AO/TF/5/ATFM/TF/7/CIIFRA/9 — WP/03 11/02/25

Fifth Meeting of the North American, Central American and Caribbean Working Group (NACC/WG)
Airspace Optimization Task Force, Seventh Meeting of the Air Traffic Flow Management
Implementation Task Force and Ninth Meeting of the CANSO IATA ICAO Free Route Airspace Team
(AO/TF/5/ATFM/TF/7/CIIFRA/9)

Orlando, United States, 03 to 07 March 2025

Agenda Item 4: ICAO NACC/WG Airspace Optimization (AO/TF) Updates

# UPDATE ON AIRSPACE OPTIMIZATION CONCEPT DOCUMENT AND FREE ROUTE AIRSPACE (FRA) IMPLEMENTATION

(Presented by the AO Task Force Rapporteur)

EXECUTIVE SUMMARY	
The paper provides updates on the Caribbean (CAR) Airspace Optimization Concept Document and outlines the progress in Free Route Airspace (FRA) implementation.	
Action:	Approve the document and provide guidance for further FRA integration.
Strategic Objectives:	<ul><li>Safety</li><li>Air Navigation Capacity and Efficiency</li></ul>
References:	<ul> <li>ICAO Doc 9992: Manual on Dynamic Airspace Management</li> <li>GANP (Global Air Navigation Plan) Aviation System Block Upgrade (ASBU) Block 0 &amp; 1 – FRTO (Free Route Operations).</li> <li>Havana Meeting Summary of Discussions: Conclusion AO/TF/4/ATFM/TF/6/CIIFRA/8/3</li> </ul>

#### 1. Introduction

1.1 In response to evolving operational demands and the need for greater efficiency, this working paper outlines the progress made in developing the CAR Airspace Optimization Concept Document and advancing FRA implementation. These efforts are essential for improving Air Traffic Management (ATM) within the NAM/CAR Regions.

- 1.2 The AO Task Force has focused on addressing airspace constraints and achieving seamless cross-border operations, emphasizing collaboration among stakeholders to deliver tangible improvements in safety and efficiency. This aligns with ICAO's strategic objectives and the Global Air Navigation Plan (GANP).
- 1.3 The progress detailed herein highlights the importance of a harmonized approach to airspace management, ensuring alignment with international best practices and fostering sustainable growth within the aviation sector.

#### 2. Analysis

## 2.1 CAR Airspace Optimization Concept Document

- 2.1.1 The CAR Airspace Optimization Concept Document serves as a strategic framework for enhancing airspace utilization in the region. Key updates include:
  - Identification of major airspace bottlenecks and proposed solutions.
  - Collaboration with Air Navigation Services Providers (ANSPs) and airlines to ensure stakeholder alignment.
  - Integration of Performance-Based Navigation (PBN) procedures to optimize route structures.
- 2.1.2 Challenges remain in harmonizing airspace optimization efforts across Flight Information Region (FIR) boundaries, necessitating stronger coordination mechanisms and resource allocation.

## 2.2 **Progress in FRA Implementation**

- 2.2.1 FRA implementation has achieved several milestones:
  - Preliminary FRA operational trials in designated airspaces.
  - Enhanced data-sharing protocols among ANSPs to support dynamic airspace management.
  - Increased use of automation tools for flight planning and conflict resolution.
- 2.2.2 Despite these advances, challenges persist in ensuring technical interoperability and regulatory alignment among states.

## 2.3 Alignment with Strategic Objectives

2.3.1 These initiatives directly support ICAO's Safety and Air Navigation Capacity and Efficiency objectives. By adopting FRA and optimizing airspace, the region contributes to achieving GANP ASBU Block 0 and 1 targets.

2.3.2 Stakeholder collaboration remains critical, as coordinated efforts are necessary to overcome technical and operational challenges.

#### 3. Conclusions and Recommendations

- 3.1 The following actions are recommended:
  - a) approve the CAR Airspace Optimization Concept Document and FRA implementation updates;
  - b) facilitate additional workshops and training sessions for stakeholders to address gaps in technical knowledge and interoperability; and
  - c) prioritize investments in automation and data-sharing infrastructure to support dynamic airspace management.
- 3.2 These actions will ensure continued progress toward achieving a seamless and efficient airspace structure across the NAM/CAR Regions.

# 4. Suggested Actions

- 4.1 The Meeting is invited to:
  - a) review and approve the updates provided in this paper;
  - b) endorse the recommendations outlined in Section 3; and
  - c) suggest any additional actions necessary to further FRA integration and airspace optimization.