



Agenda Item 3: Implementation of air traffic flow management (ATFM) and improvement of procedures for coordination between agencies

FOLLOW-UP TO ATFM IMPLEMENTATION

(Presented by the Secretariat)

SUMMARY	
This working paper presents the status of implementation of ATFM in the Region, as well as the work programme and the information update tasks to be carried out by SAM State experts.	
References:	
<ul style="list-style-type: none">• PPRC/5 meeting report• SAM/IG meeting reports• Doc. 9971 ICAO	
ICAO strategic objectives:	<i>A - Safety</i> <i>B – Air navigation capacity and efficiency</i> <i>E – Environmental protection</i>

1. Introduction

1.1 During the last ten years, indicators in the South American Region have shown growth in air operations and transported passengers. In several SAM States, this sustained growth has not been accompanied by an expansion in airport infrastructure and air navigation services. This adverse scenario affects efforts to increase air connectivity as a means for social and economic development in the Region.

1.2 ICAO has envisaged the ATFM service to meet possible imbalances between the capacity of air navigation services and facilities and the demand for aircraft operations requiring these facilities.

1.3 The objective of ATFM is to optimise capacity utilisation so that State and Regional industry growth does not come to a halt while expanding air navigation services and facilities, without neglecting safety.

1.4 Pursuant to GREPECAS Decisions 16/45 and 16/47 for the SAM Region, the ATFM Programme was structured in association to Project B1 - Improve demand-capacity balancing (DCB). Following is a description of the progress made by this Project.

2. Analysis

2.1 In order to analyse the attainment of ATFM goals pursuant to the Declaration of Bogota, the following indicators have been considered:

- a) Percentage of States that have conducted runway and ATC sector capacity calculations.
- b) Percentage of States that have implemented ATFM in flow management units (FMUs) or flow management positions (FMPs).

2.2 At present, 85% of the States of the Region have performed runway capacity calculations as a task prior to implementation. Regarding ATC sector calculations, it was noted that nine States of the Region, that is 64%, had carried out these calculations.

2.3 Regarding the metrics on implementation of flow units in the SAM Region, the Region has achieved 71% ATFM implementation, as shown in the following table:

Nov 2019	ARG	BOL	BRA	CHI	COL	FGY	ECU	GUY	PAN	PAR	PER	SUR	URU	VEN
71%	YES	NO	YES	YES	YES	NO	YES	NO	YES	YES	YES	NO	YES	YES

States that have implemented ATFM at flow management units (FMUs) or flow management positions (FMPs)

2.4 With regard to the operation of FMUs/FMPs, Argentina, Brazil, Colombia, Chile and Peru are developing the ATFM service on the basis of Doc 9971 and, due to the increase in aircraft operations and the overall growth of the industry in these States, ATFM and capacity management initiatives are being applied to mitigate demand/capacity imbalances generated by temporary or permanent factors. In general, the ATFM service is focused on domestic operation, however, Colombia and Brazil are developing initiatives for linking with other States.

2.5 Other units in the Region are more focused on coordination of ATFM elements, operating in association with their ACC, and generating the support to flow requirements of adjacent ACCs.

2.6 Argentina, Brazil and Colombia are participating in sessions of coordination of CADENA-CANSO, every Friday.

2.7 The appendix to this note shows the listing of ATFM focal points of the Region, in order to be updated during the meeting.

2.8 Flow control measures

2.9 Conclusion SAM/IG/22-02 (SAM/IG/22, November 2018) instructed States to strengthen ATFM functions with resources and trained personnel, as shown:

*Conclusion SAM/IG/22-02: Support in the implementation of the intraregional and interregional ATFM
That:*

The States enhance their efforts to:

- a) *promote or optimize the implementation of the ATFM units in the assigned ACCs and that a study of procedures and tests be initiated to join the functions of their units with those of other adjacent States of the SAM Region, and, if such were the case, of the CAR Region; and*
- b) *render administrative resources that will facilitate the ATFM functions, including basic and recurrent instruction for operational and supervision personnel*

2.10 In addition, it is emphasized that the SAMIG/23 Meeting issued the following conclusion on the implementation of ATFM measures;

<p>CONCLUSION SAM/IG/23-01 Implementation of ATFM measures in accordance with Doc 9971, and coordination in case of ATS contingencies</p>	
<p>That: SAM States prioritise the provision of the following for their ATS and ATFM services:</p> <ul style="list-style-type: none"> a) Strengthen the functions of the flow management positions (FMPs) or units (FMUs), providing them with the prerogatives for coordinating and supporting ATS services; b) Define the profile and skills of the ATFM staff, and provide programmes for initial and recurrent training for the Staff; c) Mandate that ATFM measures are strictly based on the Doc. 9971 to face situations generating capacity/demand imbalance, especially in cases of ATS capacity degradation caused by unforeseen events; d) Establish instructions and supervision H24, ensuring that ATFM measures has the less impact for international flights, and all ATFM measures are agreed with adjacent ATFM or ACC dependencies; e) Mandate the correct application of the ATFM process, from the ATM planning phase to the phase of operations analysis and performance control; and f) Exclude the use of NOTAM of Flow Control to deal with situations of demand/capacity unbalance, with the only exception of the initial response that an ACC may require in the first 12 hours of ATS contingency. 	<p>Expected impact:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Political / Global <input checked="" type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input checked="" type="checkbox"/> Environmental <input checked="" type="checkbox"/> Technical/Operational
<p>Why: To meet the provisions of ICAO Doc 9971 and the SARPs contained in Annex 11</p>	
<p>When: Immediately</p>	<p>Status: Adopted by SAM/IG/23</p>
<p>Who: <input checked="" type="checkbox"/> Coordinators <input checked="" type="checkbox"/> States <input checked="" type="checkbox"/> ICAO Secretariat <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: Users/Industry</p>	

2.11 In this regard, in October 2019, the ACC of Barranquilla has implemented Flow Control, due to the failure of its radar systems. ACC Barranquilla coordinated with the adjacent ACCs of SAM and CAR Regions about aircraft separation.

Updating of the CAR/SAM ATFM CONOPS

2.12 CONOPS ATFM was updated through joint work of the NACC and SAM Regional Offices, and was presented to the Fifth Meeting of the Programme and Project Review Committee – PPRC/5 in Mexico in July 2019. Decision PPRC/05/05 below was issued;

DECISION	
PPRC/05/05 APPROVAL OF THE CONOPS ATFM CAR/SAM AMENDMENT	
<p>What:</p> <p>That, considering the need to update the interregional approach of ATFM implementation, based on experiences obtained in the CAR/SAM Regions States/Territories and International Organizations,</p> <p>a) the Meeting approve the new version of the CAR/SAM CONOPS ATFM presented by the Secretariat (Appendix to WP/11); and</p> <p>b) the Coordinators of the Programme take the relevant actions to review the respective work programmes as well as the regional handbooks and guidelines, based on the approved update of the CAR/SAM CONOPS ATFM by the GREPECAS/19.</p>	<p>Expected impact:</p> <p><input type="checkbox"/> Political / Global</p> <p><input checked="" type="checkbox"/> Inter-regional</p> <p><input checked="" type="checkbox"/> Economic</p> <p><input checked="" type="checkbox"/> Enviromental</p> <p><input checked="" type="checkbox"/> Operational/Technical</p>
Why: To support the set of activities necessary to design and implement the ATFM systems of the CAR/SAM Regions	
When: GREPECAS/19	Status: <input checked="" type="checkbox"/> Valid <input type="checkbox"/> Superseded <input type="checkbox"/> Completed
Who: <input type="checkbox"/> States <input type="checkbox"/> ICAO <input checked="" type="checkbox"/> Otros:	Project Coordinators

Updating the Documentation of the Regional ATFM service

2.13 From 19 August to 13 September 2019, as indicated at the RCC/12 meeting, an update of the ATFM guidance documentation was made, including the development of "Runway and Sector Capacity Calculation Manual" and "Guidance to the implementation of the ATFM Service in the SAM Region". These activities and their results are presented in separate working papers.

3. Conclusion

3.1 In view of the above, States must foster the implementation of at least one ATFM position (FMP) per FIR, in order to balance demand and capacity of airspace and international aerodrome service, also taking into account the impact of meteorological events and/or temporary disruptions in air navigation services.

3.2 The update of the ATFM CONOPS is completed. Translation to Spanish version will be coordinated with NACC Office before December 2019.

3.3 The results of documentation updating activity for Regional ATFM service are presented in separate working papers.

4. **Suggested actions**

4.1 The Meeting is invited to take note and examine the information presented, and to:

- a) Update the information on ATFM focal points contained in the Appendix;
- b) request states, that have not done it yet, to intensify their efforts to implement at least one ATFM position (FMP) in each FIR;
- c) analyze what kind of assistance or procedures are required for States to eliminate the flow control measures that impact efficiency and safety;
- d) provide feedback on CADENA sessions; and
- e) recommend any other action it may deem appropriate.

APPENDIX / APÉNDICE

LIST OF CONTACTS FOR OPERATIONAL ATFM FOCAL POINTS AND
ESTABLISHED ATFM UNITS
LISTA DE CONTACTOS PARA PUNTOS FOCALES ATFM OPERACIONALES Y
UNIDADES ATFM ESTABLECIDAS

* Updated during SAM/IG/23 Meeting, May 2019/ Tabla actualizada durante la SAM/IG/23, Mayo 2019

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