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**International Civil Aviation Organization
South American Regional Office**

**THIRD WORKSHOP/MEETING OF THE SAM IMPLEMENTATION GROUP
(SAM/IG/3)
REGIONAL PROJECT RLA/06/901**

Lima, Peru, 20 to 24 April 2009

Agenda Item 8: Other business

**GUIDANCE FOR IMPLEMENTATION OF FLIGHT PLAN INFORMATION TO SUPPORT
AMENDMENT 1 OF THE *PROCEDURES FOR AIR NAVIGATION SERVICES — AIR TRAFFIC
MANAGEMENT*,
FIFTEENTH EDITION (PANS-ATM, DOC 4444)**

(Presented by the Secretariat)

Summary

This working paper presents State Letter Ref.: AN 13/2.1-09/9 dated 6 February 2009, on Guidance for implementation of flight plan information to support Amendment 1 of the *Procedures for Air Navigation Services — Air Traffic Management*, Fifteenth Edition (PANS-ATM, Doc 4444) and related with the updating of flight plan form and new flight planning procedures.

References:

- AN 13/2.5-07/35 dated 25 May 2007.
- AN 13/2.1-08/50 dated 25 June 2008.
- AN 13/2.1-09/9 dated 6 February 2009.

1. Introduction

1.1 Information paper IP/04 was presented during the SAM/IG/01 Meeting, where the process of approval of amendment 1 to Doc PANS-ATM was explained, related with flight plans, to become effective on **15 November 2012**. This amendment comes from the Flight Plan Study Group (FPLSG). The nature and scope of the amendment proposed is to update the flight plan form to meet the needs of aircraft with advanced capabilities and the evolving requirements of automated air traffic management (ATM) systems, while taking into account compatibility with existing systems, human factors, training, cost and transition aspects.

1.2 SAM/IG/02 Meeting, on the other hand, assessed the impact that this amendment could have in automated systems, keeping in mind PBN implementation and particularly amendment 1 to PANS/ATM as regards flight plans. The meeting observed that the referred amendment is complex and involves other aspects, in addition to PBN, and it was of the opinion that a new strategy for modification of ATC automated systems should be adopted.

1.3 GREPECAS/15, in assessing the creation of the new ATM/CNS Subgroup and its terms of reference and work programme, examined the new flight plan model and considering the fact that a new CAR/SAM regional strategy will have to be established for its implementation, it formulated Conclusion 15/35 - "*Implementation of the new ICAO Flight Plan Model*", where States were requested to adopt the necessary measures to prepare for the transition, and also the ATM/CNS/SG was requested to establish an auxiliary body to prepare this transition strategy.

1.4 In view of the above, the meeting agreed to include a task within the work programme of the PBN SAM/IG to evaluate PBN implementation, in the light of Amendment 1 to PANS/ATM. This activity would serve as support and reference to the work assigned to the GREPECAS ATM/CNS/SG Specific Task Force. Consequently, this task was included within the work to be carried out under the auspices of the Regional Project RLA/06/901. The first results are expected by the SAM/IG/04 Meeting.

2 Discussion

2.1 On the other hand, ICAO, keeping in mind that the current transition from the current flight plan form, to the new flight plan, and its corresponding requirements, could set out challenges for States and organizations participating in the flight plans processing, has prepared the guidelines shown in Attachment to letter AN 13/2.1-09/9 dated 6 February 2009, which appears as **Appendix A**, for ease of reference.

2.2 Also, and with the aim to support transition, ICAO is developing a public website in which States, air navigation services operators (ANSP) and airspace users will find information related to the status of application of the amendment, in which the issues and most common difficulties will be commented.

3 Suggested action

3.1 The meeting is invited to:

- a) take note of the information provided in **Appendix A** to this working paper; and
- b) evaluate if it is necessary to adopt particular actions as regards guidelines contained in **Appendix A**.

APPENDIX A



Tel.: +1 (514) 954-8219 ext. 6711

Ref.: AN 13/2.1-09/9

6 February 2009

Subject: Guidance for implementation of flight plan information to support Amendment 1 of the *Procedures for Air Navigation Services — Air Traffic Management*, Fifteenth Edition (PANS-ATM, DOC 4444)

Action required: Coordinate the transition to the new ICAO flight plan

Sir/Madam,

1. I have the honour to draw your attention to the content of Amendment 1 to the *Procedures for Air Navigation Services — Air Traffic Management*, Fifteenth Edition (PANS-ATM, Doc 4444) related to the amended flight plan form and new flight planning procedures.
2. The nature and scope of the amendment, as described in State letter AN 13/2.1-08/50, is to update the ICAO model flight plan form in order to meet the needs of aircraft with advanced capabilities and the evolving requirements of automated air traffic management (ATM) systems, while taking into account compatibility with existing systems, human factors, training, cost and transition aspects.
3. Considering that the transition from the current flight plan form and associated requirements to the new flight plan may present challenges for States and organizations involved in the processing of flight plans, ICAO has developed the guidance contained in the Attachment. The primary purpose of this guidance is to support a coordinated global effort during the transition period so that a successful and coordinated transition is achieved by the applicability date of 15 November 2012.
4. To support the transition, a public website is being developed by ICAO where States, Air Navigation Service Providers (ANSPs) and airspace users will be able to find information regarding the implementation status of the Amendment and where the most common issues and difficulties encountered will be discussed. States will be notified as soon as the site is available.

5. May I, therefore, request that all efforts be made to ensure a smooth transition to the new flight plan and that particular attention be paid to the pages referring to the conversion of new items 10 and 18 to the present items 10 and 18, which concern aircraft equipment and capabilities.

Accept, Sir, Madame, the assurances of my highest consideration.

Original signed by

Taïeb Chérif
Secretary General

Enclosure: Guidance for implementation of flight plan information to support Amendment 1 of the *Procedures for Air Navigation Services — Air Traffic Management*, Fifteenth Edition (PANS-ATM, DOC 4444)

ATTACHMENT to State Letter AN 13/2.1 – 09/9**Guidance for implementation of flight plan information to support Amendment 1 of the *Procedures for Air Navigation Services — Air Traffic Management, Fifteenth Edition (PANS-ATM, DOC 4444)*****1. INTRODUCTION**

1.1. The guidance contained herein is provided to assist airspace users and Air Navigation Service Providers (ANSP) to implement the flight planning changes incorporated by Amendment 1 to Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM, Doc 4444) Fifteenth Edition.

1.2. Amendment 1 stems from the work of the Flight Plan Study Group (FPLSG). The nature and scope of the amendment is to update the ICAO model flight plan form in order to meet the needs of aircraft with advanced capabilities and the evolving requirements of automated air traffic management (ATM) systems, while taking into account compatibility with existing systems, human factors, training, cost and transition aspects.

1.3. The changes were announced by ICAO in State letter AN 13/2.1-08/50 dated 25 June 2008 and will become applicable on 15 November 2012.

1.4. The changes have considerable consequences on ANSP flight data processing systems that check and accept flight plans and related messages, use flight plan data in displays for controller reference, use data in ANSP automation and which support communication between ANSPs as the flight progresses. Preparation for the changes should therefore be made well in advance of the applicable date.

1.5. The changes also have consequences for airspace users. If a flight plan with new content is sent to an ANSP that has not prepared to accept the new content then it is likely that some information will be lost, misinterpreted or cause a rejection of the flight plan.

1.6. No start date has been given for implementation of the flight planning changes to commence; however, one reason for the State letter is to support the updating of flight plan data processing systems. The transition period for the changes is therefore from 25 June 2008 until 15 November 2012.

1.7. It is recognized that changes will be implemented by airspace users and ANSPs on individual schedules due to individual needs, however some coordination will occur.

1.8. It is essential to the success of this implementation that all airspace users and ANSPs be able to submit and process flight information in accordance with Amendment 1 to the PANS-ATM by 15 November 2012, as processing via present methods is not assured after that date.

1.9. This guidance does not change any provision in Annex 2 — *Rules of the Air* or the PANS-ATM regarding completion and acceptance of a flight plan.

2. OBJECTIVE

2.1 The purpose of the guidance contained herein is to support a coordinated global effort during the transition period so that a successful transition is achieved by the applicability date of 15 November 2012.

3. APPLICABILITY

3.1 This guidance applies to airspace users, ANSPs and Planning and Implementation Regional Groups (PIRGs). Note that flight planning services and related organizations involved in the processing of flight plans are considered part of the airspace user community and, as such, are covered under this guidance.

3.2 This document presents guidelines which should be considered when developing implementation plans for this amendment. Adherence to these guidelines will mitigate risks associated with the technical challenges inherent during the transition period and assure that users are able to meet flight planning requirements as individual ANSPs implement changes.

3.3 This document applies with immediate effect and continues until implementation of Amendment 1 to the PANS-ATM is complete.

4. SCOPE

4.1 This guidance is limited to transitioning to flight planning and Air Traffic Services (ATS) message changes defined in Amendment 1 to the PANS-ATM, including message content and submission instructions.

5. FLIGHT PLANNING ENVIRONMENT

5.1 PRESENT is defined as the present flight planning and ATS message formats as defined in the current version of the PANS-ATM.

5.2 NEW is defined as the flight planning and ATS message formats as specified in Amendment 1 to the PANS-ATM.

5.3 In order to allow performance case considerations to drive individual airspace user and ANSP implementation schedules, the ATM system will need to simultaneously support both PRESENT and NEW for a period of time.

5.4 Amendment 1 to the PANS-ATM contains changes to the length and content of items. The changes to content are as follows:

- Change the way aircraft equipment and capabilities are communicated to provide more details;
- Provide additional means of describing route way points (specifically bearing and distance from points other than navigation aids); and
- Permit specification of the date of flight in a standardised manner.

5.5 The present flight planning environment supports a variety of means of filing flight plans. For example flight plans can be filed directly by the airspace user to each ANSP individually or flight plans

can be filed by the airspace user at one location and then the ATM system distributes the flight plan. Amendment 1 does not specifically change these options; however the means of transitioning to Amendment 1 may impose some requirements during the transition.

1 The present ATM system supports a variety of means of ANSPs communicating flight plan data between ANSP systems, for example use of coordination messages where Amendment 1 implies changes of content.

2 IMPLEMENTATION GUIDELINES

6.1. These guidelines have been developed to facilitate concurrent use of both PRESENT and NEW by airspace user and ANSP flight data processing systems during the transition period.

6.2. Guideline 1

- a) As each ANSP transitions to NEW, it is essential that they also support PRESENT until the applicability date of 15 November 2012.
- b) There is no requirement for ANSPs to accept and process PRESENT after the applicability date, unless specified by the appropriate authority.
- c) This guideline relates to the situation when some ANSPs and/or airspace users do not implement the flight planning changes until the end of the transition period.

6.3. Guideline 2

- a) PIRGs are encouraged to plan and publish regional implementations sufficiently in advance of the applicability date so that airspace users and ANSPs can respond to and resolve any unforeseen operational issues.
- b) It is anticipated that implementation will occur progressively as each PIRG works with their member States/international organizations and airspace users to coordinate a regional transition prior to 15 November 2012.
- c) Transition plans should encourage all ANSPs to transition to NEW a certain period of time prior to 15 November 2012 to allow airspace users a transition period to NEW before the applicability date.
- d) Transition plans should take into account that the airspace user may not be able to make use of the new opportunities provided by NEW until an ANSP has transitioned. Even then, use of NEW may be restricted in its application if the flight still involves ANSPs who have not yet transitioned.

6.4. Guideline 3

- a) During the transition period and after an ANSP has advised that they can accept NEW, the determination to file NEW or PRESENT with that ANSP is the choice of the airspace user.

- b) It is expected that airspace users will make the decision on what format to file based on performance gains which may be achieved through capability information in Items 10 and/or 18 of NEW.
- c) It is intended that all airspace users will file NEW from the applicability date forward, as using PRESENT is not assured after that date.

Note – The following guidelines apply only to situations where ANSPs affected by a flight have not all transitioned to NEW.

6.5. **Guideline 4**

- a) During the transition period when not all ANSPs affected by a flight have transitioned to NEW, the airspace user must ensure that PRESENT is filed with ANSPs who have not yet transitioned.
- b) This can be achieved by the airspace user filing only PRESENT with all ANSPs (as ANSPs supporting NEW will also support PRESENT during transition).
- c) ANSPs using PRESENT may misinterpret, and may reject, flight plan information that is filed more than 24 hours in advance of flight. Filing more than 24 hours in advance of flight cannot be used if one or more ANSPs affected by a flight have not transitioned (unless those ANSPs already support filing more than 24 hours in advance of flight). Although ANSPs using NEW could accept the flight plan they may not be able to pass essential coordination to ANSPs using PRESENT.
- d) The airspace user may choose to file NEW to ANSPs that have transitioned and PRESENT to ANSPs that have not transitioned. However, without special transitional procedures, a situation can occur where the NEW would only be useable until the first ANSP along route of flight using PRESENT. This is because the ANSP using NEW will not be able to coordinate NEW with ANSPs using PRESENT.

6.6. **Guideline 5**

- a) To facilitate user decisions on whether to file PRESENT, NEW or a combination of PRESENT and NEW, ICAO will maintain a website listing each ANSP's ability to accept PRESENT or NEW.
- b) This information which will be publicly available is in addition to the normal methods of communication between an ANSP and its airspace users.
- c) Each ANSP will communicate, via State and ICAO Regional Offices, their ability to accept NEW to ICAO as soon as possible so that ICAO can ensure that complete and updated information is posted on the website. An ANSP advising of having completed transition to NEW is also indicating that they can coordinate with other ANSPs who have transitioned to NEW.

6.7. Guideline 6

- a) During the transition period, ANSPs who accept NEW may need to convert flight information to PRESENT for coordination with adjacent ANSPs who have not yet transitioned.
- b) It is strongly recommended for consistency that all ANSPs utilize the conversion table provided below so that airspace users and ANSPs have a common understanding of how NEW will be converted to PRESENT.
- c) PIRGs, States and ANSPs should be aware that valuable planning information may be lost during the conversion process, as shown in the conversion table.
- d) There is no intent for PRESENT to be converted to NEW during the transition period.

7. CONVERSION OF NEW ITEMS 10 and 18 TO PRESENT ITEMS 10 and 18

It is strongly recommended that all ANSPs utilize the table below to convert NEW Items 10 and 18 to the PRESENT for coordination with adjacent ANSPs which only accept PRESENT.

- Different agreements may be worked out between ANSPs for Item 18 information if the conversion would cause the message to be rejected by an ANSP which only accepts PRESENT.
- CAUTION: Some information will be lost from NEW during conversion, including certain information about capabilities, and information held in Item 18 indicators which do not exist in PRESENT such as DOF, DLE and TALT. As a partial mitigation, any information which would otherwise be lost from NEW may be translated into a single free text following RMK/ in Item 18 of PRESENT.

	NEW data in these columns		Converts to PRESENT data in these columns	
Com-Nav	Item 10	Item 18	Item 10	Item 18
	N		N	
	S		VOL	
	SF		S	
	A		Z	NAV/GBAS
	B		Z	NAV/LPV
	C		C	
	D		D	
	E1		J	DAT/n
	E2		J	DAT/n
	E3		J	DAT/n
	F		F	

	G	NAV/nnnn	G	
	H		H	
	I		I	
	J1		J	DAT/V
	J2		J	DAT/H
	J3		J	DAT/V
	J4		J	DAT/V
	J5		J	DAT/S
	J6		J	DAT/S
	J7		J	DAT/S
	K		K	
	L		L	
	M1		Z	COM/INMARSAT
	M2		Z	COM/MTSAT
	M3		Z	COM/IRIDIUM
	O		O	
	P1-P9(Reserved)			
	R	PBN/nn	Z	NAV/nnnn

	NEW data in these columns		Converts to PRESENT data in these columns	
Com-Nav	Item 10	Item 18	Item 10	Item 18
	T		T	
	U		U	
	V		V	
	W		W	
	X		X	
	Y		Y	
	Z	COM/NAV/DAT	Z	COM/ NAV/

Sur	N		N	
	A		A	
	C		C	
	E		S	
	H		S	
	I		I	
	L		S	
	P		P	
	S		S	
	X		X	
	B1			
	B2			
	U1			
	U2			
	V1			
	V2			
	D1		D	
	G1		D	