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

#### WORKING PAPER

AO/TF/4/ATFM/TF/6/CIIFRA/8 — WP/09 12/09/24

Fourth Meeting of the North American, Central American and Caribbean Working Group (NACC/WG) Airspace Optimization Task Force (AO/TF/4), Sixth Meeting of the NACC/WG Air Traffic Flow Management Implementation Task Force (ATFM/TF/6) and Eight Meeting of the CANSO IATA ICAO Free Route Airspace (CIIFRA/8) Team (AO/TF/4/ATFM/TF/6/CIIFRA/8)

Havana, Cuba, 23 to 27 September 2024

Agenda Item 5: Other Business

## FIR COORDINATES IN THE NAM/CAR REGIONS

(Presented by the Secretariat)

#### **EXECUTIVE SUMMARY**

The ICAO CAR and NAM regions must convene to verify and confirm the current Flight Information Region (FIR) boundary coordinates. These meeting is crucial to ensuring that the FIR data in our database is accurate and up to date. The existing data needs verification to enhance airspace management, safety, and efficiency across both regions. This paper outlines the importance of this task and provides actionable steps for achieving these objectives.

Action:	The immediate action is to convene a regional meeting involving all relevant stakeholders from the CAR and NAM regions to verify and update FIR boundary coordinates. This step is necessary to synchronize data across systems and ensure accurate boundary representation in all regional air traffic management systems.
Strategic	Safety
Objectives:	Air Navigation Capacity and Efficiency
	Environmental Protection
References:	ICAO Doc 9750 - Global Air Navigation Plan
	ICAO Annex 11 - Air Traffic Services
	• ICAO Doc 4444 - Procedures for Air Navigation Services (PANS-ATM)

## 1. Introduction

- 1.1 Accurate and current FIR boundary coordinates are critical for maintaining efficient and safe airspace operations.
- 1.2 The boundaries define the areas of responsibility for air traffic control and ensure clarity in cross-border operations.
- 1.3 Recent developments in the CAR and NAM regions, including airspace optimization initiatives, have highlighted discrepancies in FIR boundary data, making this meeting a necessary step to synchronize and confirm these coordinates.

## 2. Analysis

- 2.1 The FIR boundaries between the CAR and NAM regions affect multiple areas of air traffic management, including communication, coordination, and air traffic flow management.
- 2.2 Discrepancies in coordinates can lead to inefficiencies, miscommunication, and potential safety hazards.
- 2.3 With initiatives like Free Route Airspace (FRA) and airspace optimization ongoing in both regions, the verification of boundary data is critical for achieving harmonized airspace operations.
- 2.4 Several FIRs, including those covering large portions of oceanic airspace, require particularly close examination due to the complexities of managing these regions.

#### 3. Conclusions and Recommendations

- 3.1 Verifying and confirming FIR boundary coordinates is essential to enhance the safety, efficiency, and effectiveness of air traffic management in the CAR and NAM regions.
- 3.2 Without this critical update, discrepancies could persist, leading to operational challenges and potential safety risks.
- 3.3 A dedicated meeting with the appropriate stakeholders from both regions is necessary to resolve these issues and ensure harmonized data across all systems.
- 3.4 Organize a Regional Meetings: A special meeting with representatives from both the CAR and NAM regions should be scheduled to discuss and confirm the FIR boundary coordinates.
- 3.5 Involve Key Stakeholders: Ensure participation from Air Navigation Service Providers (ANSPs), ICAO regional offices, and relevant aviation authorities to achieve consensus on the boundary coordinates.

- 3.6 Update ICAO Database: Once confirmed, the updated coordinates should be shared with ICAO for integration into the global air navigation database.
- 3.7 Establish a Review Cycle: Implement a regular review cycle to ensure FIR boundary data remains current and aligned with regional airspace optimization efforts.

### 4. Suggested actions

- 4.1 The Meeting is invited to:
  - a) set dates for the meeting will be selected for the FIR boundary discussion, ensuring the participation of all relevant parties;
  - b) engage with specialists in FIR boundary data to assist with the verification and confirmation process;
  - c) form a dedicated working group or similar group to prepare the necessary documentation and analysis prior to the meeting;
  - d) after verification, submit a formal report to ICAO to ensure the updated FIR coordinates are reflected in all relevant databases;
  - e) support the recommendations included in Section 3; and
  - f) suggest any other action deemed necessary.