

THIRD MEETING OF THE ALLPIRG/ADVISORY GROUP

(Montreal, 6 – 8 April 1999)

Agenda Item 5.5: Interregional coordination and harmonization mechanism – Interregional extension of the pilot project on CNS/ATM implementation

Agenda Item 5.6: Interregional coordination and harmonization mechanism – Interregional input for the CAR/SAM/3 RAN Meeting

APPLICATION OF THE CNS/ATM PLANNING METHODOLOGY AND BUSINESS CASE MODEL IN THE CAR/SAM REGIONS

(Presented by the Secretary of GREPECAS)

SUMMARY

This paper describes plans to extend, with the support of a Regional Technical Project, the application of the CNS/ATM planning methodology and business case model in the CAR/SAM Regions, its integration into the GREPECAS mechanism and efforts being made to assist States with the implementation of the resultant plans. It also comments on its value for possible application in other regions.

1. BACKGROUND

1.1 The ALLPIRG/2 Meeting, held in February 1998, recommended changes to the role and scope of planning and implementation regional groups (PIRGs) and initiated a special implementation project (SIP) to implement them on a test basis.

1.2 The World-wide CNS/ATM Systems Implementation Conference, held in May 1998, recommended that States carry out cost/benefit studies on the implementation of CNS/ATM systems, taking into account the available guidance from ICAO and the advantages of the Net Present Value methodology, and develop full and detailed business cases at national and sub-regional or regional levels, as required, taking into account the concept of homogeneous air traffic management areas and major international traffic flows identified by the ICAO planning and implementation regional groups with the assistance of ICAO, as necessary.

1.3 The same conference recommended that ICAO assist States in CNS/ATM systems implementation through the application of guidance on cost/benefit and business cases, including the development of model cases for homogeneous air traffic management areas and major international traffic flows.

1.4 As approved by the ICAO Council in July 1998, a special implementation project, oriented to develop a business case model and define a planning methodology with emphasis in the economic and financial aspects of CNS/ATM systems implementation, has been carried out by ICAO, as a pilot project in the CAR/SAM Regions.

1.5 The SIP results include a regional CNS/ATM planning methodology based on major traffic flows and/or homogeneous areas and their articulation at a regional level.

1.6 The planning methodology identifies the ATM evolution according to the users' need, the determination of the best CNS elements according to the ATM requirements, and a timetable for their implementation in a homogeneous area and/or major traffic flow and translates them into an action plan for the implementation (and decommissioning) of specific CNS facilities and services.

1.7 The SIP results also include guidance for the development of a business case for the action plan produced by the methodology and gives a concrete example based on the major traffic flow Santiago-Lima-Miami.

2. DISCUSSION

2.1 Contributing factors

2.1.1 It should be noted that the methodology clearly cannot produce results unless the set of identified data/information specified in the SIP is available for the homogeneous area and/or major traffic flow in question.

2.1.2 The CNS/ATM Action Plan for the CAR/SAM Regions, approved by GREPECAS at its eighth meeting, described 8 homogeneous areas and 18 major traffic flows. Since some flows cross and some areas overlap, the methodology ensures that this is taken into account in the overall regional planning scheme.

2.1.4 Since several flows and areas extend beyond the boundaries of the CAR/SAM Regions, the issue of the responsibility for these interregional zones arises (see ALLPIRG/3–WP/9 for proposals in this regard).

2.2 The GREPECAS approach

2.2.1 The methodology has already received support from GREPECAS/8 on the basis of an interim report presented at that meeting in November 1998.

2.2.2 It has been decided to extend the application and scope of the methodology to validate the ATM evolution and the CNS implementation options, including the CNS/ATM Action Plan for the CAR/SAM Regions, and to develop the business case accordingly by using resources available through the Regional Technical Co-operation Project RLA/98/003, among other arrangements, as follows:

- a) training a dedicated Project Team in the CNS, ATM and Air Transport Economics (ATE) aspects of the methodology;
- b) identify State groupings (say G1 to G18) and user involvement for each traffic flow area (i.e. areas under the 18 traffic flows, say TF1 to TF18).
- c) offering the CAR/SAM States involved in the main traffic flows Buenos Aires–New York (TF1) and Sao Paulo–Rio de Janeiro–Miami (TF2) training to three of its representatives in the CNS/ATM and ATE fields. Other training activities are planning during the second half of this year and the first half of 2000 to include in the training process specialists from all CAR/SAM States;
- d) develop a time table of actions to be carried out by States teams from both main traffic flows TF1 and TF2 and users to apply the planning methodology and complete the business cases;
- e) apply the planning methodology to both main traffic flows TF1 and TF2 with the support of the national teams involved. In a time of 1.5 years, the methodology will be applied to the 18 main traffic flows defined to the CAR/SAM Regions in conjunction with States and users;
- f) assist the States and users in completing tasks in the time table of actions according c), including the collection of data for each traffic flow area and the planning for terminal areas;
- g) develop guidance for exploration of financing options;
- h) coordinate and provide assistance to the regional harmonization (thus developing a region-wide business case) by different combinations of specialist teams and users as appropriate;
- i) consolidate/improve all proposals relating to financing; and
- j) develop proposals to formalize above arrangements for future joint application by GREPECAS and Technical Co-operation mechanisms.

2.2.3 It is expected that the resources to extend the application and scope of the methodology will move progressively from the Technical Co-operation Project to the regular GREPECAS mechanism. It is the intention to draw the attention of the forthcoming CAR/SAM/3 RAN Meeting (October 1999) to this development, which it is felt will be extremely relevant for the all-important work of the RAN meeting on implementation of the new CAR/SAM air navigation plan (ANP), into which the CAR/SAM regional CNS/ATM plan will have been integrated. Future GREPECAS meetings will then be tasked with validating

the work being done, including the outcome within the regional plan, and progressively refining the planning methodology.

2.3 **Possible application in other regions**

2.3.1 Depending upon the success of the above described exercise, the methodology could be applied in other regions through the relevant PIRGs.

3. **CONCLUSION**

3.1 The meeting is invited to:

- a) take note of the information provided in this paper; and
- b) consider and recommend, if pertinent, the GREPECAS approach for the application of the SIP methodology to other regions and PIRGs.