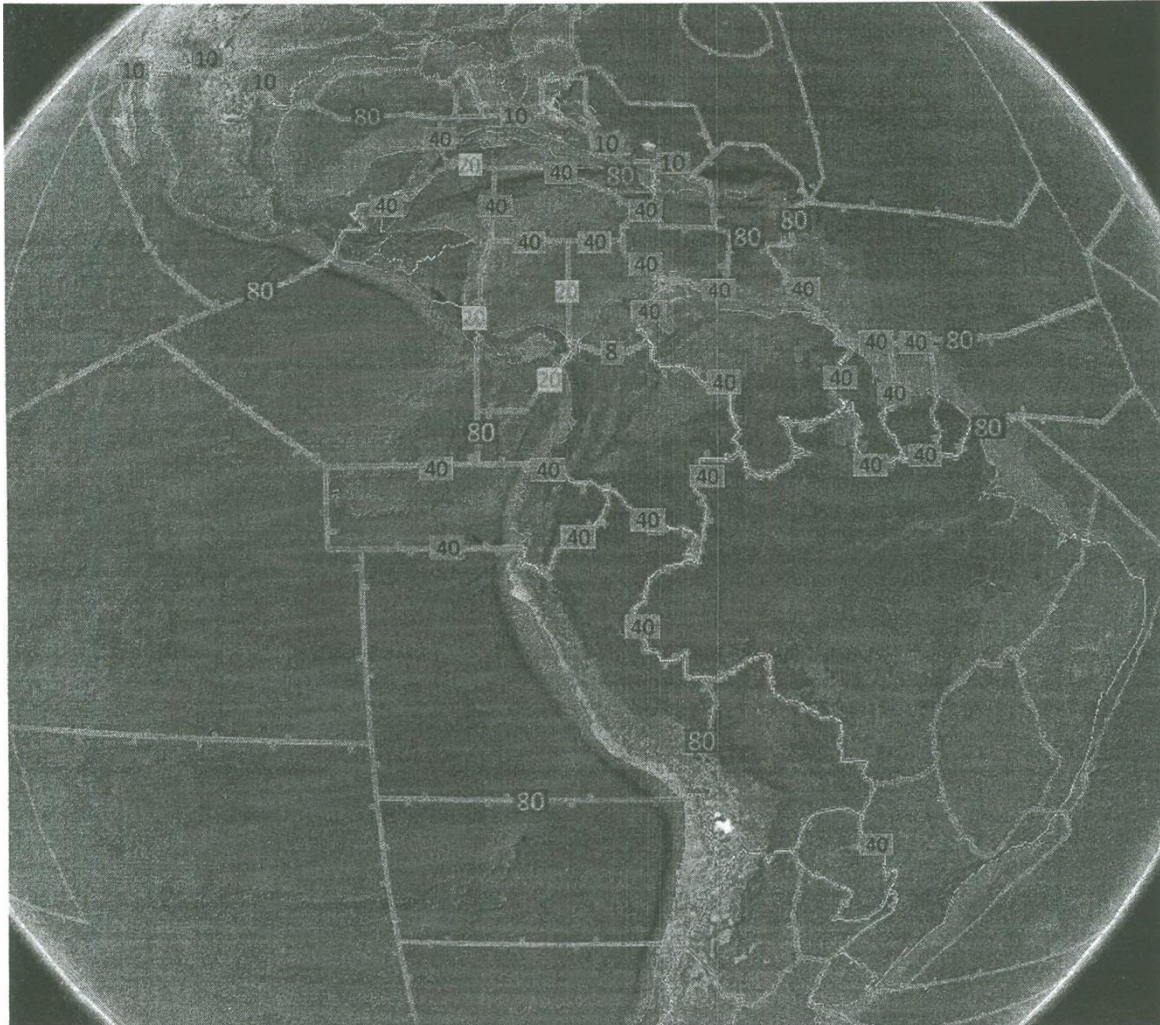
2.3 With them, the compliance of the longitudinal separation has been arranged “IF AND ONLY IF” the traffic has for destination Venezuela. This is due to the lack of agreements with the adjacent FIRs that belong to the CAR Region, to be able to give continuity to the flights that keep going towards the north, with the mentioned separation.

2.4 This situation is happening because there is no a direct channel of communication available with Curaçao and San Juan. Information on focal points to be able to address this issue and convene a meeting as required, is not available. In fact, during SAM/IG/17, as shown in the attached image, it was indicated that, for example, San Juan FIR maintain 80 NM separation.

2.5 If this had changed, Venezuela has no information on this regard. However, this situation could be improved if a direct channel allowing a more expeditious communication with States of the CAR Region would be available.

2.6 In this regard, it is considered that a good strategy would be: To request ICAO Regional Office in Lima to provide appropriate coordination with CAR Office, in order to promote approach among SAM and adjacent CAR States, to be able to arrange required operational agreements and to base the longitudinal separation of 40 NM in the Region, but duly harmonized with adjacent Region FIRs.

2.7 If such a meeting could be convened in the Republic of Colombia, advantage could be taken from their participation to conclude their operational agreement with Curaçao, which would further optimize the process of implementation of the longitudinal separation in our Region.



3. **Suggested action:**

3.1 The Meeting is invited to:

- a) take note of the information provided;
- b) analyze the proposal;
- c) analyze other considerations concerning the Meeting as deemed required.