



**Twenty-first Meeting of the CAR/SAM Regional Planning and Implementation Group
 (GREPECAS/21)**

Santo Domingo, Dominican Republic, 15 to 17 November 2023

Agenda Item 3: Global and Regional Developments
3.3 CAR/SAM Air Navigation Services (ANS) Implementation Level

**COLLABORATIVE DECISION MAKING (CDM) FOR AIR TRAFFIC FLOW MANAGEMENT
 IN CENTRAL AMERICA**

(Presented by Belize, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua)

EXECUTIVE SUMMARY

This Working Paper presents the implementation by the Central American States and the Central American Corporation of Air Navigation Services (COCESNA) of a Collaborative Decision Making (CDM) process with the purpose of maintaining operational safety and efficiency in the provision of Air Traffic Service in the region.

Action:	Suggested Actions are included in Section 6.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"> • Safety • Air Navigation Capacity and Efficiency
<i>References:</i>	<ul style="list-style-type: none"> • Doc 4444 - PANS-ATM • Doc 9971 • Annex 11

1. Introduction

1.1 The recovery of the number of pre-pandemic air traffic operations in the region has been completed and surpassed. In September 2023, Central America's upper airspace reached 110.33% of the number of flights recorded in that same period in 2019 and 113.51% of what has been reported in 2022.

1.2 With the objective of maintaining operational safety and efficiency in the provision of Air Traffic Service in Central America, the Central American Corporation for Air Navigation Services (COCESNA) has implemented with its Member States a Collaborative Decision Making (CDM) process.

2. Collaborative Decision Making (CDM)

2.1 CDM is a component of Air Traffic Flow Management (ATFM) established to improve the operational efficiency of air transport through data exchange. Service providers (ANSPs), aircraft operators and/or airport operators work together to identify solutions to problems affecting air traffic flow.

2.2 CDM is a harmonized approach that allows Air Navigation Service Providers (ANSPs) and stakeholders to meet regularly remotely, learn from each other, share information and operational preferences, develop common understanding, establish procedures, develop tools and thereby achieve greater aviation system efficiency.

3. Benefits of CDM

3.1 Through information sharing and the various web conferences, stakeholders can benefit from tangible and measurable operational cost savings, such as:

- Reduced waiting in the air at border points due to the availability of flight plan data, improved planning and enhanced situational awareness.
- More accurate Traffic Management Measures (TMM) due to a better picture of demand and capacity forecasts.
- Reduced departure delays during an extended outage of a major airfield in the region due to options developed during CDM conferences.
- Fuel savings due to communication of new shorter routes available in the region between key city pairs.
- Rapid communication of the impact of volcanic ash events.
- Managing the impact of major hurricanes; etc.

4. CDM Implementation

4.1 The following activities have been carried out to implement collaborative decision making in Central America:

- Identified information resources and data exchange.
- Developed and documented regional procedures including the definition of roles and responsibilities.
- Designated representatives from Member States to participate in the CDM.
- Provided CDM training to representatives.

4.2 On 6 September 2023, CDM began in Central America, with the participation of experts from the ANSPs of Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and COCESNA. The information collected is also used to exchange information with other regional initiatives such as CADENA (CANSO ATFM Data Exchange Network for America).

4.3 The next step for CDM in Central America is to involve representatives of airlines with major presence in the Central American region.

5. Conclusions

5.1 The behavior of air traffic flow experienced by Central America is higher than that experienced in 2019.

5.2 With the objective of maintaining operational safety and efficiency in the provision of air traffic service in Central America, the Central American Corporation for Air Navigation Services (COCESNA) has implemented a Collaborative Decision Making (CDM) process with its Member States.

6. Suggested Actions

6.1 The meeting is invited to:

- a) take note of the information presented; and
- b) support the process of Collaborative Decision Making in Central America with the objective of maintaining safety and efficiency in the provision of air traffic service in the region.