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

INFORMATION PAPER

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Sixth Meeting of the North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/06)

Nassau, Bahamas, 10-12 May 2016

Agenda Item 4: Accountability Report of the ICAO NACC No Country Left Behind (NCLB) Strategy
4.2 Regional Air Navigation/Safety Developments and Achievements
4.2.4 Report of the NAM/CAR Air Navigation Implementation Working Group (NAM/CAR ANI/WG)

OPTIMIZATION AND HARMONIZATION OF LONGITUDINAL SEPARATION MINIMA IN THE NAM/CAR/SAM

(Presented by IATA)

EXECUTIVE SUMMARY	
This information paper presents an update on the longitudinal separation optimization implementation and harmonization progress of the NAM/CAR/SAM regions.	
Strategic Objectives:	• Safety • Air Navigation Capacity and Efficiency • Economic Development of Air Transport • Environmental Protection
References:	• ANI/WG/2 - WP27 & meeting report • AN & FS/2 - WP/15 & meeting report • SAM/IG/15 – WP23 & meeting report • RAAC/14 – WP21 & meeting report • ANI/WG/3 – meeting report

1. Introduction

1.1 During the year 2015 IATA presented at several ICAO working groups and meetings, the distinct criteria and longitudinal separation used across boundaries and different FIRs. This issue was identified as a legacy of old separations techniques used when VHF communication was not available in majority of the regional controlled airspace.

1.2 This excessive longitudinal separation criterion was considered as a significant roadblock to fulfil all expected benefits from the ASBU methodology, PBN implementation and different CNS technologies solutions already deployed in the NAM/CAR/SAM regions.

1.3 As a result of the deliberations referred in 1.1, it was agreed by States and ANSPs to reduce the current 80 NM longitudinal separation between FIRs to 20 NM by 2017, with an intermediate step to reduce to 40NM by the end of 2016.

2 Current situation

2.1 During last March, ICAO, IATA and CANSO jointly organized the Performance-Based Navigation (PBN) Harmonization, Modernization and Implementation meeting for the Caribbean (CAR) Region which took place in Fort Lauderdale - United States, where the optimum and minima separation concept was discussed according to the ICAO Doc.4444 and Doc. 9426.

2.2 Both documents supported the principle that enables ANSPs to provide the horizontal (longitudinal) separation according to the quality of the information that the ATCs have available (Doc 9426).

2.3 As a result of this meeting, all states in attendance agreed that the region could embrace this concept and update the airspace CONOPS in order to move from longitudinal separation based on time (10 minutes or approximately 80NM) to the longitudinal separation based on DME and/or GNSS distance (where applicable[1]).

2.4 It is important to highlight that there is no need for further investments in equipment or systems, the only requirement to reduce the separation from 80 to 20 NM is to update the existing Letter of Agreement (LOA) between States.

2.5 During the meeting, there were ANSPs signing the LoAs (4 LoAs) with the neighbours implementing 40NM minima separation and some others even 20NM.

2.6 This graphic provides a pictorial representation of the current situation regarding the adoption of the concept of the regions.

Green: States responsible for of the UTA/FIR that have accepted the concept and **have no challenges** to implement the optimized longitudinal separation.

Brown[2]: States responsible for the UTA/FIR that have accepted the concept but **have challenges** to implement the optimized longitudinal separation.

[1] The only additional CNS component required by the ICAO Doc.4444 to use 20NM longitudinal separation is direct VHF controller to pilot communication.

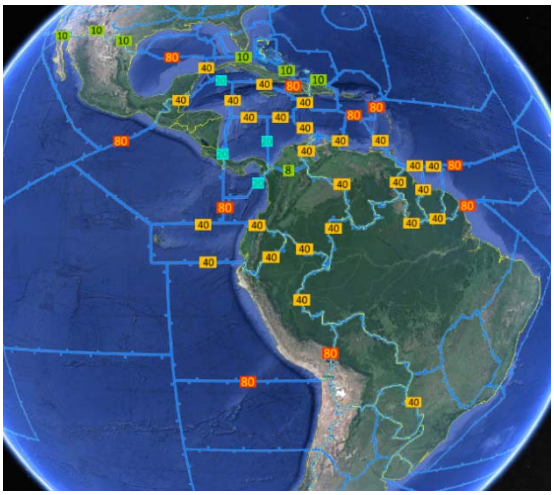
[2] US has advised that there is an issue relate to the US airspace classification which is preventing the adoption of the proposed optimized longitudinal separation. This subject is currently being reviewed by FAA to determine its applicability in ZHU offshore airspace.

3 Longitudinal separation across boundaries and different FIRs

3.1 Before the meeting PBN Meeting

Red: 80NM
Yellow: 40NM
Green: 10NM or less

3.2 Projected result by December 2016



Red: 80NM
Yellow: 40NM
Sky blue: 20NM
Green: 10NM or less

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