



Agenda Item 6: Other Business

REVISION OF THE ATS CONTINGENCY PLAN OF THE SAM REGION

(Presented by Brazil)

SUMMARY

This working paper presents the initiative of the Department of Airspace Control (DECEA), through an ad hoc group of the Air Space Planning Study Group (GEPEA), to update the ATS contingency plan for the SAM region, considering the particularities of the South American FIR.

REFERENCES

- Air Traffic Services Planning Manual (Doc. 9426)
- Air Traffic Services (Annex 11)

1 Background

1.1 The Air Traffic Services Planning Manual (Doc. 9426) and Annex 11 – Air Traffic Services provide that “The State(s) responsible for providing air traffic services and related supporting services in particular portions of airspace is (are) also responsible, in the event of disruption or potential disruption of these services, for instituting measures to ensure the safety of international civil aviation operations and, where possible for making provisions for alternative facilities and services. To that end the State(s) shall develop, promulgate and implement appropriate contingency plans. Such plans shall be developed in consultation with other States concerned and with ICAO, as appropriate, whenever the effects of the service disruption(s) are likely to affect the services in adjacent airspaces”.

1.2 In the Air Traffic Services Planning Manual (Doc. 9426) and Annex 11 – Air Traffic Services there are some elements that must be considered in a contingency plan:

- a) *re-routing of traffic to avoid the whole or part of the airspace concerned, normally involving establishment of additional routes with associated conditions for their use;*
- b) *establishment of a simplified route network through the airspace concerned, if it is available, together with a flight level allocation scheme to ensure lateral and vertical separation and a procedure for adjacent area control centres to establish longitudinal separation at entry point and to maintain such separation through the airspace;*

- c) *a requirement for aircraft to maintain continuous listening watch on a specified pilot-pilot VHF frequency in specified areas where air-ground communications are uncertain or non-existent and to broadcast, preferably in English, position information and estimates on that frequency, including start and completion of climb and descent;*
- d) *a requirement and procedures for aircraft to maintain their own longitudinal separation from preceding aircraft at the same cruising level;*
- e) *a requirement for climbing and descending well to the right of the centre line of specifically identified routes; and*
- f) *establishment of arrangements for controlled access to the contingency area to prevent overloading of the contingency system.*

1.3 Considering the benefits of the collaborative decision-making (CDM) process for the organization and management of airspace, the industry has taken the initiative to create the Airspace Planning Study Group (GEPEA) in Brazil, with the participation of the National Agency of Civil Aviation (ANAC), the Brazilian Association of Airlines (ABEAR), the Department of Airspace Control (DECEA) and the International Air Transport Association (IATA).

1.4 The GEPEA was established with a well-defined governance process, through the formalization of terms of reference and work program, which promote the sharing of work and responsibility among its members.

1.5 The main objectives of the GEPEA are the following:

- a) Introduction of new airspace concepts deemed of interest by the aviation community, including aspects related to safety;
- b) Introduction of new types of air navigation procedures deemed to be of interest by the aviation community, including aspects related to safety;
- c) Optimization of existing air navigation procedures;
- d) Improvement of the internal regulations of the regulators (DECEA and ANAC) on the airspace, within a CDM process;
- e) Definition of airspace concepts that should be prioritized, in a CDM process; and
- f) Definition of air navigation procedures that should be prioritized, in a CDM process.

1.6 In accordance with the objective established in letter "b" above, an ad hoc group was created in subgroup 1 (airspace) of the GEPEA, in order to establish best practices for the process of updating the regional contingency plan: GEPEA / SG1 / GADHOC CONT PLAN.

2 Discussion

2.1 The purpose of a Contingency Plan is to establish procedures for the entry, overflight, landings and takeoffs of aircraft to or from adjacent FIR, in the event of a partial or total interruption of the ATS services and the corresponding support services, maintaining the movement of air traffic ordered and safe.

2.2 The procedures relating to a partial interruption, a situation in which only the provision of flight information and warning services is considered, provide for the establishment of contingency routes between specified TMA and adjacent FIR, used by aircraft wishing to operate in the aerodromes located within the contingency FIR.

2.3 The procedures related to a total interruption, a situation in which it is considered that there is no supply of the ATS services, provide for the establishment of contingency routes between the Brazilian FIR and between these and the adjacent FIR, as well as flight levels and minimum longitudinal separation.

2.4 In Brazil, the contingency plan is reviewed three times a year, based on an interaction between the ACC and the Air Navigation Management Center (CGNA), which has the competence to activate the contingency plan in case of partial or total interruption of said services in the Brazilian FIR. However, a complete revision of the current plan is necessary, including letters of agreement with foreign FIR adjacent to Brazilian airspace, as well as a review of the contingency plan update process.

2.5 The GADHOC CONT PLAN intends to deliver the following products: revision of the Brazilian standard (the Aeronautical Command Directive DCA 63-1), full update of the contingency plan (partial and total interruptions), simulation in an accelerated time of the updated plan and preparation of the regional contingency plan (with standardization of procedures and collaborative decision making among the States of the Region).

2.6 The update of the contingency plan must follow the following script:

- a) Analysis and definition of the routes of the Contingency Plan with partial interruption;
- b) Analysis and definition of the routes of the Contingency Plan with total interruption;
- c) Analysis and proposal to update the letters of agreement with the adjacent FIR;
- d) Analysis of the frequencies in the AIS publications in force; and
- e) Discussion on the adequate longitudinal separation for income in the contingency FIR.

3 Suggested actions

3.1 The Meeting is invited to:

- a) To take note and review the information provided in this working paper;
- b) To approve the creation of working group of the Study and Airspace Implementation Group of the SAM (GESEA), based on the experience of the industry in Brazil, with the participation of the other States in order to prepare the Regional Contingency Plan (GESEA/SG1/GT CONT PLAN);
- c) To appoint advisors and the rapporteur of the GT CONT PLAN, under GESEA/SG1; and
- d) Discuss and approve the schedule of meetings for 2020, as described in 3.2.

3.2 Proposed schedule of meetings for 2020 of the GESEA/SG1/GT CONT PLAN:

Meeting	Main Subject / States
Abril 6 to 10	Analysis and definition of the routes with the states adjacent to the Curitiba FIR
Mayo 11 to 15	Analysis and definition of the routes with the states adjacent to the Amazonian FIR
Septiembre 7 to 11	Adjustments, integration and approval of letters of agreement
SAM/IG 26	Presentation of results and simulation report in accelerated time