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

SOUTH AMERICAN REGIONAL MANAGEMENT

(Presented by Brazil)

SUMMARY

This working paper presents to the Meeting the current status of ATFM used in Brazil and the availability of means and structures in the training process applied in the training of its specialists.

References:

- Report of the Twenty-Third Meeting of the SAM implementation group (SAM/IG/23).

1. Background

1.1 The need to manage the traffic flow of the SAM Region is very important, mainly considering the seasonal and international events that occur and the growing demand. However, we have been experiencing contingency situations, where flow management coordination has been adopted by the communication channels provided by the Air Traffic Control Service.

1.2 The Brazilian administration, aware of the operational impacts derived from the demand for flights from the SAM Region and in line with the objectives of ICAO, has in its structure the South American Regional Management (GRS) that is subordinated to the Air Navigation Management Center (CGNA).

1.3 Therefore, the actions were taken by the Brazilian administration so that the coordination is done by phone (+55 021 2101-6380) and by email (grsam@cgna.gov.br), available and exclusive to comply with the international coordination.

1.4 The Brazilian administration has identified the need to bring this Working Paper to the meeting so that the GRS is known to the entire SAM Region. In addition, the main objective would be to seek integration with the region's FMPs, thus providing a greater exchange of information and actions for ATFM growth in the region.

2 Discussion

2.1 The implementation work began in November 2018, with meetings and technical operations to assess the current situation, identify key needs and purposes.

2.2 The Brazilian administration has identified key actors involved in the implementation, such as the SAM States and DECEA.

2.3 The automated systems used in the GRS are:

a) SIGMA: Integrated Air Movement Management System, the main tool for demand and capacity analysis, or that allows GRS to verify in advance the airspace imbalances of the Brazilian jurisdiction;

b) TATIC FLOW: Flow management support system that is interconnected with the Brazilian ATC facilities that have the TWR TATIC.

2.4 The GRS is operational 24/7 in the CGNA. There is a flow manager specialized in air traffic control in conditions of providing international coordination with countries in the SAM region. It is important to say that interactions are being made between Brazil, Argentina, Peru, Colombia, Venezuela and Uruguay. ATFM SAM measures implemented so that countries involved in coordination have continuous flows.

2.5 The desired scenario includes the adoption of a flow management for the SAM Region, within which DECEA/CGNA is available with ready-to-use technical and operational means, where information can be shared in collaboration in accordance with CDM principle.

2.6 Integrated flow management with exchange of demand information will allow a significant reduction in ATC workloads. The management of shared information will contribute both to collaborative decision making and the efficient use of airspace in the SAM Region.

2.7 It should be noted that all the advantages of implementing a Flow Management Unit in the SAM Region are in line with what ICAO DOC 9971 recommends. Therefore, we can list some points so that we can collaboratively advance in our coordination and achieve them:

a) improved ATM performance with organization, process, training and automation appropriate to the operational need;
b) improve overall efficiency while maintaining agreed safety levels;
c) promote timely and effective coordination and collaboration with all the countries of the SAM Region;
d) encourage international collaboration, which leads to an ideal and perfect ATM environment;
e) recognition that airspace is a common resource for all users and to ensure fairness and transparency, considering security and defense needs;
f) support the introduction of new technologies and procedures that increase the capacity and efficiency of the system;
g) predictability gain for ANSP (Air Navigation Service Providers) and airspace users;
h) evolve to support the ever-changing aviation environment;
i) greater operational efficiency of the system and predictability through collaborative decision processes;
j) effective capacity and demand management through data analysis and planning;
k) increased situational awareness among the countries of the SAM Region and coordinated and collaborative development, in addition to the execution of operational plans;
l) improved punctuality, lower fuel consumption and other operating costs;
m) effective management of irregular operations and effective mitigation of system limitations and the consequences of unforeseen events;
n) provide data on anticipated demands for certain airports, possible tactical and postoperative planning related to the treatment given to traffic; and
o) mitigate the effects of unforeseen situations and reduced capacity by coordinating effective and rapid recovery solutions.

2.8 The implementation strategy is based on the following phases:

a) Phase 1: Meeting of the States concerned to establish ATFM agreements;
b) Phase 2: Process regulation;
c) Phase 3: Training and simulation for the implementation of new FMP with the objective of expanding integration within the region;
d) Phase 4: Consolidation, practice, monitoring and frequent participation of all links to present solutions and possible difficulties for system feedback, process improvement and solidification of concepts.

3 Suggested actions

3.1 The Meeting is invited to:

a) Take note of the information provided by this Working Paper; and

b) discuss the improvements resulting from the implementation of a Flow Management Unit of the SAM Region in terms of support and collaborative decision process.

- END -