

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

Third Meeting of the AFI Flight Plan Transition Task Force (FPLT TF/3) (Dakar, Senegal, 15 – 16 September 2011)

Agenda Item: 3 Review of implementation implications and development of implementation strategy, plan and guidance

REVIEW OF THE REGIONAL STRATEGY

(Presented by the Secretariat)

SUMMARY

This working paper provides a review of the regional strategy for implementation of Amendment 1 of the 15th Edition of PANS-ATM, Doc 4444, in the AFI Region.

Action by the meeting is at paragraph 3.

REFERENCES: SP AFI RAN Report

This Working Paper is related to Strategic Objectives: A

1. Introduction

- Amendment No. 1 to the Fifteenth Edition of the Procedures for Air Navigation Services Air Traffic Management (PANS-ATM, Doc 4444), which is an interim step towards a completely revamped system of interaction between aircraft and the ATM system, calls for substantial changes to ICAO flight plan to take effect from 15 November 2012. The new flight plan model introduces considerable changes related, *inter-alia*, to reduced vertical separation minimum (RVSM), Performance Based Navigation (PBN), Required Communication Performance (RCP), Automatic Dependent Surveillance Broadcast (ADS-B) and Global Navigation Satellite systems (GNSS).
- 1.2 The Special AFI/8 Regional Air Navigation Meeting (SP AFI/8 RAN) Durban, South Africa, 24 to 29 November 2008, recognized that the impact of the modifications to flight data processing systems would vary from one air navigation service provider (ANSP) and State to another depending on their data requirements, the level of validation necessary and the types of systems in place, and consequently, would require significant effort and lead time for States, air navigation service providers and aircraft operators.

The SP AFI/08 RAN also recognized 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.

2. DISCUSSION

- 2.1 The FPLT Task Force meeting in Johannesburg, 13-14 September 2010, developed an initial draft Strategy for the New ICAO flight plan format and for supporting ATS messages, which was reviewed by the Task Force meeting in Nairobi, 12-16 February 2011 as shown at **Appendix A** to this working paper, for adoption by States when implementing the New ICAO flight plan format.
- 2.2 Based on the continuous assessment of available information, outcome of the 2012 Flight Plan Workshop (12-14 September 2011), other developments as discussed under agenda item 2 of this meeting, as well as impact of the implementation of Amendment 1 to Doc 4444 15th Edition, the meeting may wish to:
 - a) Identify additional information that is essential for implementation, coordination, and in this context, information to be provided by States;
 - b) Review and update the Regional Strategy at **Appendix A**, to guide and adjust implementation in the AFI Region.
- 2.3 **Appendix B** to this working paper provides the "NEW" to "PRESENT" Conversion Table adopted by the last meeting of the Task Force for implementation by States. This table was matched to the Asia/Pacific and Europe Guidance Material for the Implementation of Amendment 1 to the 15th Edition of the Procedures for Air Navigation Services (Version 2-3 November 2010).

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) review and update (as necessary) the Regional strategy for implementation as shown at **Appendix A**; and
 - b) take note of the "NEW" to "PRESENT" Conversion Table to be applied in the AFI Region as shown at **Appendix B**.

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Appendix A

INTERIM AFI STRATEGY FOR THE IMPLEMENTATION OF NEW ICAO FLIGHT PLAN FORMAT AND SUPPORTING ATS MESSAGES

Recognizing that:

- The Global Air Traffic Management Operational Concept (Doc 9854) requires information management arrangements that provide accredited, quality-assured and timely information to be used to support ATM operations;
- ATM Requirement 87 in the Manual of Air Traffic Management System Requirements (Doc 9882) provides that 4-D trajectories be used for traffic synchronization applications to meet ATM system performance targets, explaining that automation in the air and on the ground will be used fully in order to create an efficient and safe flow of traffic for all phases of flight;
- The amended ICAO Flight Plan and associated ATS Message formats contained in Amendment 1 to the Fifteenth Edition of the PANS ATM (Doc 4444, applicable 15 November 2012) have been formulated to meet the needs of aircraft with advanced capabilities and the evolving requirements of automated air traffic management systems;
- The complexities inherent in automated computer systems preclude the adoption of a single regional implementation date and transitions to the new flight plan format will therefore occur in accordance with the declared transition period described in this document.
- All States shall implement all provisions of Amendment 1 to the Fifteenth Edition of the PANS ATM (Doc 4444, applicable 15 November 2012).
- APIRG 17 established the AFI FPLT TF under Decision 17/61 to facilitate and guide the transition and implementation.

The AFI implementation of Amendment 1 to the PANS-ATM shall:

- Ensure that all States and airspace users implement all the provisions of Amendment 1 from 15 November 2012, not just selected aspects of the Amendment;
- Acknowledge that States, having taken all practical efforts to fully implement all the Amendment 1 provisions in accordance with guidelines, are obliged, in event of any non-implemented provisions, to inform ICAO about the "significant difference" in accordance with established ICAO procedures by 30 June 2011 and publish such difference in their State AIPs. However, that such action may not be taken before interested stakeholders including international organizations have been given an opportunity to intervene in pre-empting the "significant difference."

Note: The "significant difference" in this context does not relate to Standards and the obligation imposed by Article 38 of the Convention. It however, relates to provisions of Annex 15 to the Convention, inter alia, under section 4.1 thereof, regarding publication of significant differences between State practices and SARPs and procedures.

Ensure that, from 15 November 2012, all States and airspace users accept and disseminate the 'NEW' flight plan and associated ATS message formats only, and capabilities for 'PRESENT' flight plan provisions are forthwith discontinued.

(Note: In the context of the implementation, 'PRESENT' refers to the existing flight planning and ATS message formats as defined in the current version of the PANS-ATM and 'NEW' refers to the amended provisions as contained in Amendment 1 to the PANS-ATM.)

The AFI transition to the PANS-ATM Amendment 1 provisions shall:

Comply with the regional guidance provided by APIRG's FPLT TF;

Preserve global consistency in implementation by basing implementation activities, to the extent possible, on Guidelines 1 to 6 as described in the ICAO guidance material circulated under cover of State Letter AN 13/2.1-09/9 dated 6 February 2009;

Ensure that the FPLT TF undertakes coordination to facilitate harmonization with implementations in neighbouring regions;

Take all necessary measures to Ensure that State specific constraints are reduced, if not eliminated;

Declare a transition period from 1 January 2012 until 14 November 2012, comprising;

- 1 January to 31 March 2012 ANSPs software delivery and internal testing,
- 1 April to 30 June 2012 ANSPs implementation, and
- 1 July to 14 November 2012 airspace users testing and implementation.

Notwithstanding paragraph 5 above, Encourage States:

- To commence with implementation process as soon as practical, and not await the transition period;
- Not to implement 'NEW' capability by States before the commencement of the ANSPs external testing and implementation period.
- Insofar as possible, to complete ANSP implementation of 'NEW' capability by the end of the ANSPs external testing and implementation period.

Recognizing the risk to automated systems of having all airspace users simultaneously commencing 'NEW' on the common implementation date (15 November 2012), encourage users to take full advantage of the airspace users testing and implementation period to ensure operational readiness of flight planning systems;

Encourage States (ANSPs) and airspace users to coordinate appropriate implementation methodologies in order to ensure a staggered migration of airspace users to 'NEW' during the airspace users testing and implementation period (i.e. 1 July – 14 November 2012);

Encourage States (ANSPs) and airspace users to immediately commence preparations to implement Amendment 1 provisions in accordance with the declared transition period and report progress to the Regional Offices quarterly (i.e., January, April, July and September).

Require States to inform the Regional Offices of scheduled transition dates immediately (not later than 30 June 2011);

Require States to make necessary preparations in order to accommodate up to 120 hours prior to Estimated Off Blocks Time (EOBT) as of 15 November 2012; and

Require that States retain capability to simultaneously support 'PRESENT' and 'NEW' provisions (flight plan and ATS message format) from the activation of their 'NEW' capabilities until the end of the transition period (i.e. until and inclusive of 14 November 2012), at which point 'PRESENT' capability shall be discontinued.

Appendix B

NEW TO PRESENT CONVERSION TABLE

NAV/COM	NEW	PRESENT	
10a	Item 18	10a Item 18	
N		N	
S		S	
SF		SF	
Α		Z	NAV/GBAS
В		Z	NAV/LPV
С		С	
D		D	
E1		Z	COM/FMC WPR ACARS E1
E2		Z	COM/DFIS ACARS E2
E3		Z	COM/PDC ACARS E3
F		F	
G		G	
Н		Н	
I		- 1	
J1		J	DAT/V COM/J1
J2		J	DAT/H COM/J2
J3		J	DAT/V COM/J3
J4		J	DAT/V COM/J4
J5		J	DAT/S COM/J5
J6		J	DAT/S COM/J6
J7		J	DAT/S COM/J7
K		K	
L		L	
M1		Z	COM/INMARSAT M1
M2		Z	COM/MTSAT M2
M3		Z	COM/IRIDIUM M3
0		0	
			Reserved- should not be present.
P1-P9	RESERVED for RCP		Remove items
F1-F3	HESERVED for HEF		if present (i.e. do not make
			information part of the PRESENT format plan).
В	PBN/A1	R7	
R R R R R R	PBN/A1 PBN/B1 PBN/B2 PBN/B3 PBN/B4 PBN/B5 PBN/B6	RZ RZ RZ RZ RZ RZ RZ	NAV/RNAV10 RNP10 A1 NAV/RNAV5 B1 NAV/RNAV5 B2 NAV/RNAV5 B3 NAV/RNAV5 B4 NAV/RNAV5 B5 NAV/RNAV5 B6

NAV/COM	NEW	PRESENT	
10a	Item 18	10a	Item 18
R	PBN/C1	RZ	NAV/RNAV2 C1
R	PBN/C2	RZ	NAVRNAV2 C2
R	PBN/C3	RZ	NAV/RNAV2 C3
R	PBN/C4	RZ	NAV/RNAV2 C4
R	PBN/D1	PRZ	NAV/RNAV1 D1
R	PBN/D2	PRZ	NAV/RNAV1 D2
R	PBN/D3	PRZ	NAV/RNAV1 D3
R	PBN/D4	PRZ	NAV/RNAV1 D4
R	PBN/L1	RZ	NAV/RNP4 L1
R	PBN/O1	PRZ	NAV/RNP1 O1
R	PBN/O2	PRZ	NAV/RNP1 O2
R	PBN/O3	PRZ	NAV/RNP1 O3
R	PBN/O4	PRZ	NAV/RNP1 O4
R	PBN/S1	RZ	NAV/RNP APCH S1
R	PBN/S2	RZ	NAV/RNP APCH
Π			BARO VNAV S2
R	PBN/T1	RZ	NAV/RNP AR
			APCH RF T1
R	PBN/T2	RZ	NAV/RNP AR
			APCH T2
Т		Т	
U		U	
V		V	
W		W	
X		X	
Υ		Υ	
Z	COM/nnnn	Z	COM/nnnn
Z	NAV/nnnn	Z	NAV/nnnn
Z	DAT/nnnn	Z	COM/nnnn

SUR 10b	NEW Item 18	10b	PRESENT Item 18
N		N	
Α		Α	
С		С	
E		SD	COM/E
Н		S	COM/H
I		- 1	
L		SD	COM/L
Р		Р	
S		S	
X		Х	

SUR	NEW		PRESENT		
10b	Item 18	10b	Item 18		
B1		D	COM/BI		
B2		D	COM/B2		
U1		D	COM/U1		
U2		D	COM/U2		
V1		D	COM/V1		
V2		D	COM/V2		
D1		D	COM/D1		
G1		D	COM/G1		
NEW Item 18		PRESENT Item 18			
STS/		STS/ copy text over Except change "ATFMX" to "ATFMEXEMPTAPPROVED"			
SUR/		RMK/ SUR < text after SUR/ >			
DOF/		Maintain data in DOF/ if possible,otherwise remove. While not a documented PRESENT indicator, it is currently in use.			
	DAT/		COM/		
DLE/		RMK/ DLE < text after DLE/ >			
ORGN/			RMK/ORGN		
TALT/		RMK/TALT < text after TALT/>			
PBN/		See table above			
	NOTE: No Conversion needed for items with shaded background.				