

THIRD MEETING OF THE ALLPIRG/ADVISORY GROUP

(Montreal, 6 – 8 April 1999)

Agenda Item 2: Review of the Format of Meeting of Chairman of the CNS/ATM/IC Subgroups

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

CNS/ATM PLANNING, COORDINATION AND IMPLEMENTATION AT THE INTERREGIONAL LEVEL

(Presented by the Chairman of the GREPECAS CNS/ATM IC Subgroup)

SUMMARY

This paper contains a proposal by the CNS/ATM IC Subgroup of GREPECAS to carry out the CNS/ATM planning, coordination and implementation at the interregional level. This paper was developed in close consultation with the GREPECAS Secretariat.

1. BACKGROUND INFORMATION

1.1 CNS/ATM transition plans in most ICAO regions are already either under development or completed and in the early stages of implementation. Some regional bodies (PIRGs) have already approved specific implementation plans and have begun to put dates on time charts when the various CNS/ATM elements will be put in place.

1.2 Following suggested ICAO guidelines, most of the PIRGS are choosing to base their implementation of future systems on the basis of homogenous areas of traffic and major traffic flows.

1.3 Some of the major traffic flows transcend regional ICAO boundaries and thus encompass two or more ICAO regions. Consequently, regional CNS/ATM Implementation plans would necessarily be incomplete unless inter-regional coordination is carried out. It is our understanding that coordination of issues such as these should be the purview of the ALLPIRG meetings.

1.4 For example, in the CAR/SAM Regions the CNS/ATM IC Subgroup has identified several major traffic flows that link the CAR or the SAM Regions with the NAM, AFI, and/or ASIA/PAC Regions. Some major traffic flows from the CAR and/or SAM Regions actually traverse two other ICAO regions.

1.5 In regard to these interregional flows, several questions or issues will have to be solved bilaterally and sometimes multilaterally by more than just two regions.

1.6 First, the two or more affected regions will need to validate each proposed major traffic flow. This is an essential and critical step. If all the regions affected by a proposed major traffic flow do not agree on the existence of that major traffic flow then no more work can be advanced in that area. Coordination will be especially important in cases where differences either in flows or implementation strategies arise. In this regard, the involvement of the dedicated CNS/ATM team in Montreal will be critical.

1.7 Once two or more regions have agreed on the identification of a major inter-regional traffic flow, the exact location of the "common planning area" will need to be identified before implementation planning and coordination among the regions can take place.

1.8 Each common planning area will have specific ATM requirements which will need to be defined along with proposed dates for said ATM improvements.

1.9 Once those ATM requirements are clearly defined, the Communications, Navigation and Surveillance improvements that each of the regions must put in place to realize the ATM requirements will need to be coordinated.

1.10 The following is a step by step proposal on how the inter-regional coordination might be carried out. This outline is intended to serve as a springboard for discussions on how the process may be carried out. In any event, the results of these discussions should result in an inter-regional coordination process with which we can all agree.

2. **PROCESS**

Steps in interregional coordination

- a) Validation of major inter-regional traffic flows;
- b) Identification of common planning areas;
- c) Definition of ATM requirements;
- d) Coordination of implementation dates; and
- e) Communications, Navigation and, Surveillance requirements.

Validation of major interregional traffic flows

2.1 All inter-regional major traffic flows will need to be validated and approved by each and every region involved in the traffic flow. Most of the flows should be easily validated as there is general agreement on the level of traffic that requires identification as a major traffic flow.

2.2 Differences of opinion may be settled through bilateral or multilateral meetings under the auspices of ICAO. Once agreement is reached, the routes may be considered as validated and the next steps can be taken. Coordination to be carried out by the Core Team in Montreal.

Definition and identification of common planning areas (CPA)

2.3 This should be a fairly straightforward task. Tables identifying the major traffic flow seem to work well intra-regionally and the same process may be the ideal way to effect inter-regional coordination.

2.4 The CAR/SAM CNS/ATM IC Subgroup proposes that each region send every other affected region by its major traffic flow a coordinating chart for each of the major traffic flow that cross regional boundaries.

2.5 For example the Rio/New York flow would require one common planning area for the ATM requirements and corresponding CNS elements. This piece of airspace may be identified as Common Planning Area CAR/NAM-1. Similarly, the flow Buenos Aires/ Cape Town may generate a Common Planning Area called the SAM/AFI-1. The number 1 is assigned arbitrarily and may be useful to identify this common area from other common areas between the regions. Other flows between two regions may get sequential numbers such as SAM/AFI-2, etc.

2.6 The CNS/ATM Subgroups in each region would review the proposals from the adjacent regions in regard to ATM requirements in these Common Planning Areas. The ICAO Core Team in Montreal CNS/ATM office created last year would be the central coordinating office for these common implementation areas. All PIRGS would be required to send their proposed Common Planning Areas to Montreal for eventual coordination. The CPA established in this way should be included in the Companion Document of the Global Plan

Definition of ATM requirements

2.7 Given that each region has already produced ATM requirements for each of the major flows, the regions with the assistance from the Core Coordinating team will need to reconcile any possible differences or discrepancies among the regions in each of the common coordinating areas.

Coordination of implementation dates

2.8 Once the ATM requirements have been agreed upon, the IC subgroups with the assistance of the core coordinating team will need to validate and agree on common implementation dates for each of the ATM requirements.

Communications, navigation and surveillance requirements

2.9 The Core Coordinating team will need to ensure that the appropriate CNS elements are planned in support of the ATM implementation dates. The team will need to ensure that the dates that are agreed upon are indeed satisfactory to all parties.

CNS/ATM Pilot Implementation Project

2.10 As far as feasible the process should make use of the methodology being developed by the especial implementation project agreed upon through Conclusion 2/14 of the ALLPIRG/2 meeting. The methodology should be an ideal tool for definition of ATM requirements, selection of the best CNS elements options and implementation dates.

Future steps

2.11 Each of the common planning areas should have its own ATM evolution tables just as the current tables for major traffic flows. Whereas coordination was carried out among States within our region, coordination will now have to be effected between regions. The importance of the role of the Core Coordinating team in Montreal in every aspect of this interregional coordination exercise cannot be over emphasized.

2.12 All of the tables associated with the inter-regional coordination defining CPAs, showing ATM requirements and proposed implementation dates should become part of Volume II of the Global Air Navigation Plan for CNS/ATM systems. Management and upkeep of these tables would be a task of core coordinating team.

3. **CONCLUSION**

3.1 The group is invited to consider the foregoing and adopt the proposed methodology as the standard procedure used to carry out inter-regional coordination. If necessary, a task force should be established to work out the mechanics of this proposal.

3.2 The group should be informed of the exact composition of the Core Co-ordinating team and contact points.

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