



Agenda Item 2:

Air Navigation Matters

2.1 Implementation of the NAM/CAR Regional Performance-Based Air Navigation Implementation Plan (NAM/CAR RPBANIP)

- **Optimization and modernization of the communication infrastructure**

EMPLOYMENT OF AN AUGMENTATION SYSTEM IN THE E/CAR REGION

(Presented by Barbados)

SUMMARY	
This paper seeks to stimulate Regional interest in the implementation of PBN Programmes, to encourage the meeting to establish a committee to determine the best augmentation solution for the E/CAR Region and make recommendations for implementation.	
References:	
• ICAO State Letter Ref: NS2-35 — EMX1057 dated 29 October 2009 • ICAO State Letter Ref: TC 9/1.692 (03/902) dated 21 April 2010	
Strategic Objectives	<i>This working paper is related to Strategic Objectives A – Safety and D – Efficiency.</i>

1. Introduction

1.1 The E/CAR/WG/22 Meeting in 1998 compiled a Regional CNS/ATM Implementation Plan which had as one of its core tenets, the implementation of Non-Precision RNAV/RNP (PBN) Approaches based on Receiver Autonomous Integrity Monitoring (RAIM) (ABAS). Indeed the plan never contained the long-term implementation of any augmentation system for the Region.

1.2 ICAO in Technical Cooperation Project RLA/09/801 “*Performance based air navigation planning and implementation in the CAR Region*” aims to mobilize Regional States into some activity towards the attainment of CNS/ATM goals.

1.3 ICAO, also in Regional Technical Cooperation Project RLA/03/902 – “*Transition to GNSS in the CAR/SAM Regions — Augmentation Solutions for the Caribbean, Central and South America (SACCSA)*”, has invited States to participate in the establishment of an augmentation solution for the CAR/SAM Regions.

1.4 Regional Technical Cooperation Project RLA/03/902 is complimentary to Technical Cooperation Project RLA/09/801 and in this regard should be incorporated into Technical Cooperation Project RLA/09/801.

2. Discussion

2.1 There is no need for the E/CAR Region to try to re-invent the wheel in this matter. Plenty information is available on the SBAS trials conducted in the SAM Region that should be sourced. Additional information on the functioning of the San Juan Space Based Augmentation system should be acquired to inform the study and influence any decision. There may also be a need for definitive information on the E/CAR sub-region.

3. Recommendation

3.1 Both RLA/09/801 and RLA/03/902 have been forwarded to States for participation. In this regard the meeting must be mindful of the positions of States in any decision made on participation in these two projects. However the following is recommended:

- The E/CAR/WG/32 Meeting should establish a committee lead by Trinidad and Tobago as operators of the FIR to address SBAS vs. GBAS in the E/CAR Region.
- The committee should work with ICAO and States on ICAO Technical Cooperation Project RLA/09/801 and ICAO Regional Technical Cooperation Project RLA/03/902 to inform on the augmentation solution for the E/CAR Region and make the appropriate recommendation.

4. Suggested Action

4.1 The Meeting is required to:

- a) note the contents of this paper; and
- b) consider the recommendation contained herein.