



ICAO

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

NACC/WG/11— WP/25
21/09/26

Eleventh Meeting of the North American, Central American and the Caribbean Working Group (NACC/WG/11)

Guatemala City, Guatemala, September 21-25, 2026

Agenda Item 3: Presentation of progress on the action plans of the NACC/WG Task Forces and progress on regional activities.

STRENGTHENING ATM CONTINGENCY PLANNING AND RESPONSE IN CENTRAL AMERICA AND THE CAR REGION

(Presented by COCESNA)

EXECUTIVE SUMMARY

This paper presents COCESNA's experience in strengthening ATM contingency planning based on lessons learned from the ATS service disruption that occurred on 14 March 2025. It describes the review of the response to the ATC Zero event, the guidance arising from NAM/CAR/CONT/5, the request for ICAO technical support, participation in the CAR/SAM Workshop, approval of MAP 09-2026, testing of the ICCAE Backup facility, and preparations for the regional workshop scheduled for November 2026. It also reports on the MANAGAIR simulator available in Honduras, which can be configured in contingency mode as the first local response option, while the ICCAE Backup facility in El Salvador remains available for prolonged contingencies or when local capacity cannot be used. The incorporation of this new defence confirms the need to review the Regional ATM Contingency Plan and establish a graduated response.

Action:	The Meeting is invited to take note of the progress achieved; support the updating and harmonization of the plans; promote a graduated response, periodic exercises and coordinated mechanisms; endorse MAP 09-2026; and consider follow-up on the results through the NACC/WG.
<i>StrategicEstratégicos:</i>	• Safety • Air navigation capacity and efficiency • Security and facilitation • Economic development of air transport • Environmental protection
<i>References:</i>	• ICAO Annexes 11 and 19. • PANS-ATM, Doc 4444. • CAR Region ATM Contingency Plan. • NAM/CAR/CONT/5 Summary of Discussions.

1. Introduction

1.1 The continuity of air traffic services is essential to the safety, capacity and efficiency of the regional air navigation system. Annex 11 requires ATS contingency plans to be established and coordinated whenever a disruption may affect more than one State or flight information region.

1.2 In Central America, COCESNA provides ATS in the upper airspace of the MHCC UTA/FIR through the CENAMER Control Centre. The current Regional ATM Contingency Plan defines the procedures for responding to the partial degradation or total interruption of those services.

1.3 The current plan provides that, if CENAMER is unable to provide ATS, the Central American States will temporarily assume the service in their respective airspaces while the ICCAE Backup Control Centre in Ilopango, El Salvador, is activated.

1.4 Since approval of the current plan, COCESNA has incorporated new technical and operational capabilities, including the MANAGAIR simulator in Honduras, which can be configured in contingency mode as a local alternative for ensuring service continuity.

1.5 This new defence enables a graduated response to contingencies at CENAMER: first, assessing activation of the capability available in Honduras and, if the disruption is prolonged, the simulator is unavailable, or its capacity is insufficient, considering use of the ICCAE Backup facility in El Salvador.

1.6 Since March 2025, COCESNA has undertaken actions to review, test and harmonize its contingency mechanisms, incorporating lessons from operational events, coordination with Member States, ICAO support and validation of alternative capabilities to maintain ATS continuity.

1.7 This paper informs the Meeting of COCESNA's progress and ongoing actions to strengthen ATM contingency planning and response in Central America, in support of the regional harmonization promoted by ICAO.

2. Background

2.1 The Regional ATM Contingency Plan for the MHCC UTA/FIR defines the response to emergencies affecting ATS, identifies partial and total contingency scenarios, and establishes responsibilities, operational measures, and activation, implementation and deactivation phases.

2.2 A partial contingency occurs when ATS are degraded and is addressed in accordance with the applicable operational letters of agreement and ATFM measures. A total contingency occurs when CENAMER is unable to provide ATS.

2.3 In a total contingency, the current plan provides for activation of the ICCAE Backup Control Centre while each State temporarily provides the service in the airspace under its responsibility.

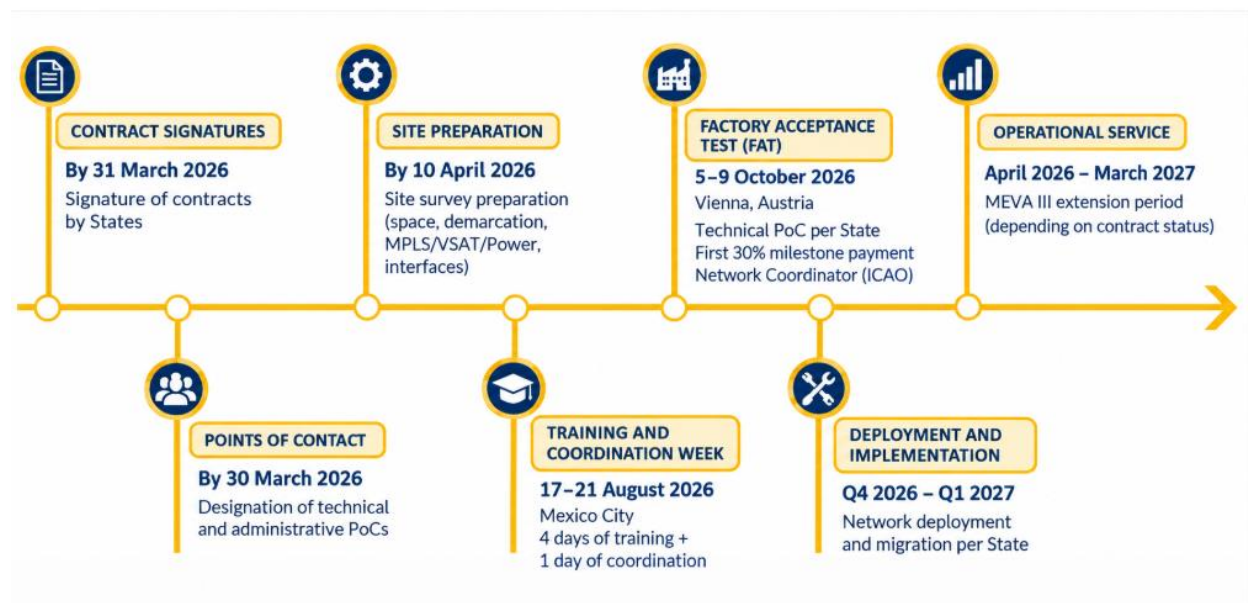
2.4 Implementation of the arrangement requires available technical capabilities, coordinated procedures, up-to-date contacts, compatible agreements, prepared personnel, and tested mechanisms for the transfer and recovery of services.

2.5 COCESNA has a MANAGAIR simulator in Honduras that can be configured in contingency mode as a local alternative for maintaining ATS before moving personnel or transferring the service to the ICCAE Backup facility.

2.6 Accordingly, the current plan should be reviewed to incorporate the available capabilities and define graduated activation based on the failure, its duration, the affected systems, the availability of communications and surveillance, the capacity of the MANAGAIR simulator, and the need to activate the ICCAE Backup facility.

2.7 The update should also define transition conditions, responsibilities, coordination with States and adjacent ATS units, and criteria for recovery and return to normal operations.

3. Progress in Updating the Contingency Plan



3.1 CENAMER ATC Zero Event, March 2025

3.1.1 On 14 March 2025, a general disruption occurred in CENAMER's surveillance, automation and communications systems, affecting the radar systems, MANAGAIR and A2100, as well as air-ground and ground-ground communications with adjacent ATS units. The event lasted approximately two hours.

3.1.2 The Regional ATM Contingency Plan was activated immediately, including notification of technical and operational teams, coordination with adjacent ATS units, communication with stakeholders, issuance of a NOTAM, and partial application of contingency routes and flight levels.

3.1.3 Given the duration of the event and the progressive recovery of communications and surveillance, it was not necessary to transfer ATS to the ICCAE Backup facility in El Salvador. Although its availability was verified as a precaution, CENAMER recovered the services and restored normal operations without relocating personnel or transferring the service. Voice communications were restored at 1740 UTC, radar display at 1800 UTC, and effective control was declared at 1828 UTC.

3.1.4 As part of the standardization of control centres, COCESNA has a MANAGAIR simulator in Honduras that can be configured in contingency mode, providing a new defence for ATS continuity and a first alternative in the event of disruptions in CENAMER's main operations room.

3.1.5 This capability modifies the response framework of the Regional ATM Contingency Plan by prioritizing assessment of its activation in Honduras before relocating personnel or transferring the service to the ICCAE Backup facility, when technical and operational conditions permit.

3.1.6 The ICCAE Backup facility would remain available as an alternative for prolonged contingencies or when the capability in Honduras cannot be used or proves insufficient. The March 2025 event report had already noted the availability of contingency MANAGAIR systems in the CENAMER simulator.

3.1.7 This new capability makes it necessary to update the Regional ATM Contingency Plan to reflect the available defences, define the activation sequence, and establish technical, operational and safety criteria for deciding between the MANAGAIR simulator in Honduras and the ICCAE Backup facility in El Salvador.

3.1.8 The event served as a starting point for strengthening regional planning, coordination and backup capabilities.

3.2 Fifth NAM/CAR/CONT/5 Regional Meeting, May 2025

3.2.1 From 13 to 16 May 2025, the Fifth NAM/CAR/CONT/5 Regional Meeting was held in Mexico City, together with the Workshop on Air Navigation Services Contingency Planning and Response.

3.2.2 COCESNA's follow-up to the outcomes of the meeting highlighted the need to conduct a new regional workshop to review and update the existing plans, taking into account lessons learned, the evolution of services, and changes in risks and threats to continuity.

3.2.3 The initiative envisaged the participation of the Central American States, COCESNA, States and service providers adjacent to the Central American FIR, ICAO, and other stakeholders, including representatives of users and service providers.

3.2.4 The guidance from NAM/CAR/CONT/5 confirmed that the plans should be updated through a coordinated process to harmonize scenarios, responsibilities, activation, communications and operational measures.

3.3 Request for ICAO Technical Cooperation, December 2025

3.3.1 As a follow-up to NAM/CAR/CONT/5, COCESNA prepared a formal request for technical support from the ICAO NACC Regional Office in December 2025.

3.3.2 The request proposed the participation of the ICAO Regional Officer, ATM/SAR, as technical facilitator for the Regional Workshop on the Update of ATM Contingency Plans, aimed at reviewing the plans of the Central American States and the plan managed by COCESNA.

3.3.3 The collaboration was intended to strengthen contingency planning, facilitate regional harmonization and enhance the resilience of air navigation services in Central America.

3.3.4 This action formally linked COCESNA's initiative to the ICAO regional process and secured specialized technical support.

3.4 CAR/SAM ATM Contingency Management Framework Workshop, June 2026

3.4.1 From 1 to 5 June 2026, the Workshop on the ATM Contingency Management Framework for the CAR/SAM Regions was held in Panama City.

3.4.2 COCESNA participated in the workshop, which provided an opportunity to analyse the ATM contingency framework, exchange experiences and review approaches applicable to the CAR/SAM Regions.

3.4.3 The inputs obtained support the review of the Regional ATM Contingency Plan for the Central American FIR and the preparation of the regional workshop promoted by COCESNA.

3.4.4 Participation linked the Central American initiative with the CAR/SAM discussions and reinforced an approach encompassing preparedness, activation, response, continuity, recovery and improvement.

3.5 Approval of Project MAP 09-2026, June 2026

3.5.1 COCESNA submitted to the MCAAP the MAP 09-2026 proposal, entitled Development of Regional Contingency Plans for the CAR Region.

3.5.2 The proposal was approved by the Project Executive Committee on 3 June 2026, authorizing COCESNA to initiate coordination for its implementation.

3.5.3 The activity responds to the need to update and align regional and national plans, incorporate operational and technological changes, consider new scenarios, and strengthen regional coordination.

3.5.4 The project provides for reviewing and updating contingency plans, assessing national plans, harmonizing procedures, and establishing coordinated activation and response mechanisms.

3.5.5 Expected outcomes include updated plans, harmonized procedures, new scenarios and technical recommendations to strengthen the resilience of air navigation services.

3.5.6 Approval of MAP 09-2026 provided a formal framework for cooperation and resources to support regional participation and preparation of the workshop.

3.6 ICCAE Backup Control Centre Tests, July 2026

3.6.1 As part of efforts to strengthen operational continuity, COCESNA planned and conducted tests of the ICCAE Backup facility in contingency mode in 2026 to verify that the ICCAE Backup Control Centre could gradually and in a controlled manner assume provision of ATS in the MHCC UTA/FIR, with reduced capacity, in the event of an ATC Zero condition at CENAMER.

3.6.2 The tests covered preparation and coordination, technical configuration, execution of the MANAGAIR operational test protocol, shadow-mode operations, gradual service provision, and return to CENAMER.

3.6.3 The verification included automation, surveillance, communications, recording and aeronautical messaging systems, databases, operational positions, safety alarms, and coordination mechanisms with adjacent ATS units. Technical and operational availability criteria were established, together with conditions for suspension, reduction and reversion.

3.6.4 The activity made it possible to review the capabilities of the backup centre, document findings and generate evidence to update procedures for a prolonged contingency at CENAMER.

3.7 Contingency Plan Update Workshop, November 2026

3.7.1 As the main activity under MAP 09-2026, COCESNA coordinated the Contingency Plan Update Workshop, scheduled to be held in El Salvador from 2 to 6 November 2026.

3.7.2 The ICAO Regional Officer, ATM/SAR, confirmed availability, allowing progress to be made on invitations, nominations and workshop logistics.

3.7.3 The workshop aims to review and update the plans of COCESNA and the participating States, harmonize scenarios, responsibilities and procedures, and strengthen regional coordination for activation, temporary service provision, recovery and return to normal operations.

3.7.4 The activity will enable review of the interaction between national airspaces and the Central American FIR, and the definition of measures in the event of partial or total unavailability of CENAMER.

3.7.5 The results will serve as a basis for updating documents and planning implementation, validation and testing activities.

4. Conclusions

4.1 The actions undertaken since March 2025 demonstrate a transition from a response associated with an operational event to a structured programme for strengthening ATM resilience.

4.2 The ATC Zero event made it possible to identify strengths and opportunities for improvement in the implementation of the Regional ATM Contingency Plan.

4.3 The availability of the MANAGAIR simulator in Honduras introduces a new defence for ATS continuity and enables a local response before considering the relocation of personnel and service provision from El Salvador.

4.4 The ICCAE Backup Control Centre remains important as an alternative capability for prolonged failures or when the response available in Honduras cannot be used or is insufficient.

4.5 Participation in NAM/CAR/CONT/5 and in the CAR/SAM ATM Contingency Management Framework Workshop provided references to guide the review and harmonization of the contingency plans of COCESNA and the Central American States.

4.6 Approval of MAP 09-2026 established a cooperation framework for conducting the Contingency Plan Update Workshop and supporting the participation of regional representatives.

4.7 The tests of the ICCAE Backup Control Centre are an essential component for verifying technical and operational backup capability, identifying limitations, and ensuring that transfers to and from the alternate centre can be carried out gradually and in a controlled manner.

4.8 The effectiveness of contingency plans will depend on their being kept up to date, properly coordinated, regionally compatible, and periodically validated through documented exercises and tests.

5. Suggested Action

5.1 The Meeting is invited to:

- take note of the experience and progress presented by COCESNA;
- support the updating and harmonization of ATM contingency plans in the CAR Region, including their coordination with the upper airspace of Central America; and
- promote the periodic conduct of regional exercises and the documentation of their results.