



International Civil Aviation Organization  
Eastern and Southern African Office

**Second Meeting of the AFI Flight Plan Transition Task Force  
(FPLT TF/2)  
(Nairobi, Kenya, 16 - 18 February 2011)**

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

REGIONAL STRATEGY, PLANNING AND GUIDANCE

*(Presented by the Secretariat)*

<b>SUMMARY</b>
<p>This working paper provides a review of the AFI performance objectives related to Amendment 1 of the 15<sup>th</sup> Edition of PANS-ATM, Doc 4444, as guidance for development of a regional strategy for implementation in the AFI Region. It also calls for the review of a Regional implementation strategy and plan.</p>
<p>Action by the meeting is at <b>paragraph 3</b>.</p>
<p><b>REFERENCES:</b> SP AFI RAN Report</p>
<p>This Working Paper is related to Strategic Objectives: <b>A</b></p>

**1. INTRODUCTION**

1.1 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.

1.3 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. Based on these requirements, the SP AFI/08 RAN 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/08 RAN formulated Recommendation 6/5 – *Implementation of the new ICAO model Flight Plan Form*.

## 2. DISCUSSION

2.1 The content of the Performance Framework Form (FPP) has since been reviewed and adopted by the APIRG 17 meeting in August 2010 under the following Conclusion:

*Conclusion 17/41: ATM Performance Framework*

*That, the AFI performance framework forms formulated by the Special AFI/8 RAN Meeting regarding performance objectives in the fields of ATM and SAR are updated as at Appendix 3.4A to the report on agenda item 3.4.*

2.2 Furthermore, the FPLT Task Force meeting in Johannesburg, 13-14 September 2010, developed a draft Strategy for the New ICAO flight plan format and for supporting ATS messages, as at **Appendix A** to this working paper, for adoption by States when implementing the New ICAO flight plan format.

2.3 Based on the continuous assessment of available information, outcome of the 2012 Flight Plan Workshop (12-16 February 2011), other developments as discussed under agenda item 2, 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;
- c) Review and update the Regional PFF at **Appendix B** to this working paper
- d) Update the plan and identify actions, responsible parties and target dates, to achieve the tasks in the Performance Objectives. In this regard the meeting may wish to consider using a template format as provided at **Appendix C** to this working paper.

2.4 The meeting may wish to note however, that a large portion of the information to be uploaded to the abovementioned website is to be provided by States and that in order to gather essential planning information, the Regional Offices will be circulating surveys requesting States to provide necessary information for planning and to assess progress in preparations for implementation:

## 3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) review and update the Regional strategy for implementation at **Appendix A**;
- b) review the AFI performance objectives related to the 2012 flight plan at **Appendix B**;
- c) develop a plan and identify actions, responsible parties and target dates to achieve the performance objectives; and
- d) Update Point of Contacts for 2012 Flight Plan.

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**(DRAFT) AFI STRATEGY FOR THE IMPLEMENTATION OF  
NEW ICAO FLIGHT PLAN FORMAT AND SUPPORTING ATS MESSAGES**

**Recognizing that:**

- 1) 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;
- 2) 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;
- 3) 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;
- 4) 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.
- 5) All States shall implement all provisions of Amendment 1 to the Fifteenth Edition of the PANS ATM (Doc 4444, applicable 15 November 2012).
- 6) 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:**

- 1) 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;
- 2) 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.*

- 3) 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:**

- 4) Comply with the regional guidance provided by APIRG's FPLT TF;
- 5) Preserve global consistency in implementation by basing implementation activities, to the extent possible, on Guidelines 1 to 6 described in the ICAO guidance material circulated under cover of State Letter AN 13/2.1-09/9 dated 6 February 2009;
- 6) Ensure that the FPLT TF undertakes coordination to facilitate harmonization with implementations in neighbouring regions;
- 7) Take all necessary measures to ensure that State specific constraints are reduced, if not eliminated;
- 8) 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.
- 9) Notwithstanding paragraph 5 above, commence with implementation process as soon as practical, and not await the transition period;
- 10) Not implement 'NEW' capability by States before the commencement of the ANSPs external testing and implementation period.
- 11) Insofar as possible, complete ANSP implementation of 'NEW' capability by the end of the ANSPs external testing and implementation period.
- 12) 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;
- 13) 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);

- 14) 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 FPLT TF periodic meetings;
- 15) Require States to inform the Regional Offices of scheduled transition dates immediately (not later than 30 September 2010);
- 16) Make necessary preparations in order to accommodate up to 120 hours prior to Off Blocks Time (EOBT) as of 15 November 2012; and
- 17) 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.

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Performance Objectives

**ATM PERFORMANCE OBJECTIVES**

<b>NATIONAL PERFORMANCE OBJECTIVE - IMPLEMENTATION OF THE NEW ICAO FPL PROVISIONS BY 15 NOVEMBER 2012</b>				
<b>Benefits</b>				
<b>Environment</b>	<ul style="list-style-type: none"> <li>• reductions in fuel consumption</li> </ul>			
<b>Efficiency</b>	<ul style="list-style-type: none"> <li>• ability of air navigation service providers to make maximum use of aircraft capabilities</li> <li>• ability of aircraft to conduct flights more closely to their preferred trajectories</li> <li>• facilitate utilization of advanced technologies thereby increasing efficiency</li> </ul>			
<b>Safety</b>	<ul style="list-style-type: none"> <li>• optimized demand and capacity balancing through the efficient exchange of information</li> <li>• enhance safety by use of modern capabilities onboard aircraft</li> </ul>			
<i>Strategy</i>				
<i>Short term (2010-2012)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
<b>AUO SDM</b>	<ul style="list-style-type: none"> <li>• 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</li> <li>• ensure that the capabilities of local systems are fully adaptable to the changes envisaged in the new FPL form</li> <li>• ensure the ability of FDPS's to parse information correctly to guarantee that misinterpretation of data does not occur</li> <li>• 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 issue regarding the provision of service by the flight planning facility itself or downstream units</li> <li>• ensure that there are no individual State peculiarities or deviations from the flight plan provisions</li> <li>• 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</li> </ul>	2009-June 2011	States	Ongoing
		2010	States	Ongoing
		2010	States	Ongoing
		2010	States	Ongoing
		2011	States	Ongoing
		2012	States	Ongoing

	<ul style="list-style-type: none"> <li>• 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</li> <li>• inform on the implementation status to the ICAO regional offices on an ongoing basis</li> <li>• keep the Flight Plan Implementation Tracking System (FITS) up to date based on the information provided by the States</li> </ul>	2010-2012	States	Ongoing
		2010-2012	States	Ongoing
		2010-2012	ICAO Regional Offices	Ongoing
<b>linkage to GPIs</b>	GPI/5 RNAV and RNP (Performance-based navigation) GPI-12 Functional integration of ground systems with airborne system GPI/18 Aeronautical Information			

**TASK LIST - SAMPLE TEMPLATE**

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<b>No.</b>	<b>ICAO Strategic Objective</b>	<b>Associated GPI</b>	<b>Tasks</b>	<b>Objective</b>	<b>Deliverables</b>	<b>Target Date</b>	<b>To be delivered by</b>	<b>Supporting Parties</b>	<b>Status</b>
1	A: Safety	GPI-5, GPI-12, GPI-18	Follow up on States completion of status of implementation plans	To ensure adequate information to facilitate planning and support	Information on status and planning by States	April 2011	ROs (Sebo)	States, ROs (PZ, SM & DL)	Ongoing
2									
3									
4									
5									
6									
7									
8									

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