



International Civil Aviation Organization
South American Regional Office - Regional Project RLA/06/901
Support for the Implementation of a Regional ATM System Considering the ATM operational concept and the corresponding CNS Support Technology
First Meeting on AIDC implementation
(Lima, Peru, 28 to 30 March 2016)

Agenda Item 2: Analysis to the availability of flight plans in the SAM Region

ANALYSIS TO THE AVAILABILITY OF FLIGHT PLANS

(Presented by the Secretariat)

SUMMARY	
This working paper presents information on the status of implementation of AMHS/AFTN terminals as well as the FPP automation for the generation and process of flight plans according to Amendment 1 to 15th Edition of ICAO Doc 4444, errors and flight plans duplicity and how it affects the AIDC performance.	
REFERENCES:	
<ul style="list-style-type: none">• Amendment 1 to the <i>Procedures for air navigation services – Air traffic services (PANS-ATM)</i>, 15th Edition, ICAO Doc 4444.• Report of the Eleventh workshop/meeting of the SAM Implementation Group (SAM/IG/11) (Lima, Peru, 13-17 May 2013).• Thirteenth workshop/meeting of the SAM Implementation Group (SAM/IG/13) (Lima, Peru, 21-25 April 2014).	
ICAO strategic objectives:	<i>A – Safety</i> <i>C – Environmental protection and sustainable development of air transport</i>

1. Background

1.1 The flight plan is the basic document to put in knowledge of all ATS units along the route of flight on the pilot’s intentions. It should indicate accurately data normally included in the flight plan form. Therefore, the flight plan is the vital link between the pilot and ATC on the way how the flight is going to be carried out.

1.2 The correct information in the flight plan consistent with Amendment 1 of the 15th Edition of the Doc 4444 (FPL/12) as well as the mitigation of multiplicity/duplication of flight plans, are the substantial requirements for the proper operation of the AIDC and safety sustainability.

1.3 Amendment 1 to the *Procedures for air navigation services – Air traffic services (PANS-ATM)*, 15th Edition, ICAO Doc 4444 became valid on 15 November 2012. In the SAM Region, the implementation of the Amendment was the result of a joint effort between States and ICAO, and the support of RLA/06/901 project.

1.4 For the implementation of the Amendment some documents were drafted, such an strategy, a model of action plan for the implementation of the Amendment based on four aspects (legislation, automation, safety assessment and training), a form to evaluate the impact of the new format

implementation on the automated systems, a *Guide for implementation of flight plan information to support Amendment 1 of the PANS-ATM, Fifteenth Edition (Doc 4444)* and the *Safety assessment for the implementation of Amendment 1 to the PANS/ATM (Doc 4444) related to the new flight plan format*. This documentation is found in the ICAO South American Regional Office website www.lima.icao.int.

1.5 The production of flight plans with errors, the multiplicity / duplicity, as well as the rejection and lack of FPL, can generate different types of ATS incidents and affect the proper operation of the AIDC.

1.6 Multiplicity/duplication of flight plans is usually due to errors of transcription of flight plans on paper in the AMHS/AFTN by the AIM, or when two or more FPL are sent to update the previous, or when the AIM uses a pre-programmed list of addresses to transmit the FPL with destination addresses editing errors (some FIR/ATS units are not on the list) and use of FPL pre-programmed (with routes, FL, etc. for certain flights) and the operator forgets to update some fields to the AFTN/AMHS/FDP.

2. Analysis

2.1 As a follow-up of the implementation of the automation that represents one of the four essential aspects for the implementation of the amendment and perhaps most importantly, the situation as known by the Secretariat, is as follows:

- a) Of the total ACCs in the SAM Region, approximately 42% made changes in their flight plan processing systems (FDP), 23% introduced converters, and the remaining continue with the manual solution.
- b) With respect to the generation of flight plans from AMHS/AFTN terminals through templates capable of detecting errors in the filling of flight, 85% own it.

2.2 The complete information on the status of the automation implementation and the implementation of templates in AMHS/AFTN terminals to comply with the amendment to the flight plan format is presented as **Appendix** to this working paper. It is expected that during the Meeting States update the information contained in such appendix.

2.3 The completion the FPD automation process and the implementation of the AMHS/AFTN templates for the FPL/12 acceptance, will contribute to the reduction of errors in the generation and processing of flight plans.

2.4 The reception of multiple flight plans has caused concern in many States of the Region because it could represent a potentially danger to safety since many times those flight plans presented for a same flight contain information of destination, route and even different flight level creating or being able to create confusion in the air traffic control system.

2.5 With the aim of mitigating the multiplicity/duplication of flight plans, multiple sources of origin of the flight plan should be limited (dispatch airline office, local dispatch office, repetitive flight plans, etc.) and find a method to determine which is the most recent and accurate flight plan.

2.6 The States in the region may have different requirements for submission of flight plans for airlines that offer services from/to their countries. These requirements may be contributing to the problems of multiplicity/duplication of flight plan that the ATS providers are facing, therefore the implementation of a common requirement in all States in the Region could be discussed.

2.7 It is necessary to determine the scope of the problem, develop and apply solutions that may comprise ATS service providers, States, airlines, IATA and ICAO.

2.8 During the SAM/IG/13 meeting IATA inform that is encouraging airlines and States to use the technology available in both sides, to transmit FPL and when applicable, updating messages to report, delay (DLA), changes (CHG) and cancellation (CNL) directly from the operations centre or airline dispatcher, reducing the possibility of error by human factors.

3. **Action suggested**

3.1 The Meeting is invited to:

- a) Note the information presented;
- b) analyse the actions considered in Section 2 of this working paper and the corresponding Appendix to reduce errors in multiplicity/duplicity of flight plans; and
- c) other considerations in this respect that the Meeting might deem necessary.

APPENDIX / APENDICE

**STATUS OF THE AUTOMATION IMPLEMENTATION TO GIVE EFFECT TO THE
AMENDMENT TO THE FLIGHT PLAN FORMAT/
ESTADO DE IMPLANTACION DE LA AUTOMATIZACION PARA DAR CUMPLIMIENTO
DE LA ENMIENDA EN EL FORMATO DEL PLAN DE VUELO**

STATE/ ESTADO	ACC	AFTN/AMHS	FDP
Argentina	Comodoro Rivadavia	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Manual Automated/Automatización Second Quarter/ Segundo semestre 2016
	Cordoba	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated / Automatizado
	Ezeiza	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated / Automatizado
	Mendoza	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Manual Automated/Automatización Second Quarter/ Segundo semestre 2016
	Resistencia	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Manual Automated/Automatización Second Quarter/ Segundo semestre 2016
Bolivia	La Paz	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Manual
Brazil / Brasil	Amazonico	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated /Automatizado (use of converter) / (uso de convertidor)
	Atlántico	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated /Automatizado (use of converter) / (uso de convertidor)
	Brasilia	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated /Automatizado (use of converter) / (uso de convertidor)
	Curitiba	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated /Automatizado (use of converter) / (uso de convertidor)

STATE/ ESTADO	ACC	AFTN/AMHS	FDP
	Recife	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated /Automatizado (use of converter) / (uso de convertidor)
Chile	Iquique	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated /Automatizado
	Punta Arena	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Manual
	Puerto Montt	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Manual
	Santiago	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Manual
Colombia	Barranquilla	Not implemented (AMHS terminal) No implantado (terminal AMHS)	Automated /Automatizado
	Bogotá	Not implemented (AMHS terminal) No implantado (terminal AMHS)	Automated /Automatizado
Ecuador	Guayaquil	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated /Automatizado
French Guiana (France) Guyana Francesa (Francia)	Rochambeau	No Implemented (AMHS terminal) / No Implantado (terminal AMHS)	Automated / Automatizado
Guyana	Timehri	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated / Automatizado
Panama	Panama	Implemented / implantado (AMHS terminal))	Automated /Automatizado
Paraguay	Asunción	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Manual
Peru	Lima	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated Automatizado

STATE/ ESTADO	ACC	AFTN/AMHS	FDP
Surinam	Paramaribo	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated (out of service, working manually) / Automatizado (fuera de servicio, trabajando manualmente)
Uruguay	Montevideo	Not implemented / No implantado	Automated / Automatizado
Venezuela	Maiquetia	Implemented (AMHS terminal) / Implantado (terminal AMHS)	Automated /Automatizado (use of converter) / (uso de convertidor)
