



ICAO

International Civil Aviation Organization
North American, Central American and Caribbean Office
INFORMATION PAPER

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7/12/16

Second ICAO/IATA/CANSO Performance-Based Navigation (PBN) Harmonization, Modernization and Implementation Meeting for the CAR Region (ICAO/IATA/CANSO/PBN/2)
San Jose, Costa Rica, 7-9 December 2016

Agenda Item 2: Follow-up of Updated Air Traffic Service (ATS) Letters of Agreement (LoAs)

STATUS OF THE OPTIMIZATION AND HARMONIZATION OF THE LONGITUDINAL SEPARATION MINIMA IN THE SAM REGION

(Presented by IATA)

EXECUTIVE SUMMARY	
This Information paper presents the status of the optimization and harmonization of the Longitudinal Separation Minima in the SAM Region (Appendix).	
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Security & Facilitation• Economic Development of Air Transport• Environmental Protection
<i>References:</i>	<ul style="list-style-type: none">• SAMIG/8 Meeting Report

1. Introduction

1.1 The longitudinal separation minima has normally a domino effect on the flight operations, due to the need of coordination between ACCs responsible by ATS in neighboring FIRs. In this sense, it is important to establish a close coordination between CAR and SAM Region, with objective of avoiding the mentioned domino effect.

1.2 The SAMIG/15 Meeting considered that the Optimization of longitudinal separation could be gradual and that it was advisable that this optimization be applied regionally to increase airspace efficiency and capacity.

2. Discussion

2.1 Following the aforementioned guidance provided by SAM/IG/15, the SAM States started a process of updating the corresponding letter of agreements, in order to establish the transitional longitudinal separation minima of 40 NM.

2.2 Many States took advantage of the SAM/IG/18 Meeting to update their Letters of Agreement or to sign a Memorandum of Understanding, with a view to sealing the commitments assumed at the previous SAM/IG meetings regarding the reduction of longitudinal separation. This reduction applies to GNSS-equipped aircraft. In case one or the two aircraft participating in a longitudinal separation lacked GNSS capacity, the separation to be applied to this traffic is 80 NM.

2.3 Although some FIRs, like French Guiana and Atlántico had oceanic separation in most of their FIR, the implementation process had been very positive in the SAM States, although more coordination was still required with adjacent States in the CAR Region. The reported status of implementation with the ACCs of adjacent States is as follows:

2016 86% %	ARG	BOL	BRA	CHI	COL	FGY	ECU	GUY	PAN	PAR	PER	SUR	URU	VEN
	YES	YES	YES	NO* ²	YES	NO* ¹	YES	YES	YES	YES	YES	YES	YES	YES

*¹ French Guiana applies oceanic separations with neighbouring States.

*² Chile has not yet completed the external processes for reducing longitudinal separation with adjacent ACCs of other States.

2.4 One of the means that SAM States have used to expedite the application of 40 NM longitudinal separation minima was the signature of a Memorandum of Understanding, taking into consideration that a letter of agreement is a more detailed document that, in some cases, could take more time to be elaborated and signed.

2.5 In this sense, it is important that all CAR/SAM States expedite the implementation of 40 NM longitudinal separation minima, using, if necessary, Memorandum of Understanding, in order to get a full benefit of this implementation, avoiding the “domino effect”. It is especially important that States on the interface between CAR and SAM Regions take advantage of this meeting to sign either the letter of agreement or Memorandum of Understanding, because a meeting with representatives of the States of CAR and SAM Regions is quite difficult to hold, due to amount of participants and travel expenses.

2.6 It is also important to have a complete control of the status of the implementation, using the appendix A as a model, in order to define the amount of effort that should be invested to have a full harmonization and optimization of the longitudinal separation in the CAR/SAM Regions, both applying 40 and 20 NM separation.

3. Conclusion

3.1 The Meeting is invited to:

- a) Take note of the information provided in this Information paper;
- b) control of the implementation status of the 40 and 20 NM longitudinal separation minima.
- c) Expedite the implementation of the 40 NM longitudinal separation as a transition phase to the 20 NM separation.

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APPENDIX
LONGITUDINAL SEPARATION LEVEL OF IMPLEMENTATION IN THE SAM REGION

ARGENTINA							
ACC	ACC ADJ	Longitudinal separation				Comments	
		40 NM GNSS/DME	Date of implementation	20 NM GNSS/DME	Date of implementation		
CORDOBA	IQUIQUE	OG					
	LA PAZ	YES	01/01/17				
	EZEIZA			YES	13/10/2016		
	MENDOZA			YES	13/10/2016		
	RESISTENCIA			YES	13/10/2016	Some problems with VHF Com.	
RESISTENCIA	ASUNCION	YES	01/01/17				
	LA PAZ	YES	01/01/17				
	CORDOBA			YES	13/10/2016		
	CURITIBA	YES	01/01/17				
	EZEIZA			YES	13/10/2016		
EZEIZA	MONTEVIDEO	YES	01/01/17				
	COMODORO RIVADAVIA			YES	13/10/2016		
	MENDOZA			YES	13/10/2016		
	PUERTO MONTT	OG					
	CORDOBA			YES	13/10/2016		
	RESISTENCIA			YES	13/10/2016		
MENDOZA	MONTEVIDEO	YES	01/01/17	YES	2010	PAPIX, KUKEN and DORBO 20NM	
	EZEIZA			YES	13/10/2016		
	SANTIAGO	OG					
COMODORO RIVADAVIA	CORDOBA			YES	13/10/2016		
	EZEIZA			YES	13/10/2016		
	PUERTO MONTT	OG					
BOLIVIA	BOLIVIA						
	ACC	ACC ADJ	Longitudinal separation				Comments
			40 NM GNSS/DME	Date of Implementation	20 NM GNSS/DME	Date of implementation	
	LA PAZ	AMAZÓNICO	YES	01/01/17			
		ASUNCION	YES	01/01/17			
		CURITIBA	YES	01/01/17			
		CORDOBA	YES	01/01/17			
LIMA		OG					
IQUIQUE		OG					
RESISTENCIA		YES	01/01/17				

BRAZIL						
ACC	ACC ADJ	Longitudinal separation				Comments
		40 NM GNSS/DME	Date of Implementation	20 NM GNSS/DME	Date of implementation	
AMAZÓNICO	BRASILIA	---	---	---	---	10NM
	BOGOTÁ	YES	13/10/16			
	CAYENNE	---	---	---	---	10 Minutes
	CURITIBA	---	---	---	---	10NM
	GEORGETOWN	YES	07/01/16			
	LA PAZ	YES	01/01/17			
	LIMA	YES	31/03/16			COM/SUR required, does not apply, overflights from/to La Paz FIR
	MAIQUETIA	YES	23/10/16			
	PARAMARIBO	YES	13/10/16			
	RECIFE	---	---	---	---	10NM
	ATLANTICO	---	---	---	---	10 Minutes
BRASILIA	AMAZÓNICO	---	---	---	---	10NM
	CURITIBA	---	---	---	---	5NM
	RECIFE	---	---	---	---	5NM
CURITIBA	ASUNCION	YES	Mar/2016			
	AMAZONICO	---	---	---	---	10NM
	BRASILIA	---	---	---	---	5NM
	LA PAZ	YES	01/01/17			
	MONTEVIDEO	YES	01/01/17			
	RECIFE	---	---	---	---	5NM
	RESISTÊNCIA	YES	01/01/17			
ATLÂNTICO	---	---	---	---	10 Minutes	
RECIFE	AMAZÓNICO	---	---	---	---	10NM
	BRASILIA	---	---	---	---	5NM
	CURITIBA	---	---	---	---	5NM
	ATLÂNTICO	---	---	---	---	10 Minutes
ATLÁNTICO	AMAZÓNICO	---	---	---	---	10 Minutes
	CURITIBA	---	---	---	---	VHS Com. problems
	RECIFE	---	---	---	---	
	CAYENNE	---	---	---	---	

CHILE						
ACC	ACC ADJ	Longitudinal separation				Comments
		40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of implementation	
SANTIAGO	IQUIQUE					5NM
	LIMA	OG				
	MENDOZA	OG				
	PUERTO MONTT					5NM
IQUIQUE	CORDOBA	OG				
	LA PAZ	OG				
	LIMA	OG				
PUERTO MONTT	SANTIAGO					5NM
	PUNTA ARENAS					5NM
	EZEIZA	OG				
	COMODORO RIVADAVIA	OG				
PUNTA ARENAS	PUERTO MONTT					5NM
	COMODORO RIVADAVIA	OG				

OMBIA						
ACC	ACC ADJ	Longitudinal separation				Comments
		40 NM GNSS/DME	Date of Implementation	20 NM GNSS/DME	Date of implementation	
BOGOTÁ	AMAZÓNICO	YES	13/10/16			
	CENAMER					No available information
	GUAYAQUIL	YES	13/10/16			Reduced separation of 40 NM is applied. Memorandum of Understanding among ATC service providers signed.
	LIMA	YES	31/03/16			COM SUR required, does not apply overflights
	MAIQUETIA	OG				
	PANAMÁ	YES	Oct/16			
	BARRANQUILLA					No available information
BARRANQUILLA	MAIQUETIA	OG				
	PANAMÁ	YES	Oct/16			
	BOGOTÁ					No available information
	KINGSTON					No available information
	CURAÇAO					No available information

ECUADOR						
ACC	ACC ADJ	Longitudina separationl				Comments
		40 NM GNSS/DME	Date of Implementation	20 NM GNSS/DME	Date of implementation	
GUAYAQUIL	BOGOTÁ	YES	13/10/16			Reduced separation of 40 NM is applied. Memorandum of Understanding among ATC service providers signed.
	LIMA	YES	31/03/16			COM/SUR required, does not apply overflights. Updated with signing of LoA during SAM/IG/18, limitations on overflights is eliminated since 10/11/16.
	CENAMER	NO	---	N/A	---	Oceanic Separation

FRENCH GUIANA						
ACC	ACC ADJ	Longitudinal separation				Comments
		40 NM GNSS/DME	Date of Implementation	20 NM GNSS/DME	Date of implementation	
CAYENNE	AMAZÔNICO	---	---	---	---	10 Minutes
	PARAMARIBO	---	---	---	---	10 Minutes
	PIARCO					No available information

GUYANA						
ACC	ACC ADJ	Longitudinal separation				Comments
		40 NM GNSS/DME	Date of Implementation	20 NM GNSS/DME	Date of implementation	
GEORGETOWN	AMAZONICO	YES				
	PIARCO					No available information

	MAIQUETIA	OG				
	PARAMARIBO	YES				

PANAMÁ						
ACC	ACC ADJ	Longitudinal separation				Comments
		40 NM GNSS/DME	Date of Implementation	20 NM GNSS/DME	Date of implementation	
PANAMÁ	BOGOTÁ	YES	Oct/16			
	BARRANQUILLA	YES	Oct/16			
	CENAMER	OG	Oct/16			

PARAGUAY						
ACC	ACC ADJ	Longitudinal separation				Comments
		40 NM GNSS/DME	Date of Implementation	20 NM GNSS/DME	Date of implementation	
ASUNCION	CURITIBA	YES	Mar/16			
	LA PAZ	YES	01/01/17			
	RESISTÊNCIA	YES	01/01/17			

PERU						
ACC	ACC ADJ	Longitudinal separation				Comments
		40 NM GNSS/DME	Date of Implementation	20 NM GNSS/DME	Date of implementation	
LIMA	AMAZONICO	YES	31/03/16			COM/SUR required, does not apply overflights to/ from La Paz FIR
	BOGOTÁ	YES	31/03/16			COM/SUR required, does not apply overflights
	SANTIAGO	OG				
	IQUIQUE	OG				
	GUAYAQUIL	YES	31/03/16			COM/SUR required, does not apply overflights. With updated LoA signed during SAM/IG/18, overflights limitation is

						eliminated since 10/11/16.
	LA PAZ	OG				

SURINAME

ACC	ACC ADJ	Longitudinal separation				Comments
		40 NM GNSS/DME	Date of Implementation	20 NM GNSS/DME	Date of implementation	
PARAMARIBO	AMAZÓNICO	YES	13/10/16			OG
	GEORGETOWN	YES	29/03/16			Signed
	PIARCO	N/A				Oceanic Separation
	CAYENNE	N/A	---	---	---	Oceanic Separation

URUGUAY

ACC	ACC ADJ	Longitudinal separation				Comments
		40 NM GNSS/DME	Date of Implementation	20 NM GNSS/DME	Date of implementation	
MONTEVIDEO	CURITIBA	YES	01/01/17			
	EZEIZA	YES	01/01/17	YES	2010	PAPIX KUKEN DORBO 20NM
	RESISTENCIA	YES	01/01/17			

VENEZUELA

ACC	ACC ADJ	Longitudinal separation				Comments
		40 NM GNSS/DME	Date of Implementation	20 NM GNSS/DME	Date of implementation	
MAIQUETIA	AMAZONICO	YES	23/10/15			
	BOGOTA	OG				
	BARRANQUILLA	OG				
	PIARCO					Negotiating
	CURAZAO	NO				Curazao does not accept.
	SAN JUAN					Negotiating
	GEORGETOWN	OG				