



**International Civil Aviation Organization
UNDP/ICAO Regional Project RLA/98/003
Transition to CNS/ATM Systems in the CAR and SAM Regions**

**Tenth Meeting/Workshop of ATM Authorities and Planners
in the CAR/SAM Regions
(AP/ATM/10)**

(Lima, Perú, from 10 to 14 May 2005)

Agenda Item 5: ATFM Implementation in the CAR/SAM Regions

Institutional Aspects for the Management and Control of Systems and Multinational Facilities

(Presented by the Secretariat)

Summary

This working paper presents the points of view expressed during the RAAC/9 Meeting (Santiago de Chile, April 2005), by the Directors of Civil Aviation of the South American Region regarding institutional aspects for the management and control of systems and multi-national facilities, and particularly on ATFM implementation.

Ref:

Report of the RAAC/9 Meeting

1. Introduction

1.1 The Civil Aviation Directors of the South American Region met in Santiago, Chile, from 18 to 20 April 2005, reviewing among other matters, the implementation of the Air Navigation Regional Plan, the implementation of CNS/ATM Systems, as well as other institutional aspects for the management and control of the systems and multi-national facilities, and particularly ATFM implementation in the South American Region.

1.2 In this regard, the Meeting recalled that the SAM States, in close coordination with the CAR/SAM Regional Planning and Implementation Group (GREPECAS) and ICAO, have planned and carried out in recent years an intense activity to implement different ATM functions through the application of CNS/ATM systems, with special emphasis on the implementation of the ATM global operational concept, and of the recommendations of the Eleventh Air Navigation Conference as a frame of reference for future activities.

1.3 The meeting noted that the Region was facing new implementation challenges, namely the need to implement ATFM in the medium term. There were plans to identify the minimum requirements for ATFM implementation, and to define the principles on which said service would be based in both Regions, thus enabling the development of Guidelines for the implementation of ATFM in the CAR/SAM Regions. It is expected that, through the implementation of traffic flow management units (FMU) and a centralised ATFM, foreseen for 2008 and 2010, respectively, this programme will ensure an optimum air traffic flow in areas or airspaces during periods in which the demand might exceed the available capacity of the ATC system, thus reducing delays, both in-flight and on the ground, and avoiding a system overload. This implementation would ensure a more effective use of the available airspace and airport capacity, without the need to apply unnecessary restrictions to air operations.

1.4 Considering that integrated and interoperable ATM automated systems would be required for a harmonious ATFM implementation, the systems available or planned in the Region would be assessed in order to establish criteria for the development of the regional strategy for the integration of ATM automated systems.

2 Analysis

2.1 When dealing with this matter, it could be noticed that given the nature of AFTM implementation, institutional aspects for management and control of systems and multinational facilities have a relevant character in all the planning, development and implementation process of this service.

2.2 Upon discussing this agenda item, the RAAC/9 meeting took note of the endorsement given to the ATM operational concept and the need to harmonise air navigation systems at the international level, pursuant to the recommendations of the AN-Conf/11 (Recommendations 1/1 and 1/13), and the subsequent endorsement by the ICAO 35th Assembly (Resolution A35-15) to these matters. In this respect, the meeting agreed that these matters required the commitment of the ATM community in an unprecedented manner for the implementation of CNS/ATM technologies, and that the legal and institutional aspects should be developed in such a way as to facilitate the implementation of the regional CNS/ATM systems in compliance with the Chicago Convention.

2.3 Important achievements of regional technical cooperation project RLA/98/003 in relation to the institutional aspects, should be emphasized; *e.g.*, the development of guidance material for dealing with institutional aspects, material for the planning and assessment of scenarios, and the organisation of seminars in support of the GREPECAS Institutional Aspects Task Force. The forthcoming meeting of the mentioned group will be carried out tentatively in Caracas, Venezuela from 19 to 21 September 2005.

2.4 The RAAC/9 meeting also recognised the importance of studying the legal and institutional aspects and that the States have already made arrangements for the implementation of multinational facilities/services, such as the REDDIG, which had been considered as a success from the technical/operational and cost-efficient points of view. It was agreed that the implementation of the CNS/ATM systems should be carried out within the framework of the ATM operational concept, and that Appendix B to Resolution A35-15 of the ICAO 35th Assembly offered guidelines for the harmonised implementation of ATM systems at the regional/global levels.

2.5 It is expected that, following the guidelines of that same Resolution A35-15, the ICAO Council would continue analyzing the institutional, economic and legal aspects as necessary, and that ICAO would develop transition strategies, ATM requirements and SARPS to support the implementation of the CNS/ATM systems. However, the RAAC/9 meeting agreed that, in the meantime, the momentum of the implementation of multinational facilities/services should not be wasted, and that it was necessary to start developing plans to foster the implementation of CNS/ATM technologies within the framework of the ATM operational concept.

2.6 In this sense, the meeting agreed that air traffic flow management (ATFM) could be considered as an initial system/service for this purpose, since:

- a) ATFM is directly related to the component of the ATM operational concept that corresponds to airspace organisation and management;
- b) it is related to other components of the concept; and
- c) the technology for ATFM implementation is already available in the Region.

2.7 In view of the foregoing, the meeting formulated the following conclusion:

CONCLUSION 9/13 **STUDIES FOR THE IMPLEMENTATION OF CNS/ATM
TECHNOLOGY WITHIN THE FRAMEWORK OF THE ATM
OPERATIONAL CONCEPT**

That the States:

- a) *in order to foster the implementation of CNS/ATM systems, in keeping with the guidelines of Resolution A35-15 of the ICAO Assembly, dealing with the gradual implementation of CNS/ATM systems applying the ATM operational concept, should start feasibility studies aimed at the implementation of air traffic flow management (ATFM) in the region, as a first step; and*
- b) *give more support to the activities of regional technical cooperation project RLA/98/003 or other projects that could be implemented on this matter, in relation to the study of scenarios and the establishment of administrative agreements for the implementation of future multinational organisations responsible for managing multinational facilities/services for the provision of air navigation services.*

2.8 There was an agreement agreed that much work is still to be developed, and States should wait for the outcome of the work performed by GREPECAS, since it covered both CAR and SAM Regions and, in these regions the following scenarios could be foreseen, aimed at establishing institutional arrangements:

- a) Subregion integrated by Canada, Mexico and United States of America;
- b) Central America with COCESNA, its regional mechanism;

- c) The Caribbean; and
 - d) South America
3. **Suggested action**
- 3.1 The meeting is invited to:
- a) Take note of the information provided in this working paper;
 - b) Analyse the different scenarios proposed by the RAAC/9 Meeting to establish institutional arrangements;
 - c) Make the greatest efforts to implement Conclusion RAAC/9 shown in paragraph 2.7 of this working paper; and
 - d) Encourage members of the ATM Committee ATFM Task Force, to initiate activities and tasks assigned by GREPECAS on this matter and to participate in the activities to be developed by the Task Force on Institutional Aspects of the GREPECAS mechanism.