



ICAO

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North American, Central American and Caribbean Office

WORKING PAPER

ATFM/TF/2 — WP/02  
17/05/21

**SECOND NAM/CAR AIR NAVIGATION IMPLEMENTATION WORKING GROUP (ANI/WG) AIR TRAFFIC  
FLOW MANAGEMENT IMPLEMENTATION TASK FORCE (ATFM/TF/2) MEETING**

On line, 17 to 19 May 2021

**Agenda Item 4: ATFM Contingency Procedures**

**GUIDELINES FOR ATFM CONTINGENCY PROCEDURES IN THE CAR/SAM REGIONS**

(Presented by the Secretariat)

<b>EXECUTIVE SUMMARY</b>	
This Working Paper presents the proposal to develop guidelines for Air Traffic Flow management (ATFM) contingency procedures in the CAR/SAM Regions.	
<b>Action:</b>	Suggested actions are presented in Section 5.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• Doc 9971 - Manual on Collaborative Air Traffic Flow Management, ICAO</li><li>• Caribbean/South American Regions Air Traffic Flow Management Concept of Operations (CAR/SAM ATFM CONOPS) 2019 - 2024</li></ul>

**1. Introduction**

1.1 Air Traffic Flow Management (ATFM) is increasingly becoming a fundamental part for Air Traffic Management (ATM) in the CAR Region. Despite the current air traffic levels, (ANSPs) rely more on traffic flow management to address strategic actions for managing their day-to-day operations.

**2. Background**

2.1 Annex 11 to the Chicago Convention requires Air Traffic Services (ATS) Authorities to develop and promulgate contingency plans for implementation in the event of disruption or potential disruption, of ATS and related supporting services in the airspace for which they are responsible. Such contingency plans should be developed in close coordination with the ATS authorities responsible for the provision of services in adjacent portions of airspace and with the affected airspace users.

2.2 The CAR Region ATM Contingency Plan promote a regional harmonized response to contingencies that affect or may affect continuous provision of ATS in the CAR Region. The CAR Region ATM Contingency Plan details guidelines for the development of contingency plans, designed to provide alternative routes that would allow aircraft operators to fly through or avoid airspace subject to contingencies.

2.3 ATFM and contingency arrangements are closely interlinked. ICAO Doc 9971 - *Manual on Collaborative Air Traffic Flow Management (ATFM)* describes two possible scenarios for ATFM contingency response:

- ATFM provides a process for mitigating the effects of disruption in an ATM systems resource; and
- Contingency arrangements are required in the event of a failure of the ATFM system as well.

2.4 ATFM contingency plans aimed at mitigating the effects of disruptions in the capability of any component of the ATM system should contain:

- a. a description of the potential ATM resource failure (ATS unit communication failure, surveillance failure, evacuation of ATS unit operations room, unanticipated aerodrome closure, major airspace closure, etc.);
- b. ATFM measures to be taken in response to disruptions (e.g., capacity reduction by 50 per cent);
- c. a process for the application of ATFM measures during each contingency situation;
- d. recovery procedures;
- e. information on contingency points of contact, roles and responsibilities; and
- f. post-contingency reporting procedures.

### **3. Discussion**

3.1 The CAR/SAM ATFM CONOPS establishes that, in case of a partial or total interruption of the flow management and/or support services, Flow Management Units (FMUs) will have corresponding contingency plans, prepared in accordance with ICAO guidelines. These contingency plans will help ensure the safe and orderly movement of air traffic and will be incorporated into the operational procedures documents associated with the FMU responsibilities.

3.2 The ATFM Task Force has in its work programme a task related to the development of guidelines for ATFM Contingency Plans to be included in the CAR/SAM ATFM CONOPS. Even though this task has an expired completion date, the task has not been addressed.

### **4. Conclusion**

4.1 It remains to be analyzed whether the region sees the ATFM contingency as an integral part of the contingency plan for ATS or as a separate document.

4.2 To this date, ICAO NACC Regional Office has only been informed of bilateral contingency agreements for ATFM between two considerably complex air navigation systems.

4.2 Also, the regional response to a contingency is yet to be analyzed.

**5. Suggested actions**

5.1 The Meeting is invited to:

- a) Evaluate the feasibility of developing contingency procedures for ATFM systems, either as part of ATM contingency plans or as a separate document;
- b) Discuss the required framework for the implementation of ATFM contingency procedures aimed at mitigating the effects of disruptions in the capability of any component of the ATM system at a regional level;
- c) Recommend the inclusion in the CAR/SAM ATFM CONOPS additional guidelines for ATFM contingency procedures in the CAR/SAM Regions: and
- d) Suggest any other action deemed appropriate.