International Civil Aviation Organization
North American, Central American and Caribbean Office

WORKING PAPER

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Third NAM/CAR Air Traffic Services Inter-facility Data Communication (AIDC) and North American Interface Control Document (NAM/IDC) Implementation Follow-up Meeting (AIDC/NAM/ICD/3)

Mexico City, Mexico, from 25 to 28 February 2020

Agenda Item 2: Joint Meeting with the ANI/WG AIM Task Force

VALIDATION OF THE FLIGHT PLAN FORMAT IN THE ATC SYSTEM

(Presented by the Secretariat)

EXECUTIVE SUMMARY	
Flight plan information is primary for the automation processes between control centres are carried out correctly and aligned with the established parameters in ICAO Doc 4444.	
Action:	Suggested actions are presented in Section 4.
Strategic Objectives:	• Safety • Air Navigation Capacity and Efficiency
References:	• Doc 4444 • AIDC implementation process

1. Introduction

1.1 When analysing the different flight plans received in the States and facing the valid concern that incorrect information decreases safety, the States have identified the origins of this issue.

1.2 The following factors that cause errors in flight plans have been identified:

a) Lack of compliance with the new flight plan format, when filled in or because of lack of information in it.
b) Manual management of flight plans.
c) Lack of validation of the information in the flight plan.
d) Lack of usage of ATS normalized messages associated to the flight plans, e. g. CHG, CNL, among others.
e) Reception of multiple flight plans for the same operation.
f) Lack of integrity of the information in the flight plan and of the associated information of the same flight plan.

1.3 Related with this, there are identified weaknesses in the AMHS automated systems because not all the AMSH systems are updated when required with the following information:

a) AMSH readdressing, provided by Eurocontrol through the AMC every 28 days.
b) The AMHS applications are not updated with current information of the last AIP, which generates lack of automated validation of the information.

1.4 In the Air Traffic Control Centres the received plans are validated by the system when the data is entered but this process suffers failures due to the following found weaknesses:

a) Lack of updating of the databases of the Air Traffic Control Centres.
b) Manual management of the flight plan information.

1.5 In the software and the Control Centres facilities is important that there is not a standardization of the flight plans management.

2. Analysis

2.1 The usage of AIDC/PAC and NAM/ICD automated protocols for the NAM/CAR regions has brought great benefits in the coordination of flight between the different FIRs. In some more experienced States the separation of their operations has been reduced up to 5NM and other benefit of this implementation is the strengthening of the information in the coordination points, which boosts safety.

2.2 Regional implementation of the automate protocols will support the implementation of other operation benefits regionally, especially efficiency and safety strategic objectives.

2.3 Flight plan errors, independently of their origin, cause that the automation process do not complies with the effective and safety criteria in which it is based, provoking errors in the coordination that are translated from FIR to FIR, causing issues in the coordination and in the climbing and descending operations in the airports.

2.4 Although this issue has several years and the States have diminished errors applying local mechanisms, there is not a regional way to assure that data that is received from flight plans complies with the necessary requirements of Doc 4444 and with quality information criteria.

2.5 To date, flight plan errors have become in a regional issue that affects automation an reduces safety.

3. Conclusions

3.1 It is essential that the States are aware of the flight plan errors and their negative impact in automation. This concern of the States must be independent of the fact that the State has or not automated coordination.

3.2 Implementation of criteria, procedures, systems and others that assure information quality are actions that the States must follow in the short-term.

3.3 Personnel training is basic to diminish this regional issue.

3.4 Procedures standardization, software facilities and other implementations are relevant for the processes to be faster.

3.5 Feedback with the flight plan error generator is part of the training and solution process.

4. Suggested actions

4.1 The AIM Task Force in invited to:

a) Establish within its working plan carry out recommendations to the different stakeholders in the flight plan management to assure the validity and quality of the information.

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