

<u>International Civil Aviation Organization</u> Eastern and Southern African Office

Eleventh Meeting of the Air Traffic Services/Aeronautical Information Service/Search and Rescue Sub-Group (ATS/AIS/SAR SG/11) (Nairobi, Kenya, 26 - 30 April 2010)

Agenda Item 10: Transition to new ICAO Flight Plan Content

AFI STATES PROGRESS TO NEW ICAO FLIGHT PLAN CONTENT

(Presented by the Secretariat)

SUMMARY

This paper presents development relating the AFI Region preparations for the new flight plan content pertaining to Amendment 1 to the 15th edition of PANS-ATM (Doc 4444) and proposes establishment of a task force to coordinate and support the transition to the November 2012 implementation deadline.

Action by the meeting is at paragraph 3.

REFERENCES

SP AFI RAN 2008 Report

PANS-ATM Doc 4444

State Letter AN 13/2.1-08/50 dated 25/6/2008

This Working Paper is related to Strategic Objectives: A and D

1. Introduction

1.1 On 28 May 2008, amendment No. 1 to the Fifteenth Edition of the Procedures for Air Navigation Services — Air Traffic Management (PANS-ATM, Doc 4444) was approved, calling for substantial changes to ICAO flight plan to take effect from 15 November 2012. The interim edition of the amendment is available as an attachment to the electronic version of State letter AN 13/2.1-08/50 dated 25 June 208 on the ICAO-NET (www.icao.int/icaonet).

1.2 The new ICAO model flight plan form and related provisions are necessary to allow ATM systems to make optimum use of advanced aircraft capabilities as well as to meet the evolving requirements of automated ATM systems. The new flight plan addresses air navigation functionalities and technologies such as RVSM, PBN, RCP, ADS-B and GNSS, while maintaining a high degree of commonality with the existing flight plan format. It should be noted that the amendment to the flight plan is an interim step towards a completely revamped system of interaction between aircraft and the ATM system, wherein the aircraft will be an integral part of the ATM system as envisaged in the Global ATM Operational Concept.

2. DISCUSSION

- 2.1 The Special AFI Regional Air Navigation Meeting (SP AFI RAN) Durban, South Africa, 24 to 29 November 2008 recalled that Amendment 1 to PANS-ATM Doc 4444 encompassed a substantial revision to the ICAO flight plan as contained in Appendix 2 to the PANS-ATM. Furthermore, that the impact of the modifications to flight data processing systems would vary from one air navigation service provider and State to another depending on their data requirements, the level of validation necessary and the types of systems in place.
- 2.2 The SP AFI RAN acknowledged in particular, that the implementation of this proposed amendment would require significant effort and lead time for States, air navigation service providers and aircraft operators, and that because the change-over should be coordinated with all stakeholders, the planning and implementation regional groups (PIRGs) should develop coordinated transition plans with common strategies and mitigation measures. The meeting therefore agreed to a basic checklist in the form of a Performance Framework Form (PFF), to be followed by States and used by APIRG to monitor transition efforts. Accordingly, the SP AFI RAN developed the following recommendation:

Recommendation 6/5 — Implementation of the new ICAO model Flight Plan Form

That:

APIRG adopt the ATM Performance Objective: Transition to the New ICAO Model Flight Plan Form as contained in the performance framework form (PFF) in Appendix A to the Report on Agenda Item 6; and

States coordinate, through APIRG, their transition to the new ICAO flight plan and follow the checklist in the PFF in Appendix A to the Report on Agenda Item 6 in order to ensure harmonization and orderliness in their transition to the new flight plan by 15 November 2012.

2.3 The PFF adopted by the SP AFI RAN, which is reflected at **Appendix A** to this working paper, reflects the requirement to deliver on a number tasks during the transition period in order to facilitate smooth implementation, coordinated with other ICAO Regions. Guidance material on Amendment 1 was provided under State Letter Ref.: AN 13/2.1-09/9 dated 6 February 2009.

- In view of the many implications affecting a wide range of automated flight plan processing systems and the associated operating practices, the ATS/AIS/SAR Sub-Group may wish to acknowledge that transitioning process needs to be carefully planned taking into account compatibility with existing systems, human factors, training, cost and transition aspects. Any incompatibility in the processing capability in a few States could have significant impact on operations in other states of the region, in effect creating the potential for a significant Regional and global degradation of ATM services, with implication on safety, efficiency and continuity of operations.
- 2.5 The meeting may wish agree that, in order to facilitate effective planning and actions therefrom, a full and comprehensive assessment of the implications of the transition to the new FPL for the AFI ANSPs and airspace users is imperative. Furthermore, to recognize that since Amendment 1 to PANS-ATM was approved, and the SP AFI RAN provided a checklist in November 2008, significant time has elapsed which is essential to planning, preparation and the associated coordination.
- 2.6 In order to advance the assessment of impact of the changes in the new flight plan content, the ESAF Regional Office circulated to the ESAF (area of accreditation) States, Sate Letter Ref: ES AN 4/3 0825 dated 21 December 2009, requesting States to provide the following:
 - a) Point of Contact for flight plan content transition, and contact details thereof
 - b) Indication of whether or processing of flight plan information was automated
 - c) Whether or not capability exist to process new (2012 content)
- 2.7 Despite the apparent simple and straight-forwardness of the information requested, after several retransmission of the State Letter and reminders including telephone calls, response to the requested information has been very low; only XX out of the 23 ESAF area States responded. The list of responses is at **Appendix B**. Experience of EUR Region has been that responses on similar inquiries improved significantly after the first meeting of the EUR 2012 Flight Plan Task Force.
- 2.8 In view of the above, the ATS/AIS/SAR SG/11 meeting may wish to agree that there are many imperative and time sensitive actions that should be carried out by the AFI Region in order to ensure effective support to States efforts to meet the provisions of PANS-ATM Doc 4444 relating to the ICAO flight plan model. Accordingly, the meeting may wish to agree to the establishment of a Flight Plan Transition Task Force (FPLT TF) and the following Draft Decision:

DRAFT DECISION 11/X: ESTABLISHMENT OF THE AFI FLIGHT PLAN TRANSITION TASK FORCE (FPLT TF)

That, in order to enable a harmonized Regional implementation of Amendment 1 to the fifteen edition of PANS-ATM (Doc 4444) in coordination with other ICAO Regions:

- a) the AFI Flight Plan Transition Task Force (FPLT TF) is established with the terms of reference (TOR) at Appendix XX to the report on agenda item 10 (Appendix C to this working paper);
- b) the Task Force should, if practical hold its first meeting in 2010; and
- c) AFI State are urged to provide to the Task Force information requested with regard to its studies and assessments, with minimum delay; and
- d) noting that after APIRG 17 the next regular meeting of APIRG will be 2012, the ATS/AIS/SAR SG may endorse the Regional Strategy and Plan relating to the Task Force TOR, including changes thereto, on behalf of APIRG

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) note the information in this working paper;
 - b) agree on Draft Decision 11/XX under paragraph 2.8 of this working paper:

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APPENDIX A

ATM PERFORMANCE OBJECTIVES

BASIC CHECKLIST FOR IMPLEMENTATION OF THE NEW ICAO FPL FORM

Benefits										
Environment Efficiency ability of air navigation service providers t make maximum use of aircraft capabilities ability of aircraft to conduct flights more closely to their preferred trajectories facilitate utilization of advanced technologies thereby increasing efficiency optimized demand and capacity balancing through the efficient exchange of information enhance safety by use of modern capabilities onboard aircraft Strategy										
Short term (2010)										
	Medium term (2	2011 - 2015)								
ATM OC COMPONENTS	TASKS	TIME FRAME START-END	RESPONSIBILITY	STATUS						
SDM	En-route airspace	2009-2012								
	ensure that the automation and software requirements of local systems are fully adaptable to the changes envisaged in the new FPL form	2009								
	ensure that issues related to the ability of FDPS's to parse information correctly and to correctly identify the order in which messages are received, to ensure that misinterpretation of	2009-2012								

data does not occur

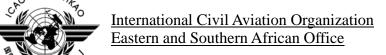
	Т		T
	 analyze each individual data item within the various fields of the new flight plan form, comparing the current values and the new values to verify any problems with regard to applicability of service provided by the facility itself or downstream units 	2009	
	 ensure that there are no individual State peculiarities or deviations from the flight plan provisions 	2009-2012	
	 ensure that the accepting ATS Reporting Office accepts and disseminates all aircraft capabilities and flight intent to all the downstream ACCs as prescribed by the PANS-ATM provisions 	2012	
	 plan the transition arrangements to ensure that the changes from the current to the new ICAO FPL form occur in a timely and seamless manner and with no loss of service 	2009-2012	
	• in order to reduce the change of double indications it is important that any State having published a specific requirement(s) which are now addressed by the amendment should withdraw those requirements in sufficient time to ensure that aircraft operators and flight plan service providers, after 15 November 2012, use only the new flight plan indications.	2009-2012	
	establish a central depository in order to track the implementation status and inform the ICAO regional offices on an ongoing basis	2009	
linkage to GPIs	GPI/18 Aeronautical Information		

ATS/AIS/SAR/SG/11 WP/20 **Appendix B**

Transition to New ICAO Flight Plan Content

Amendment 1 to Procedures for Air Navigation Services - Air Traffic Management Documents 4444 (PANS-ATM Doc.4444)

		Mode of FPL processing			y exist to process 12 content)	Brief Remarks	Last Update	
State	FIR	Location Indicator	Manual	Automated IFPS/FDPS	Yes	No		
Angola	Luanda	FNAN	Yes			NO		
Botswana	Gaborone	FBGR		FDPS		NO		
Ethiopia	Addis Ababa	НААА	Yes	IFPS/FDPS	Yes	NO	Installing new AMHS	
Kenya	Nairobi	HKNA		IFPS		NO		
Malawi	Lilongwe	FWLL	Yes			NO		
Mauritius	FIMM	FIMP		FDPS		NO		
Rwanda	Kigali	HRYR	Yes			NO	To be installed before end 2010	
Somalia (CACAS)	Mogadishu	HCSM	Yes			NO	ATS DS only no AFTN	
Sudan	Khartoum	HSSS		FDPS		NO		
Uganda	Entebbe	HUEN	Yes	Yes		NO	FPL Management partially automated	



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AFI Flight Plan Transition Task Force Terms of Reference

Terms of reference:

- 1) Conduct a comprehensive review of Amendment 1 to the Fifteenth Edition of the PANS ATM (Doc 4444, effective 15 November 2012) in order to identify, study and address implementation complexities arising from the adoption of amended PANS ATM Chapter 4, Chapter 11, Appendix 2 and Appendix 3 provisions relating to the ICAO Flight Plan and associated ATS Message formats; and
- 2) Collect and analyze information on the status of AFI ANSP flight plan processing systems including ongoing upgrades to such systems;
- On the basis of the above, and in accordance with relevant additional ICAO provisions and the SP AFI RAN Re. 6/5, develop a coordinated AFI transition strategy and plan with associated timelines to enable the streamlined coordinated implementation of the amended Flight Plan and ATS Message provisions contained in Amendment 1 to the Fifteenth Edition of the PANS ATM.

Considerations:

In addressing these terms of reference, the Task Force should consider, *inter alia*, the following aspects:

- a) Likelihood that changes within the systems in the AFI Region could differ from systems in other ICAO Regions and accordingly provide recommendable Regional action with global goals
- b) Inter and intra regional issues;
- c) Impact on inter-system co-ordination messaging (e.g. ATS AIDC)
- d) Contingency arrangements for States that cannot comply by the due date;
- How to handle staged implementations by States and/or airspace users,
- Expectations across ANSPs with different implementation dates, and
- e) Systems that transition early will need to be capable of handling both new and current instruction sets.
- f) Inter-system exchanges need to take account of differing automation capabilities in order to avoid excessive message rejection;

- g) Establishment of an Information Management system to track implementation timelines for various States/systems;
- h) Management of Repetitive Flight Plans;
- i) Implications for presentation formats, including paper & electronic flight progress strips;
- j) Impacts to users (flight planning systems etc); and
- k) Appropriately timed withdrawal of existing State or Regional specific requirements to ensure consistency with new instruction set
- 1) Existing ICAO guidance material

Membership

Core members:

- ATM specialist and systems engineering experts (CNS) from AFI States and ANSPs with existing and planned automated flight plan processing systems
- ASECNA, IATA, IFALPA, IFATCA,

Other members

AFI States and ANSPs other than the above Expertise from States, ANSPs outside the AFI Region that may be invited by the Task Force based on beneficial inputs they may contribute

Note:

Industry participation including systems providers, if required, is to be included under responsibility of State delegations

Reporting

The Task Force shall report progress to the ATS/AIS/SAR Sub-Group. However, owing to the limited time available for planning and in some cases acquisition of systems, valuable planning information emanating from the Task Force may, after coordination with Secretary of APIRG be provided to States without waiting for forthcoming meetings of the MID ATS/AIS/SAR Sub-Group.
