International Civil Aviation Organization

WORKING PAPER

A41-WP/288
TE/109
5/8/22
(Information paper)
English only

ASSEMBLY — 41ST SESSION

TECHNICAL COMMISSION

Agenda Item 33: Other issues to be considered by the Technical Commission

CENTRALIZATION OF FLIGHT PLANS IN SISCEAB – BRAZILIAN AIRSPACE CONTROL SYSTEM

(Presented by Brazil)

EXECUTIVE SUMMARY

This information paper presents the background, the purpose, the operational concept and the systematic efficiency of the evolution planned by Brazil through DECEA for the centralization of flight plans in SISCEAB - Brazilian Airspace Control System and points out that one of the specific and direct objectives of this centralization is to reduce the number of sources of flight plan data to a single point, thus maximizing the consistency of operationally available flight data.

Strategic Objectives:	This working paper relates to the Air Navigation Capacity and Efficiency Strategic Objective.
Financial implications:	None.
References:	Annex 15 — *Aeronautical Information Services,* Montreal, 2018. Doc 9854, *Global Air Traffic Management Operational Concept-GATMOC –. First Edition*, 2005. Doc 9965, *Manual on Flight and Flow Information for a Collaborative Environment* Doc 10066, *Procedure for Air Navigation Services — Aeronautical Information Management (PANS-AIM)*

1. INTRODUCTION

1.1 The integrated initial flight plan processing system (IFPS), which was first proposed and implemented by EUROCONTROL in 1995, has been tested by practice for about 27 years. It is demonstrated that the IFPS not only helps to improve the efficiency and quality of flight plan data processing, but also reduces operational costs and improves the predictability and interoperability of operation. The best practices in IFPS conducted by Europe have been recognized by many countries, including Brazil.

1.2 Additionally, with the operationalization of the Global ATM Operational Concept (GATMOC), in which a greater wealth of information from the aeronautical domain exchanged between air navigation services providers (ANSPs) and users is the pillar of the future air traffic management system, services and systems related to the exchange of information should evolve in order to mitigate the existing and future obstacles, given that the problems may intensify, if a systemic transformation in the processes of acquisition, management and distribution of information does not occur.

1.3 In this sense, Brazil through DECEA paves the way for the future fully centralized management of flight plans with the objective of optimizing current systems, promoting the definition of new processes, procedures and practices related to the exchange of air traffic services (ATS) messages, with a view to reducing the various interrelationships and steps in processing flight plans and their update messages, in addition to, in the short term, mitigating the possible obstacles existing in the Brazilian scenario.

2. DISCUSSION

2.1 The initiative for the future fully centralized management of flight plans in Brazil appears as one of the stages of modernization of the Brazilian systems, since it seeks to centralize the receipt, validation and distribution of flight plans to all users and pave the way for the centralized implementation of flight intentions at CGNA - Air Navigation Management Center, located in Rio de Janeiro.

2.2 One of the specific and direct objectives of the centralization of flight plans in Brazil is to reduce the number of sources of flight plan data to a single point, thus maximizing the consistency of operationally available flight data.

2.3 This centralization was conceived with the intention of constituting the single system in Brazil aimed at receiving, validating and forwarding the ATS messages processed among the ATS units, airlines, pilots and other parties and, thus, being the valid source of all flight plan information exchanged between all parties or stakeholders.

2.4 In the scenario envisioned by DECEA, with its full implementation, there will be significant reduction in errors, delays and loss of ATS information, as well as the optimization and efficiency of human interference during the process of receiving, validating and distributing flight plans in the Brazilian airspace.

2.5 The implementation process of the centralization of flight plans in Brazil has been gradual and evolutionary, observing the national flight information regions (FIRs) and the respective Served Zones (ZS) of the Aeronautical Information Centres (C-AIS) and Automated AIS Offices (SAA).

2.6 In this regard, the initial operationalization and implementation of the centralization in an evolutionary and transparent way for users started on 11 April 2021 at the Recife FIR and did not require qualification and training of Flight Dispatchers (DOV) or pilots, nor did it imply a change in the current airline systems for sending ATS messages.

2.7 It is worth noting that until the operation and full implementation of the centralization of flight plans in Brazil and in its respective ZS, as well as the integration of all FIRs, in terms of a single address for the filing of ATS messages (FPL, DLA, CHG and CNL), all Flight Plan filing, receipt, analysis and forwarding and their updates remain with the existing procedures and are fully transparent to all users.

2.8 With this in mind, after the consolidation of all the evolutionary planning and after all possible risks are mitigated, Brazil will publish the centralized single address within the AIRAC cycle so that all parties involved can take the necessary actions for use of the flight plan centralization covering the entire SISCEAB.

3. CONCLUSION

3.1 The traditional flight plan management model is subject to various types of systems, with low efficiency of human labour, repetitive tasks and unbalanced capabilities.

3.2 With the rapid development of computer technology, the centralized processing of flight plans can greatly reduce duplication of labour, improve processing efficiency and data quality, save human resources and enhance the operational predictability and interaction, therefore, improving the safety of air traffic management.

3.3 At present, Brazilian ATM has already made the evolutionary transformation from the traditional flight plan operational model to the new one, and initial benefits have arisen, but it still needs to learn from global best practices and further improve the operating rules and procedures on this basis, in order to achieve predictability and interoperability among all systems.

3.4 Finally, Brazil hopes to review existing national standards and promptly revise relevant documents, so that the new operating model of the centralized flight plan processing system can be completed ensuring interoperability and safety.

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