NACC/WG/5 — WP/19 17/05/17

## Fifth North American, Central American and Caribbean Working Group Meeting (NACC/WG/5) Port of Spain, Trinidad and Tobago, 22-26 May 2017

Agenda Item 3 Implementation on Air Navigation Matters

#### 3.3 ANI/WG Progress on AIM, ATM and CNS

### FOLLOW UP TO THE PBN HARMONIZATION, MODERNIZATION AND IMPLEMENTATION INITIATIVE AND OTHER RELATED AIRSPACE OPTIMIZATION IMPLEMENTATIONS

(Presented by IATA)

EXECUTIVE SUMMARY									
This working paper presents follow up proposals to the implementations on PBN, airspace and other important related subjects in the Region									
Action: The suggested actions are described in the point 6 of this WP									
Strategic	Safety								
Objectives:	Air Navigation Capacity and Efficiency								
	Environmental Protection								
References:	ANI/WG/2 - NE27 & final report								
	ANI/WG/3 – final report								

#### 1. Introduction

- 1.1 The different traffic growth studies show that the increase in demand expected for NAM/CAR/SAM Regions can cause a domino effect, affecting many States and could cause delays and consequential losses to the users and, in addition, a work overload in the ATC units, in the absence of sufficient management units for the capacity and demand balancing.
- 1.2 For this reason it was agreed, in different forums, that the implementation of operational goals (optimization of longitudinal separation and ATS routes) in a coordinated and harmonized manner in the Region, with direct impact on efficiency, capacity and safety improvements was needed.

- 1.3 In this regard and in order to keep the desired harmonization and goals, constant and periodic tracking of the progress, achievements and challenges for stakeholders is required.
- 1.4 The proposed *tracking metrics* not only captures information about the mentioned initiatives, but also provides a general and clear overview of other important implementations for flight operation in the regional airspaces, that we believe should also be part of the coordinated /harmonised implementation.

#### 2. ATS routes optimization

- 2.1 With regard to the benefits estimated for the PfA1 (Proposal for Amendment 1), there are some values that could be estimated:
  - Quantitative
    - ✓ MFT (enroute / city pairs NM reduction),
    - ✓ MCT (operational cost reduction ATC charges)
    - ✓ MTT (flight time reduction)
  - Qualitative:
    - Flight planning flexibility (more options in case of contingencies, CNS, ATC, aircrafts, etc.)
- 2.2 With regard to the quantitative values, it is necessary to have at least the final PfA1 version approved.

#### 3. Approach procedure naming convention changes (Circular 336)

- 3.1 The details described in the ICAO Circular 336 (Area Navigation (RNAV) to Required Navigation Performance (RNP) Instrument Approach Chart Depiction), provides guidance for the civil aviation authorities on the transition from Area Navigation (RNAV) to Required Navigation Performance (RNP) Instrument Approach Chart Depiction, in accordance to the amendment 6 of the volumes I and II from the Doc 8168, Procedures for air navigation services Aircraft operations (PANS OPS).
- 3.2 Although the implementation plan is for the year 2022, we consider of great importance that both States and airspace users have the full picture in advance and the regional vision regarding the implementation of such changes, as well as proposed mitigation actions to achieve a coordinated implementation.
- 3.3 In this sense, the collection of the related information in the table attached as **Appendix A** of this working paper is requested in order to know the status of implementation in the Region.

#### 4. Amendment to the Document 4444 ATC bilingual phraseology

- 4.1 On March 1 2016, the ICAO Air Navigation Commission approved Amendment 7 to the Doc 4444, which includes Amendments 7-A and 7-B of the 15th edition of the PANS-ATM, applicable from November 10<sup>th</sup> 2016.
- 4.2 Due to the importance of standardized ATC phraseology and changes in the Amendment to Doc 4444, it is expected that the Civil Aviation Authorities of the Region will implement appropriate measures to inform airspace users under their responsibility about the changes.
- 4.3 In that sense, it is requested to consider the collection of the related information, in the table attached as **Appendix B** to this working paper, in order to know the status of implementation in the Region.

#### 5. ATS routes optimization

- During the last PBN harmonization, modernization and implementation meeting held in Costa Rica from December 7<sup>th</sup> to 9<sup>th</sup> 2016, the Region showed advances in the optimization of longitudinal separation (80NM to 20NM), however it is of great importance to update the status of the achievements, plans and problems encountered to date.
- 5.2 The initiative seeks to reduce the longitudinal separation specified in letters of agreement, to the minimum required for procedural control, providing more flexibility to ATC and increasing the efficiency of enroute operations.
- 5.3 Similarly, this working paper proposes to capture information regarding procedural and ATS surveillance separation planning, as well as any limitations that may exist.
- 5.4 In this regard, it is requested to consider the collection of related information in the table attached as **Appendix C** of this working paper, in order to know the status of implementation in the Region.

#### 6. Suggested actions

- 6.1 The meeting is invited to:
  - a) Take note of the information provided in this working paper;
  - b) adopt the proposed monitoring methodology;
  - c) evaluate the proposed formats as a base model in case it is necessary to edit fields; and
  - d) fill in the information in Appendix A, B and C to this working paper.

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#### CIR336

Resolution/Task	State 1	State 2	State 3	State 4	State 5	State 6	State 7	State 8	State 9	State 10	State 11	State 12	State 13	Comments
Changes in the naming convention for approach procedures (Circular 336)														
States implementing the changes envisaged in Circular 336, consider the processes for the development of the transition, impact assessment plan, and to publish an AIC on the subject, in coordination with all the stakeholders involved.														

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# **APPENDIX B**

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#### AMENDMENT 7 TO DOC. 4444 ADOPTION AND DISSEMINATION

Resolution/Task	State 1	State 2	State 3	State 4	State 5	State 6	State 7	State 8	State 9	State 10	State 11	State 12	Comments
Amendment 7 to Doc. 4444 has													
been adopted and disseminated													
Notes:													
a) Insert YES or NO in the state													
field accordingly													
b) Insert the regulations of the													
State in which the amendment													
was adopted and the means of													
dissemination of information													
(AIC, NOTAM, Instruction /													
dissemination of information													
to crews / ATC, etc.) in													
COMMENTS.													

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# APPENDIX / APÉNDICE C

# POSITION OF SAM FIRS AND WITH CAR ADJACENT FIRS REGARDING USE OF 40/20 NM GNSS/DME (available only in English)

STATE/ORGANIZATION	Adjacent State/Organizati on	40 NM GNSS/DME Longitudinal	Proposed implementation dates	20 NM GNSS/DME Longitudinal	Proposed implementation dates	Remarks
Trinidad & Tobago (Includes Antigua & Barbuda, Barbados)	United States (San Juan)	TBD	TBD	TBD	TBD	Currently 10Mins MNT  US has advised that there is a current issue regarding the US classification of their airspace that is preventing the use of this type of separation.  US and Trinidad and Tobago will continue discussion on this issue bilaterally.  TJSJ has possible VHF issues at FIR BDY. This is being investigated.

Guyana	implemented	June 30, 2016	TBD	TBD	Currently 10 Mins MNT  Analysis will be conducted over the first six months of use and a decision will be made by June 2017 as to the timeframe to reduce to 20 NM
Suriname	TBD	TBD	TBD	TBD	Currently 10 Mins MNT  Currently there is a VHF communication challenge for T&T at position TRAPP. Solutions to this challenge are being investigated.
Venezuela	TBD	TBD	TBD	TBD	Currently 10 Mins MNT  Meeting set between T\$T and Venezuela to discuss. T&T is ready to implement 40NM GNSS with Venezuela SAFETY ANALYSIS NEEDED

Curacao	San Juan	TBD	TBD	TBD	TBD	Currently 10 Mins MNT
						US has advised that there is a current issue regarding the US classification of their airspace that is preventing the use of this type of separation.
						US and Curacao will continue discussion on this issue bilaterally.
						TJSJ has possible VHF issues at FIR BDY. This is being investigated.
	DR	Agreed but LOA/MOA needed  A319, remain at 80nm by end of 2017 possible 40 NM	TBD	TBD		Currently 10 Mins MNT
	Venezuela	Agreed via telcon to be confirmed	TBD	TBD	TBD	Currently 10 Mins MNT
	Jamaica	Agreed but LOA needed	TBD	TBD	TBD	Currently 10 Mins MNT

	Haiti  Colombia	UG444 remain at 80nm based on Curacao's VHF situation Agreed but LOA needed A319, UG444 remain at 80nm	TBD  DEC 2016	TBD	TBD	Currently 10 Mins MNT Discussions ongoing  Currently 10 Mins MNT
COCESNA (Costa Rica, Honduras, Belize, El Salvador, Nicaragua)	Mexico	Implemented	In effect	TBD	TBD	Challenge to Reduction to 20 is due to required separation between Mexico and Houston
	Cuba	N/A	N/A	Implemented	implemented	Data sharing agreements in effect. 2017 proposed RADAR handoffs
	Jamaica	Implemented	In effect	Discussions		Limitation is VHF at BDY with Jamaica. Request has been made by Jamaica for solution. When this is accomplished, analysis for use of 20nm will be done by Jamaica

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	Panama	Implemented	In effect	Reduce to 20NM in a certain area that include the FIX points.  • UM659 LESIR • UM328 PAPIN • UR773/UA502 POXON • UL655 EGODI • UG440 ISEBA • UA317 BUFEO • UM796 PADUR • UM419 ANSON • UA322 AMUBI • UR505 DURAM  Maintain 40NM the next points: • UA552 FALLA • UA321 PELRA		•
	Colombia	Agreed	TBD 2017	TBD	TBD	LOA being revised.
Dominican Republic	Haiti	LOA signed in Ft. Lauderdale Florida march 2016	Implementation Date TBD	TBD	TBD	Discussions Ongoing
	Curacao	TBD A319, remain at 80nm	TBD	TBD	TBD	
	Miami	Discussion with Miami re procedural contingency				Currently 10 NM Surveillance in use Discussion if required

	 San Juan	Willing to reduce. Procedural.	TBD		Currently 10 Mins MNT
		Discussion with San Juan			US has advised
		(SJ RQS 15 and			that there is a
		20 MINS)			current issue
		20 1411 (5)			regarding the
					US
					classification of
					their airspace
					that is
					preventing the
					use of this type
					of separation.
					Discussions
					ongoing on
					LOA for 10NM
					Separation
					T10
					US and
					Curacao will continue
					discussion on
					this issue
					bilaterally.
					-
					TJSJ has
					possible VHF
					issues at FIR
					BDY. This is
					being investigated.
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Mexico	COCESNA	Already	Northbound
		implemented	traffic from
		(Surveillance)	COCESNA
		(MEX RQS 15	Challenge to
		MINS in	Reduction to 20
		PACIFIC)	is due to
		Discussion about	required
		procedural use of	separation
		40NM with	between Mexico
		GNSS	and Houston
			Radar data
			sharing
			discussions
			ongoing
	Houston		Continental –
		N/A	10 NM miles
			Surveillance
			The proposed
			separation
			standard is
			currently being
			reviewed by
			FAA HQs to
			determine
			applicability in
			ZHU offshore
			airspace.
		N/A	Oceanic 10
			minutes (MNT)
			The proposed
			separation
			standard is
			currently being
			reviewed by
			FAA HQs to
			determine
			applicability in
			ZHU offshore
			airspace.

	Albuquerque  Los Angeles	N/A N/A				Currently Continental – 10NM miles Surveillance  Bilateral Discussions required  Currently 10 nm Surveillance Bilateral Discussions required
	Cuba	TBD	TBD	TBD	TBD	Currently 40 nm (surveillance) Discussion regarding use of 40NM procedural under a letter of agreement
Haiti	Kingston	TBD	TBD	TBD	TBD	10 Mins MNT  Discussions Ongoing
	Cuba	TBD	TBD	TBD	TBD	10 Mins MNT Discussions Ongoing
	Dominican Republic	TBD	TBD	TBD	TBD	10 Mins MNT Discussions Ongoing
	Miami Curacao	TBD  LOA agreement	TBD Operational	TBD	TBD	10 MINS MNT
		in place	from?			
Guyana	Trinidad & Tobago	Agreed	May 31 2016	TBD	TBD	
	Suriname	Agreed	May 31, 2016	TBD	TBD	

	Brazil	Signed	Implemented	TBD	TBD	
	Venezuela	TBD	TBD	TBD	TBD	
Suriname	Guyana					10 Mins MNT
	Brazil	Suriname in favour	TBD	TBD	TBD	Sent draft to Brazil. TELCON on April 7 for discussion
	French Guiana	TBD	TBD	TBD	TBD	10 Mins MNT
	Trinidad and Tobago	Suriname willing, Trinidad and Tobago has challenges with VHF	TBD	TBD	TBD	Currently 10 MIN  Currently there is a VHF communication challenge for T&T at position TRAPP.
Bahamas						Discussions needed with US Separation standards does not apply with US.
Colombia	PANAMA	Agreed  Air traffic flying between the FIRs maintain 20 nm separation	I implemented 2016	As agreed between FIRs	December 2016	

	JAMAICA	Agreed	When?			20nm will depend on establishing communication in the north of the Barranquilla FIR
	CURACAO	Agreed	December 2016	TBD	TBD	
	VENEZUELA	TBD	TBD	TBD	TBD	
Cuba	COCESNA	N/A	N/A	20 NM Implemented	Implemented	Data sharing agreements in effect. 2017 proposed RADAR handoffs
	MEXICO	TBD	TBD	TBD	TBD	Currently 40 nm (surveillance) Discussion regarding use of 40NM procedural under a letter of agreement
	HAITI	TBD	TBD	TBD	TBD	10 Mins MNT Discussions Ongoing

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	JAMAICA	TBD	TBD	TBD	TBD	Currently 40nm overflight based on surveillance, 20nm landing based on surveillance.  Use of GNSS procedural minima to be discussed
Panama	COCESNA	LOA signed October 2016 effective November 2016	Implemented	Reduce to 20NM in a certain area that include the FIX points.  UM659 LESIR  UM328 PAPIN  UR773/UA502 POXON  UL655 EGODI  UG440 ISEBA  UA317 BUFEO  UM796 PADUR  UM419 ANSON  UA322 AMUBI  UR505 DURAM  Maintain 40NM the next points:  UA552 FALLA  UA321 PELRA	WHEN?	
	COLOMBIA	Air traffic flying between the FIRs maintain 20 nm separation	September 2016	As agreed between FIRs	December 2016	

	JAMAICA	Agreed	November 2016 effective 10 December 20161 May 2016	40 NM Separation	TBD	LOA with Kingston signed November 2016, effective 10 December 2016.
United States	TRINIDAD AND TOBAGO	TBD	TBD	TBD	TBD	Currently 10Mins MNT  US has advised that there is a current issue regarding the US classification of their airspace that is preventing the use of this type of separation.  US and Trinidad and Tobago will continue discussion on this issue bilaterally.  TJSJ has possible VHF issues at FIR BDY. This is being investigated.

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Currently 10 Mins MNT

US has advised that there is a current issue regarding the

classification of their airspace

preventing the use of this type of separation.

US

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US and Curacao will continue discussion on this issue bilaterally.

TJSJ has possible VHF issues at FIR BDY. This is being investigated.

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DR	Willing to reduce Procedural				Currently 10 Mins MNT
	Discussion with San Juan				US has advised that there is a current issue regarding the US classification of their airspace that is preventing the use of this type of separation.  US and Curacao will continue discussion on this issue
					TJSJ has possible VHF issues at FIR BDY. This is being investigated.
MEXICO (Reference Above)					
HAITI	TBD	TBD	TBD	TBD	10 MNT

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Jamaica	Curacao	Agreed	TBD	TBD	TBD	Currently 10 Min MNT in use  Discussions on ground to ground communications in progress and LOA revision to be signed soon.  Automated coordination being investigated.
	COCESNA	Implemented EXCEPTION: UM782 10 MIN MNT	In effect	Discussions	TBD	Limitation is VHF at BDY with Jamaica. Request has been made by Jamaica for solution. When this is accomplished, analysis for use of 20nm will be done by Jamaica
	PANAMA	agreed	10 Dec 2016	TBD	TBD	
	COLOMBIA	Implemented	In use	TBD	TBD	
	HAITI	TBD	TBD	TBD	TBD	

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CUBA	TBD	TBD	TBD	TBD	Currently 40nm overflight based on surveillance, 20nm landing based on surveillance.
					Use of GNSS procedural minima to be discussed

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		A	ARGENTINA			
ACC	ACC ADJ	40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of Implementation	Comments
	IQUIQUE	OG				
	LA PAZ	YES	01/01/17			
CORDOBA	EZEIZA			YES	13/10/2016	
CORDODA	MENDOZA			YES	13/10/2016	
	RESISTENCIA			YES	13/10/2016	VHF Com. Constrains
	ASUNCION	YES	01/01/17			
	LA PAZ	YES	01/01/17			
P E G I G E E E E E E E E E E E E E E E E	CORDOBA			YES	13/10/2016	
RESISTENCIA	CURITIBA	YES	01/01/17			
	EZEIZA			YES	13/10/2016	
	MONTEVIDEO	YES	01/01/17			
	COMODORO RIVADAVIA			YES	13/10/2016	
	MENDOZA			YES	13/10/2016	
	PUERTO MONTT	OG				
EZEIZA	CORDOBA			YES	13/10/2016	
	RESISTENCIA			YES	13/10/2016	
	MONTEVIDEO	YES	01/01/17	YES	2010	PAPIX, KUKEN and DORBO 20NM
	EZEIZA			YES	13/10/2016	
MENDOZA	SANTIAGO	OG				
	CORDOBA			YES	13/10/2016	
	EZEIZA			YES	13/10/2016	
COMODORO RIVADAVIA	PUNTA ARENAS	OG				
	PUERTO MONTT	OG				

BOLIVIA							
			Longitudina				
ACC	ACC ADJ	40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of Implementation	Comments	
	AMAZÓNICO	YES	01/01/17				
	ASUNCION	YES	01/01/17				
	CURITIBA	YES	01/01/17				
LA PAZ	CORDOBA	YES	01/01/17				
	LIMA	OG					
	IQUIQUE	OG					
	RESISTENCIA	YES	01/01/17			_	

	BRAZIL							
		Longitudinal separation						
ACC	ACC ADJ	40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of Implementation	Comments		
	BRASILIA					10NM		
	BOGOTÁ	YES	13/10/16					
	CAYENNE					10 Minutes		
	CURITIBA					10NM		
	GEORGETOWN	YES	07/01/16					
AMAZÓNICO	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		
	AMAZÔNICO					10NM		
BRASILIA	CURITIBA					5NM		
	RECIFE					5NM		
CURITIBA	ASUNCION	YES	Mar/2016					
CUMITIDA	AMAZONICO					10NM		

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	BRASILIA			 	5NM
	LA PAZ	YES	01/01/17		
	MONTEVIDEO	YES	01/01/17		
	RECIFE			 	5NM
	RESISTÊNCIA	YES	01/01/17		
	ATLÂNTICO			 	10 Minutes
	AMAZÔNICO			 	10NM
RECIFE	BRASÍLIA			 	5NM
KECIFE	CURITIBA			 	5NM
	ATLÂNTICO			 	10 Minutes
	AMAZÔNICO			 	10 Minutes
ATLÁNTICO	CURITIBA			 	VHFCom.
	RECIFE			 	problems
	CAYENNE			 	

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

		C	OLOMBIA			
ACC	ACC ADJ	40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of Implementation	Comments
	AMAZÔNICO	YES	13/10/16			
	CENAMER	NO				80 NM due to VHF/HF Comunications Constrains
BOGOTÁ	GUAYAQUIL	YES	13/10/16 31/03/16			Reduced separation of 40 NM is applied. Memorandum of Understanding among ATC service providers signed. COM SUR
						required, does not apply overflights
	MAIQUETIA	OG				
	PANAMÁ	YES	Oct/16			
	BARRANQUILLA	YES				
	MAIQUETIA	OG				
	PANAMÁ	YES	Oct/16			
BARRANQUILLA	BOGOTÁ	YES				
	KINGSTON	YES	30/Ago/2013			
	CURAÇAO					No available information

		F	ECUADOR			
			Longitudina	separation	1	
ACC	ACC ADJ	40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of Implementation	Comments
GUAYAQUIL	BOGOTÁ	YES	31/03/16			Reduced separation of 40 NM is applied. Memorandum of Understanding among ATC service providers signed.  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							
			Longitudinal separation				
ACC	ACC ADJ	40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of Implementation	Comments	
CAYENNE	AMAZÔNICO					10 Minutes	
CATENNE	PARAMARIBO					10 Minutes	
	PIARCO					10 Minutes	

	GUYANA							
			Longitudinal separation					
ACC	ACC ADJ	40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of Implementation	Comments		
	AMAZONICO	YES	7/Jan/2016					
GEORGETOWN	PIARCO	YES	30/Jun/2016					
	MAIQUETIA	YES	30/01/2017					
	PARAMARIBO	YES	31/May/2016			_		

	PANAMÁ								
			Longitudinal separation						
ACC	ACC ADJ	40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of Implementation	Comments			
	BOGOTÁ	YES	Oct/16						
	BARRANQUILLA	YES	Oct/16						
PANAMÁ	CENAMER	YES	18/Oct/2012	OG	TBD	20NM under consideration in Panama			
	KINGSTON	YES	10/Dec /2016						

		PA	RAGUAY			
ACC	ACC ADJ	40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of Implementation	Comments
	CURITIBA	YES	Mar/16			
ASUNCION	LA PAZ	YES	01/01/17			
	RESISTÊNCIA	YES	01/01/17			

			PERU			
			Longitudinal	separatio	n	
ACC	ACC ADJ	40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of Implementation	Comments
	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				
LIMA	GUAYAQUIL	YES	31/03/16			COM/SUR required, does not apply overflights. LoA signed during SAM/IG/18, overflights limitation is eliminated since 10/11/16.
	LA PAZ	OG				

	SURINAME								
			Longitudinal separation						
ACC	ACC ADJ	40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of Implementation	Comments			
	AMAZÓNICO	YES	13/10/16			Signed			
	GEORGETOWN	YES	31/05/16			Signed			
PARAMARIBO	PIARCO	N/A				Oceanic			
TAKAWAKIDO						Separation			
	CAYENNE	N/A				Oceanic			
						Separation			

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

		VEN	NEZUELA				
			Longitudinal separation				
ACC	ACC ADJ	40 NM GNSS/ DME	Date of Implementation	20 NM GNSS/ DME	Date of Implementation	Comments	
	AMAZONICO	YES	23/10/15				
	BOGOTA	OG					
MAIQUETIA	BARRANQUILLA	OG					
MAIQUETIA	PIARCO					Negotiating	
	CURAZAO	NO				Curazao does	
						not accept.	
	SAN JUAN	NO					
	GEORGETOWN	YES	30/01/2017				