



Agenda Item 2:

Review of Air Navigation Matters

2.2 Air Navigation specific activities:

2.2.1 Air Traffic Management (ATM)

- *Activities for the new Flight Plan format implementation*

ICAO GUIDELINES FOR THE NEW FPL FORM

(Presented by the Secretariat)

SUMMARY	
State Letter AN13/2.1-08/50, announced significant changes to the ICAO Flight Plan (FPL) form incorporated by amendment to PANS ATM, Doc 4444. These changes should bring a marked improvement of service and will require major system changes for both airspace users and ANSPs. As airspace users plan to meet the effective date of 15 November 2012, ANSPs must be ready to comply with the new FPL at a global level.	
References: • State Letter AN13/2.1-08/50 • Doc 4444, PANS-ATM • Third Meeting of North American, Central American and Caribbean Directors of Civil Aviation (NACC/DCA/3), Punta Cana, Dominican Republic, 8-12 September 2008 • Fifteen Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/15), Río de Janeiro, Brasil, 13 – 17 October 2008	
Strategic Objectives	<i>This working paper is related to Strategic Objectives A and D.</i>

1. Introduction

1.1 ICAO State Letter AN13/2.1-08/50 (available at ICAONET) was issued on 25 June 2008 amending the 15th edition of the PANS-ATM, Doc 4444. Although the format of the FPL form will remain relatively consistent with that presently being used, numerous changes will be required in the field descriptors used in the ICAO Flight Plan form.

2 Discussion

2.1 In order to assure a seamless and timely transition with no loss of service, the North America, Central America and Caribbean Directors of Civil Aviation approved the actions depicted in Conclusion 3/2 of the NACC/WG Meeting concerning the transition from the current to the new FPL form.

2.2 Amendment 1 to the PANS-ATM (15th Edition) was issued 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.

2.3 Substantial system and work practice changes will be required by airspace users and air navigation service providers (ANSPs) alike, as a consequence of these modifications.

2.4 Airspace users systems will need to conform to the new data fields, sequence and alphanumeric coding. Likewise, adaptation within the ANSPs flight data processing systems will need to ensure that the new flight plans filed are accepted without any cause for reject or denial of service.

2.5 Considering that the transition from the present 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 guidance material included in the **Appendix** to this Working Paper, to facilitate the implementation of the changes.

2.6 The primary purpose of the 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. Although the effective date for the changes in the Filed Flight Plan (FPL) is November 15, 2012, ANSPs can transition to the new form at any time.

2.7 Civil Aviation Authorities are encouraged to follow the guidance provided by ICAO and to make necessary efforts to guarantee the continuity of operations during the transition period, considering that the flight plan information is essential to the ATM system.

2.8 States, Territories and International Organizations as a whole should guarantee the smooth transition from the present to implement the new FPL form and closely coordinate with the ICAO NACC Regional Office the necessary actions.

2.9 ICAO will soon publish a website where the implementation status of the new provisions in all flight information regions (FIRs) will be contained and where issues related to the implementation will be posted and available for discussion among the subject matter experts and points of contact designated by the States.

3. Suggested Action

3.1 The Meeting is invited to review the content of this paper and develop an E/CAR strategy for adoption of the new ICAO Flight Plan Form and request assistance from the ICAO NACC Regional Office to prepare action plans, if required.

APPENDIX

GUIDANCE FOR IMPLEMENTATION OF FLIGHT PLAN INFORMATION TO SUPPORT AMENDMENT 1 TO PANS-ATM, DOC 4444, FIFTEENTH EDITION

1. INTRODUCTION

1.1. The guidance contained herein is provided to assist airspace users and Air Navigation Service Providers (ANSP) 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. This guidance do not change any provision in Annex 2 or PANS-ATM regarding completion and acceptance of a flight plan.

1.3. The changes were announced by ICAO on the 25 June 2008 in State Letter 50/2008 and will become applicable on 15 November 2012.

1.4. The changes have considerable consequences on ANSP flight data processing systems. Changes are required to 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 affect information that is communicated between ANSPs as the flight progresses. Preparation for the changes should therefore be made well in advance of 15 November 2012.

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 yet changed 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 changes to commence, however one reason for the ICAO State Letter on 25 June 2008 was to allow recipients “to begin updating your 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 PANS-ATM (Doc 4444) Fifteenth Edition by 15 November 2012, as processing via present methods is not assured after that date.

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 applicable date of 15 November 2012.

3. APPLICABILITY

3.1. This guidance applies to airspace users, ANSPs, Planning and Implementation Regional Groups (PIRG). 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 the complete implementation of Amendment 1 to PANS-ATM Fifteenth Edition.

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 PANS-ATM Fifteenth Edition, including message content and submission instructions.

5. FLIGHT PLANNING ENVIRONMENT

5.1. 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 flight plan information and content for a period of time.

5.2. Amendment 1 to PANS-ATM Fifteenth Edition contains changes to length and content of items. The changes to content are:

- Change the way aircraft equipage and capabilities are communicated to provide more detail;
- 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.

5.3. The existing 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.

5.4. The existing 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.

6. IMPLEMENTATION GUIDELINES

6.1. PRESENT is defined as the present flight planning and ATS message formats as defined in the current version of PANS-ATM (Doc 4444) Fifteenth Edition.

6.2. NEW is defined as the flight planning and ATS message formats as specified in Amendment 1 to PANS-ATM (Doc 4444) Fifteenth Edition.

6.3. The transition period is from 25 June 2008 until the applicability date of 15 November 2012.

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

6.5. **Guideline 1:** As each ANSP transitions to NEW content, it is essential that they also support present content until the applicability date of 15 November 2012.

6.5.1. There is no requirement for ANSPs to accept and process PRESENT after the applicability date, unless specified by the appropriate authority.

6.5.2. This guideline relates directly to the transition environment in which a segment of airspace users (and ANSPs) do not amend their flight planning systems until the end of the transition period.

6.6. **Guideline 2:** 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.

6.6.1. 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.

6.6.2. Transition plans should encourage all ANSPs transition to NEW a period of time before 15 November 2012 to allow airspace users a transition period to NEW before the applicability date.

6.6.3. Transition plans should take into account that the airspace user may not be able to make use of the new opportunities provided by NEW content until an ANSP has transitioned. Even then, use of NEW content may be restricted in its application if the flight still involves ANSPs who have not transitioned.

6.7. **Guideline 3:** During the transition period and after an ANSP has advised that they can accept NEW flight plans, the determination to file NEW content or PRESENT content with that ANSP is the choice of the airspace user.

6.7.1. 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 the NEW flight plan form.

6.7.2. 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.

6.8. **Guideline 4:** During the transition period when not all ANSPs affected by a flight have transitioned to NEW, the airspace user must ensure that PRESENT flight plan information is filed with ANSPs who have not transitioned.

6.8.1. This can be achieved by the airspace user filing only PRESENT information with all ANSPs (as ANSPs supporting NEW will also support PRESENT during transition).

6.8.2. 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.

6.8.3. 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 information 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 information with ANSPs using PRESENT.

6.9. **Guideline 5:** To facilitate user decisions on whether to file PRESENT, NEW or a combination of PRESENT/NEW, ICAO will maintain a repository of information on the ICAO website regarding the ability of each ANSP to accept PRESENT or NEW.

6.9.1. This information which will be publicly available is in addition to the normal methods of communication between an ANSP and its airspace users.

6.9.2. 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.

An ANSP advising NEW will mean that they can not only receive and process the new information but also coordinate with other ANSPs who have transitioned to NEW.

6.10. **Guideline 6:** During the transition period, ANSPs who accept NEW may need to convert flight information to PRESENT format for coordination with adjacent ANSPs who have not transitioned.

6.10.1. It is strongly suggested for consistency that all ANSPs utilize the conversion table provided below so airspace users and ANSPs have a common understanding of how NEW will be converted to PRESENT.

6.10.2. PIRGSs, States and ANSPs should be aware that valuable planning information may be lost during the conversion process, as shown in the conversion table.

6.10.3. There is no intent for PRESENT to be converted to NEW during the transition period.

CONVERSION OF NEW ITEMS 10 AND 18 TO PRESENT

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

- Modified agreements may be worked 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 capability information will be lost during conversion.

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

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	NEW data in these columns		Converts to PRESENT data in these columns	
	Item 10	Item 18	Item 10	Item 18
	M1		Z	COM/INMARSAT
	M2		Z	COM/MTSAT
	M3		Z	COM/IRIDIUM
	O		O	
	P1-P9(Reserved)			
	R	PBN/	R	
	T		T	
	U		U	
	V		V	
	W		When prescribed by ATS	
	X		When prescribed by ATS	
	Y		When prescribed by ATS	
	Z	COM/NAV/DAT	Z	COM/ NAV
Surveillance	N		N	
	A		A	
	C		C	
	E			
	H		S	
	I		I	
	L		S	
	P		P	
	S		S	
	X		X	
	B1			
	B2			
	U1			
	U2			
	V1			
	V2			
	D1		D	
	G1		D	

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