



International Civil Aviation Organization

**The Twentieth Meeting of the APANPIRG ATM/AIS/SAR Sub-Group
(ATM/AIS/SAR/SG/20)**

Singapore, 05 – 09 July 2010

Agenda Item 4: Review and progress the tasks assigned to the ATM/AIS/SAR/SG by APANPIRG

**SECOND MEETING OF ICAO FLIGHT PLAN AND
ATS MESSAGES IMPLEMENTATION TASK FORCE**

(Presented by the Secretariat)

SUMMARY

This paper presents a report of the Second Meeting of ICAO Flight Plan & ATS Messages Implementation Task Force (FPL&AM TF/2, November 2009).

This paper relates to

Strategic Objectives:

- A: Safety – Enhance global civil aviation safety*
- C: Environmental Protection – Minimize the adverse effect of global civil aviation on the environment*
- D: Efficiency – Enhance the efficiency of aviation operations*
- E: Continuity – Maintain the continuity of aviation operations*

Global Plan Initiatives:

- GPI-5 Performance based navigation*
- GPI-9 Situational awareness*
- GPI-11 RNP and RNAV Standard Instrument Departures (SIDs) and Standard Terminal Arrivals (STARs)*
- GPI-17 Implementation of data link applications*
- GPI-18 Aeronautical information*

1. INTRODUCTION

1.1 The Second Meeting of Asia/Pacific Flight Plan & ATS Messages Implementation Task Force (FPL&AM/TF/2) and a seminar was held at ICAO Asia and Pacific Office, Bangkok, Thailand from 17 to 20 November 2009. Full report is available at the ICAO Asia and Pacific Office website at http://www.icao.or.th/meetings/2009/fpl_amtf2/index.html

2. DISCUSSION

Seminar on Implementation of New ICAO Flight Plan

2.1 The participants recognised that in addition to the obvious impacts on airline flight planning systems and ATC automation systems, many States had a large number of ancillary systems that would also be affected by the changes to flight plan and ATS messaging formats.

Review Available Documentation and Guidance Materials

Matters for Clarification Arising from FPL&AM/TF/1

2.2 FPL&AM TF/1 (March 2009, Bangkok) identified a number of items in respect to the Amendment 1 of the *Procedures for Air Navigation Services – Air Traffic Management* (PANS-ATM, Doc 4444) that warranted assistance/guidance from ICAO Headquarters. The meeting discussed the clarifying responses provided by ICAO HQ to the queries raised during FPL&AM TF/1 as follows:

FPL Field Sizes

2.3 The meeting learned that it was not possible for software coders to work with open ended fields and therefore in every case a field size had to be specified. In practice, this meant that coders in each State were obliged to individually decide and apply parameters for each field length. Rather than ad-hoc local solutions, the meeting considered that agreeing on an Asia/Pacific requirement for a defined number of characters per field or sub-field that also complied with relevant Annex 10 Volume II AFTN provisions would result in worthwhile standardisation and economies for States. Accordingly, an ad-hoc FPL Parameters Working Group was established and tasked with working by correspondence to agree, amongst other things, a suitable number of characters for relevant flight plan fields.

RPL Equipment Notification

2.4 FPL&AM TF/1 had noted that neither the PRESENT or NEW provisions made allowance for an equipment field in Sections 6 and 7 of Appendix 2 of PANS-ATM in relation to Repetitive Flight Plans (RPL). The absence of such a field had led to local arrangements being agreed within and between some States in some instances to enable equipage to be notified in RPLs. Recognising that information in relation to equipage was of importance in RPL arrangements; clarification had been sought as to whether it was possible to include an equipment field in RPL.

2.5 The clarification recalled that historically it was assumed that aircraft filing a RPL were 'S' equipped for the route to be flown. However, an arrangement such as the use of EQPT/ to provide Field 10 info within Item Q of the RPL could be a regional solution if deemed necessary.

ATS Messages & Field 18 DOF

2.6 The meeting considered that the clarification relating to Item 18 and Date of Flight (DOF) has implications on the composition of ATS messages as published in the Amendment. The clarification provided for the requirement to include Field Type 18 in CHG, CNL, DLA, DEP and RQS messages states “*Field Type 18 with DOF specified is meant to uniquely identify the flight when the FPL is presented more than 24 hours in advance and there is no need to include all other Item 18 information*”. The meeting adopted the following interpretation as an Asia/Pacific regional approach:

- Insert DOF/YYMMDD in Field 18 if that indicator has been previously specified
- If the DOF/ indicator has not been previously specified insert zero (0) in Field 18

Development of Asia/Pacific Regional Guidance Material

2.7 The meeting discussed the complexity of the matters at hand, noting that a standardised interpretation of Amendment 1 was absolutely critical to a successful implementation. It was evident that a number of different interpretations were already being made by States. A number of other issues had developed that would require interpretation/decision by the Task Force and it was likely that this would continue be the case as more States commenced implementation activities and sought to more clearly understand what was intended by Amendment 1.

2.8 In order to record the approaches, interpretations and resolutions agreed by the Task Force for use as Asia/Pacific guidance material, the meeting commenced work on a repository of coding guidelines and associated material for application in affected automation systems. A draft document titled *Asia/Pacific Guidance Material for the Implementation of Amendment 1 to Procedures for Air Navigation Service – Air Traffic Management, (PANS-ATM, DOC 4444), 15th Edition*, was prepared and is retained as **Attachment A** hereto.

Conversion Table for NEW to PRESENT

2.9 The United States presented a development of the ICAO Conversion Table for review by the meeting. The ICAO Table had been modified in response to discussions at the Eurocontrol Task Force 1 meeting (September 2009) and bilateral discussions between the United States, and Canada and Mexico, respectively.

Flight Plan Implementation Tracking System

2.10 A demonstration of the ICAO Flight Plan Implementation Tracking System (FITS) website (<http://www2.icao.int/en/FITS/Pages/home.aspx>) was conducted by the Secretariat. The meeting offered the following comments/suggestions that may be useful in making FITs even more effective:

- a) Critical columns should be moved to the left, with less critical information in columns to the right (OK to access by scrolling):
 - o Examples of critical columns would be: Name of ANSP, and Status - “NEW” or “PRESENT”
 - o Examples of non-critical columns would be: POC, etc.
- b) Date of Implementation has a time value (currently 12.00 AM) – assume this is local time – should it be UTC?
- c) Could PRESENT add more value to cover a scenario where a State may be able to accept the new format but not be able to, or chooses not to, transmit the new format?

Aspects of Implementation in Asia/Pacific Region

Australia

2.11 Australia pointed out that one of the primary transition challenges to be managed was the effect on downstream ANSPs of the conversion of NEW to PRESENT. Once one ANSP had made the conversion, subsequent ANSPs could receive flight data with reduced information.

India

2.12 India recognized the critical need for regional coordination between States to develop appropriate guidelines and highlighted the need for in depth testing arrangements to be developed to facilitate testing between ANSPs, and between ANSPs and users. India was interested in understanding how other ANSPs would approach this issue and would appreciate feedback to the next meeting in this regard.

2.13 India noted that their geographic location would require coordination not only with States in Asia/Pacific Region but also with States in the Middle East and Eastern & South African Regions. India was concerned that unless these adjacent regions also adopt the same strategies for implementation, India will face problems, for example in handling date of flight (DOF) issues. In this context, India expressed that the coordination efforts between regions were of paramount importance and the FPL&AM TF must play a primary role in initiating coordination.

Japan - General

2.14 In regard to handling the 120 hour submission, Japan informed that Japan Civil Aviation Bureau (JCAB) planed to establish a new data base in front end systems receiving the flight plans from airspace users to enable acceptance and holding of flight plans 120 hours in advance. However, the systems behind the front end systems ('backside systems') won't be modified and will continue to handle flight plans less than 24 hours before departure. A timer will be added to the front end systems which will release flight plans from the new storage data base to the backside systems about 24 hours in advance of the flight.

Japan - AIDC

2.15 Analysis by JCAB had indicated that the 120 hour submission is not likely to have a significant impact on AIDC messaging because this system messaging occurs with the actual conduct of the flight and AIDC messaging essentially does not begin until the flight has actually commenced. However, there is a significant issue with AIDC messaging in NEW format as JCAB will have to update the interface with AIDC connected States to include the item 10 and 18 changes that are utilized in at least messages for CPL, ABI, PAC, MAC and CDN as an option field.

2.16 Consequently, JCAB was exploring whether it would be possible to simultaneously switch over the systems to NEW AIDC between connecting area control centres as Anchorage, Incheon, Oakland and Taipei, and will commence coordination with affected them shortly. However, as it is anticipated that such an approach will require significant coordination and management to be successful, JCAB is also investigating an alternative whereby the JCAB systems are configured to handle both PRESENT and NEW AIDC messaging simultaneously.

Thailand

2.17 It is anticipated that the Flight Data Strip Printing System (FDSS) will eventually be modified to be compatible with NEW, probably after November 2012. AEROTHAI is also considering upgrading one of the two proprietary systems to handle NEW but the business case has not been developed and any upgrade is unlikely to adhere to the Amendment 1 implementation date and would take place after November 2012, if at all. The timeline is unlikely to be able to be reliably linked to the Amendment 1 effective date.

2.18 In this respect, in order to implement some NEW capability AEROTHAI will establish a Flight Data Management Center (FDMC) as a front-end system that will centralize and pre-process ATS messages before distributing them to AEROTHAI's existing flight data processing systems (end systems) and downstream ATS units. The FDMC will distribute the messages to the end systems according to their current PRESENT capabilities, both in terms of format and filing time. AEROTHAI has commenced work on defining the operational concept and system requirements for the FDMC to meet Amendment 1 provisions, and is expecting to commence initial stages of implementation during the first quarter of 2010.

Thailand - Outstanding Issues

2.19 AEROTHAI system developers have raised a number of concerns in relation to the implementation of NEW. At the moment, concern was experienced regarding the fact that there was no explicit way to distinguish between NEW and PRESENT. AEROTHAI would like to know how other ANSPs plan to address this issue.

United States – Impact on ATC Automation Systems

2.20 The United States highlighted that it was possible to file numerous combinations of PBN capabilities and considered that some of these may be redundant. They posed the question as to whether it could be assumed the lowest RNAV or RNP specification for a particular phase of flight meant that it could be automatically assumed that the greater specification was also authorised.

2.21 The meeting noted that the PBN manual specifically precludes the assumption that one specification automatically assumed a higher capability but recognised the logic expressed by the United States and agreed that such an outcome would be very beneficial. The Secretariat would bring the matter to the attention of ICAO Headquarters for consideration.

IATA's Concerns

2.22 IATA noted that nearly 18 months has passed and while Asia/Pacific Region was now conducting FPL&AM TF/2, IATA was concerned that the corresponding effort in other regions was not as apparent. As such IATA believed it was vital for the implementation of the amended FPL provisions to be very carefully managed on a global basis. While coordination could be undertaken on a regional basis, the necessary guidance, controls, coordination and motivation must be controlled on a global basis. IATA noted that the meeting had already discussed the effects on flight safety arising from ATC automation failures.

2.23 From IATA's perspective, unfortunately there is already enormous variation in preparation and approach to the FPL amendment, with some States already identifying that they have no intention of meeting the effective date. At the first meeting of the European FPL TF in Sep 09, NATS UK and AENA Spain announced they would not be capable of accepting the NEW format in 2012 with NATS expecting late 2013/early 2014 and AENA indicating early 2013. In the AFI region, no specific group has been established with little progress expected before APIRG in mid 2010. The MID ATM/AIS/SAR group has only this month established a Study Group which does not plan to conduct their first meeting until February 2010.

IATA - Consistency and Accuracy of Guidance

2.24 IATA strongly endorsed the establishment of Asia/Pacific FPL & AM TF and the efforts made thus far. However, in proposing that the meeting endorse the concept that no regional variations should occur, IATA recognised that it had already been necessary for Asia/Pacific Region to adopt a number of regional interpretations and approaches to facilitate progress toward implementation. In IATA's view, this was highly regrettable and suggested that ambiguity did exist; it was therefore likely that other regions would also need to make interpretations and that these could also be different for the different areas.

Lack of Robustness in Global Coordination

2.25 The meeting was strongly of the view that a suitably robust coordination arrangement was not yet in place and that this would work against achieving a smooth implementation.

Regional Strategies for Implementation

IATA – Implementation Strategy

2.26 The meeting expressed strong concern at the prospect that a large number of operators would cutover to the NEW format on a single day, creating significant potential risks in implementation. IATA acknowledged these concerns and agreed that the situation was much less than ideal. However, users are entirely reliant on the State's ability to accept NEW format FPL and so users cannot switch to NEW until after the States are ready. Unfortunately with some States in regions outside the Asia/Pacific reportedly targeting implementation by all ANSPs and users on 15 November 2012, there was little else that could be planned by users at present.

FPL&AM TF – Adopt Phased Implementation

2.27 The meeting recalled discussions during FPL&AM TF/1 in relation to airspace users targeting a fixed transition date of 15 November 2012 globally. The meeting expressed concern that such an approach would not allow adequate testing of the interfaces between airline and ground systems and would represent a critical risk to transition.

2.28 The meeting considered that the implementation strategy being considered by IATA, whereby all user switchovers occurred on the same day, would result in an unmanageable impact on ANSPs systems with a very real risk of system crashes. As such, ANSP safety case hazard analysis was likely to find that mitigation of some kind was necessary. Under the phased arrangements, users would have the opportunity to switch to the NEW format at a time of their choosing during an identified users testing and implementation period, supported by operational ANSPs systems able to assist with testing and the user transition, whilst at the same time maturing their own systems.

2.29 In this regard, the meeting adopted an Asia/Pacific approach using a phased transition, where ANSPs would implement NEW, followed by users. A transition period was declared, commencing 1 January 2012 and ending 15 November 2012. The transition period is subdivided as follows:

- **Phase 1** - ANSPs software delivery and internal testing
 - 1 January to 31 March 2012,
- **Phase 2**– ANSPs external testing and implementation
 - 1 April to 30 June 2012, and
- **Phase 3** – Airspace users testing and implementation.
 - 1 July to 15 November 2012

2.30 Following 30 June 2012, airspace users would be invited by AIC or NOTAM to commence testing with ANSPs from 1 July 2012.

Date of Flight (DOF) – Five Day (120 Hour) Issues

2.31 The meeting recalled that FPL&AM TF/1 had expressed strong reservations about the NEW provision under which flight plans could be lodged up to five days (120 hours) in advance of EOBT. Present experience in the Asia/Pacific region with plans submitted well in advance of EOBT (within the present 24 hour window) is that this practice precipitates a large number of CHG messages as operators changed aircraft type, or tail number on a same type but with different equipage, or varied the ETD, or a variety of other modifications to what had originally been filed. As meteorological conditions change after the FPL has been filed, route changes and altitude changes also manifest, requiring modification messages as well. The extension of the filing period from 24

hours to 120 hours is expected to compound these effects, particularly in respect to meteorology factors as changes to the flight plan become necessary on the basis of updated weather reports received within the 5 day period before departure.

2.32 Consequently, FPL&AM TF/1 had included a constraint in the Interim Strategy – “...consider a regional constraint on requiring acceptance of flight plans more than 24 hours prior to EOBT...” – which strategy had subsequently been adopted by APANPIRG. FPL&AM TF/1 had been unable to identify situations where FPL lodgement earlier than 24 hours was necessary and requested that States and users in the Asia/Pacific conduct studies into the circumstances in which it was essential that a flight plan be submitted more than 24 hours in advance of EOBT.

2.33 Following significant discussion, the meeting did not support a compulsion on all States to meet the 120 hour lodgement provision by 15 November 2012 and strengthened the position previously adopted by FPL&AM TF/1 in the regional implementation strategy from “..consider a constraint...” to “...adopt a regional approach that does not require processing of flight plans more the 24 hours prior to EOBT during the declared transition period...”. This is expected to mitigate the transition issues associated with DOF/ matters and reduce transmission of superfluous modification messages and corresponding load on messaging systems. DOF complexities will be further considered by States after the November 2012 implementation and would be incorporated into new systems as they were specified, procured and commissioned.

2.34 On the basis of the new and firm information to hand and the regional approaches agreed by the meeting, the regional implementation strategy was updated as shown in **Attachment B** hereto and the following Conclusion was drafted:

Draft Conclusion 20/XX – Adopt Strategy for Implementation of New Flight Plan Format

That the ‘Strategy for the Implementation of new ICAO Flight Plan Format and Supporting ATS Messages’ provided in Appendix J to the FPL&AM TF/2 Report on Agenda Item 6 be adopted and published as the interim edition, and States and users be urged to continue implementation planning based on the strategy.

2.35 The meeting recognised that the next APANPIRG meeting would not take place until September 2010 and that APANPIRG/20 (September 2009) had adopted the “Interim Strategy”. As such, the “Interim Strategy” would remain in force until superseded by an updated version adopted by a future APANPIRG.

3. SUMMARY OF SIGNIFICANT POINTS

3.1 The following are the main points of interest arising from the Task Force meeting:

- a) A draft document titled “Asia/Pacific Guidance Material for the Implementation of Amendment 1 to Procedures for Air Navigation Service – Air Traffic Management, (PANS-ATM, DOC 4444), 15th Edition” was prepared;
- b) ICAO Flight Plan Implementation Tracking System (FITS) website is available at <http://www2.icao.int/en/FITS/Pages/home.aspx>;
- c) Asia/Pacific approach using a phased transition was adopted;
- d) A compulsion on all States to meet the 120 hour lodgement provision by 15 November 2012 was not supported; and

- e) On the basis of the new and firm information to hand and the regional approaches agreed by the meeting, the regional implementation strategy was updated and a draft Conclusion was drafted.

4. ACTION BY THE MEETING

4.1 The meeting is invited to:

- a) note the information in this paper;
- b) review the Asia/Pacific Guidance Material for the Implementation of Amendment 1 to PANS-ATM document in Attachment A and consider an additional draft conclusion as follows;

**Draft Conclusion 20/XX – Adopt Guidance Material for the
Implementation of Amendment 1 to
PANS-ATM**

That, in order for States and users to clearly understand what is intended in Amendment 1, the ‘*Asia/Pacific Guidance Material for the Implementation of Amendment 1 to the 15th Edition of the Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM, Doc 4444)*’ provided in Appendix XX to the ATM/AIS/SAR/SG/20 report on Agenda Item 4 be adopted and published as regional guidance material.

- c) review the updated Strategy for the Implementation of new ICAO Flight Plan Format and Supporting ATS Messages;
- d) consider, since only a couple of States have informed of scheduled date and implementation methodology for transition by 1 July 2010 in accordance with Conclusion 20/8, the following new conclusion with the revised due date; and

**Draft Conclusion 20/XX – Notification of State Transition Date to
the New Flight Plan Format**

That, in order to keep the ICAO Flight Plan Implementation Tracking System (FITS) website updated, States, if have not done yet, inform the Regional Office of the initial set of data required in the FITS website, e.g. scheduled date and contact person, by dd mm yyyy, and subsequently update the data at each juncture.

- e) identify any additional matters to be addressed by the Sub-Group.

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INTERNATIONAL CIVIL AVIATION ORGANIZATION
ASIA AND PACIFIC OFFICE



DRAFT

**Asia/Pacific Guidance Material for the
Implementation of Amendment 1 to the 15th Edition of the
Procedures for Air Navigation Services – Air Traffic Management
(PANS-ATM, Doc 4444)**

Draft Version 0.1 – 19 November 2009

Issued by the ICAO Asia/Pacific Regional Office, Bangkok

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**ASIA/PACIFIC GUIDANCE MATERIAL FOR THE
IMPLEMENTATION OF AMENDMENT 1 TO THE 15th EDITION OF
PROCEDURES FOR AIR NAVIGATION SERVICES – AIR TRAFFIC MANAGEMENT
(PANS-ATM, Doc 4444)**

1. Background

1.1 In order to ensure a harmonised implementation of the provisions contained in Amendment 1 to the 15th Edition of PANS-ATM relating to comprehensive changes to the ICAO Flight Plan and associated ATS Messages formats, this Asia/Pacific regional guidance material has been developed by APANPIRG's Asia/Pacific ICAO Flight Plan and ATS Messages Task Force (FPL&AM/TF). The material will be further developed during 2010 and presented to APANPIRG/21 in September 2010 for formal adoption.

1.2 Asia/Pacific (APAC) States and Air Navigation Service Providers (ANSPs) are encouraged to use this material as general implementation guidance for the new flight plan and ATS messages formats required by Amendment 1 to PANS-ATM for applicability date 15th November 2012. The material is expected to be of specific assistance when coding software changes in automation systems needed to support the changes to flight plan and ATS message formats

1.3 The FPL&AM/TF considers that it is of critical importance to conduct validity checking of Filed Flight Plans (FPL) and Air Traffic Service (ATS) Messages filed with and between all Asia/Pacific States and ANSPs, and to ensure that Current Flight Plans (CPL) and other messages exchanged between States and ANSPs are likewise formatted and handled in a similar fashion. In this manner, users/filers are assured that FPLs and associated messages are checked with the same level of scrutiny independent of where the flight originates. Additionally, they are assured that critical flight data information is passed intact by each Asia/Pacific State and ANSP along the route of flight.

2. Terminology

2.1 In accordance with International Civil Aviation Organization (ICAO) transition guidance documents, the following terminology is used throughout this guidance material:

- **PRESENT** format is defined as ICAO flight planning and ATS message formats currently in use as specified in DOC 4444, 15th Edition.
- **NEW** format is defined as ICAO flight planning and ATS message formats specified in Amendment 1 to DOC 4444, 15th Edition.
- **Applicability Date** is the 15 November 2012 effective date of Amendment 1 to PANS-ATM (Doc 4444).

3. Transition Period & Phased Implementation

3.1 The FPL&AM/TF considers that applying an implementation strategy whereby all user switchovers to NEW format occur on the same day (i.e. on Applicability Date) would result on an unmanageable impact on ANSPs systems with a very real risk of automation system crashes. As such, the pre-implementation ANSP safety case analyses are expected to indentify this implementation scenario as a safety hazard that requires effective mitigation.

3.2 Under the phased arrangements agreed by the FPL&AM/TF for application in the Asia/Pacific Region, ANSP implementation of NEW format (whilst simultaneously retaining PRESENT capability) would take place first, followed by a staggered user switchover to NEW capability.

3.3 The transition period is defined as the declared Asia/Pacific transition period from 1 January 2012 until 15 November 2012, as outlined in the updated Asia/Pacific Region *Strategy for the Implementation of NEW ICAO Flight Plan Format and Supporting ATS Messages* proposed by FPL&AM/TF/2 (November 2009), comprising the following phases:

- **Phase 1** - ANSPs software delivery and internal testing
 - 1 January to 31 March 2012,
- **Phase 2**– ANSPs external testing and implementation
 - 1 April to 30 June 2012, and
- **Phase 3**– Airspace users testing and implementation.
 - 1 July to 15 November 2012

3.4 Under the phased approach, States will not implement NEW capability before the commencement of the ANSPs external testing and implementation period on 1 April 2012 and, insofar as possible, would complete implementation of NEW capability by the end of the ANSPs external testing and implementation period on 30 June 2012. Following this, airspace users would be invited by AIC or NOTAM to commence testing with ANSPs from 1 July 2012. Importantly, ANSPs and users would be encouraged 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 – 15 November 2012).

4. DOF/ - Five Day (120 hour) Advance FPL Lodgement

4.1 The Amendment 1 provisions enable flight plans to be lodged up to 5 days (120 hours) prior to the Estimated Off Blocks Time (EOBT) for the flight, a significant change from the 24 hour requirement in the existing provisions.

4.2 Present experience in the Asia/Pacific region with FPLs submitted well in advance of EOBT (within the present 24 hour window) is that this practice precipitates a large number of CHG messages as operators change aircraft type, or tail number on a same type but with different equipage, or vary the ETD, or a variety of other modifications to what has originally been filed. As meteorological conditions change after the FPL has been filed, route changes and altitude changes also manifest, requiring modification messages as well. Overall, the existing 24 hour window generates a significant amount of message traffic that does not add apparent value to the aircraft operator and increases complexity for the many ATS units along the path of flight that have to process the extra modification messages. To address this existing problem, in one instance an Asia/Pacific State has already published a constraint in AIP under which flight plans are not accepted more than 8 hours prior to EOBT.

4.3 The extension of the filing period from 24 hours to 120 hours is expected to compound these effects, particularly in respect to meteorology factors as changes to the flight plan become necessary on the basis of updated weather reports received within the 5 day period before departure.

4.4 Investigations by the FPL&AM/TF have been unable to identify required operational circumstances in the Asia/Pacific Region where FPL lodgement earlier than 24 hours was necessary to meet the medium term needs of States. A similar situation is reported by IATA in respect to Asia/Pacific operators.

4.5 Discussions during the FPL&AM/TF/2 meeting highlighted the difficulties being experienced by many States in terms of civil aviation funding. In the case of the 120 hour lodgement provision, it was difficult for States to justify a business case for changes to what was often a number of legacy systems within a State when there was no clear operational requirement driving the change. Such changes would, of course, be included by States in the specification for new system procurement but, in the absence of a clear operational need, the business case for retrofit by Asia/Pacific States does not appear sound.

4.6 Notwithstanding, some States already have some capacity for DOF, albeit disabled in their systems at the moment. In these cases, where financial impacts were much less, it was logical for such ANSPs to proceed with 120 hour lodgement capability. It is also possible that some States will prefer to proceed with a DOF retrofit to legacy systems in time for the November 2012 implementation. However, the potential impacts of the implementation of an 'island' airspace which was accepting 120 hour lodgement should be considered in terms of the impact of neighbouring airspaces not accepting 120 hour lodgements, particularly in relation to AIDC configuration.

4.8 In light of the issues presently associated with the 5 day (120 hour) lodgement provision, including business case difficulties, the FPL&AM/TF does not support a compulsion on all Asia/Pacific States to meet the 120 hour lodgement provision by 15 November 2012. Accordingly the position adopted in the Asia/Pacific interim regional implementation strategy (Appendix A refers) has been proposed to APANPIRG for strengthening from the current *"..consider a constraint..."* to *"...adopt a regional approach that does not require processing of flight plans more the 24 hours prior to EOBT during the declared transition period..."*.

4.9 This is expected to mitigate the transition issues associated with DOF/ matters and reduce transmission of superfluous modification messages and the associated loading on messaging systems. DOF/ complexities will be further considered by States after the November 2012 implementation and, in any case, would be incorporated into new systems as they were specified, procured and commissioned.

5. Software Coding Considerations

Date of Flight (DOF) and Early Filing

5.1 In Amendment 1, use of a DOF/ indicator in Item 18 is accompanied by the ability to file NEW format up to 120 hours in advance. As it is likely that not all ANSPs will implement the 120 hour requirement by the Applicability Date, the following guidelines regard use of DOF/:

- a) An ANSP that does not implement the 120 hour requirement should handle such messages in accordance with normal ANSP error message handling procedures if that message has a DOF/ that is beyond their implemented time frame (i.e. more than *nnn* hours in advance, often limited to 24 hours). This ensures such messages are processed for the intended day of flight.

- b) At a defined time before Estimated Off Blocks Time (EOBT), normally within 24 hours, DOF/ can be removed from stored FPLs. In any case, DOF/ should not be transmitted in AIDC messages since flight data is first coordinated by AIDC much less than 24 hours before departure (and in fact, in most cases, is first coordinated after departure).

Use of P1-P9 in Field 10a

5.2 In relation to the use of P1-P9 in Field 10a (Radio communication, navigation and approach aid equipment and capabilities), Amendment 1 identifies alphanumeric entries P1-P9 in Field 10a as “Reserved for RCP.” The following guidelines regard filing and processing P1-P9 in Item 18:

- a) Even though there is no need for this information now, ANSPs should accept P1-P9 if filed in an FPL and pass the information in AIDC messages, but with no interpretation or processing required. This will avoid transition issues and minimize necessary coordination when these items begin to be used in the future.

Changed definition of “S” in Field 10a

5.3 Amendment 1 changes the definition of standard equipment in Field 10a (“S”) so that it no longer includes ADF. An FPL may have elements that uniquely identify it as being in either PRESENT or NEW format. However, it is also possible for an FPL to have no unique elements, and thus be valid as both PRESENT and NEW format. In such an FPL, use of “S” in Field 10a is ambiguous.

5.4 Therefore, it is essential to know whether an FPL is in NEW or PRESENT format before interpreting an “S” filed in Field 10a. The following guidelines regard filing and processing of “S” during Phases 2 and 3 of the transition period, respectively (i.e. 1 April to 30 June & 1 July to 15 November 2012).

- a) In conjunction with the beginning of Phase 2 of the transition period (i.e. 1 April 2012), ANSPs should not assume ADF capability when an “S” is filed, regardless of the perceived format of the filed FPL (NEW or PRESENT format). All FPLs received on or after 1 April 2012 with an “S” filed in Field 10a will be processed and/or interpreted as if “V O L” (VHF RTF, VOR and ILS) were filed; and
- b) States and ANSPs must provide instructions to their users to file an “F” for ADF in addition to filing of “S” in PRESENT format FPLs, beginning 1 April 2012.

Consistency between Field 10a and PBN/ in Item 18

5.5 The PBN/ indicator introduced by Amendment 1 conveys not only navigational capability with respect to accuracy, but also information regarding what type of navigational equipment is used to achieve it. This introduces a relationship between PBN/ in Item 18 and Field 10a, and it is possible to file inconsistent data (i.e., capabilities in PBN/ that are not supported by data in Field 10a). Consequently, a consistency check should be coded to evaluate NEW FPLs per the following guidelines:

- If B1, B2, C1, C2, D1, D2, O1 or O2 are filed, then a “G” must be included in Field 10a;
- If B1, B3, C1, C3, D1, D3, O1 or O3 are filed, then a “D” must be included in Field 10a;

- If B1 or B4 is filed, then an “O” or “S” and a “D” must be included in Field 10a (i.e., “SO” or “SD” must appear in 10a);
- If B1, B5, C1 or C5 are filed, then an “I” must be included in Field 10a; and
- If C1, C4, D1, D4, O1 or O4 are filed, then a “D” and an “I” must be included in Field 10a (i.e., “D I” must appear in 10a).

Validity Checking & Processing of Item 18 Indicators

5.6 Amendment 1 indicates that only the specified indicators should be included in Item 18. Furthermore, it makes the order of the indicators mandatory as opposed to preferred. Finally, the rules for some items are quite explicit and could readily be subject to validity checking by automation systems. The following guidelines regard use of Item 18:

- a) Systems should not accept indicators in Item 18 which are not defined in the PANS-ATM. If internal requirements create the need to use a ‘local’ non-standard indicator, measures must be taken to ensure that airspace users filing with multiple FIRs are not impacted, and AIDC coordination does not contain any such indicators.
- b) Airspace users should file indicators in the required order to ensure that systems applying truncation do not eliminate more important data. ANSPs should either enforce the required order, or ensure that AIDC messages contain the items in the required order regardless of the order filed.
- c) Airspace users should only file a single instance of each indicator, though, when prescribed, multiple entries may follow that indicator, separated by a space (blank). ANSPs should either enforce the filing of a single instance of indicators, or ensure that AIDC messages concatenate (i.e. link together) multiple instances into a single instance followed by multiple entries (each separated by a space).

5.7 ANSPs should, at a minimum, perform a validity check of Item 18 indicator contents that are used for processing, and they are encouraged to check all items not listed as “free text field” in the Table 5-1, Item 18 Indicator Validity Check, below.

Indicator	Contents
STS/	One or more of the approved specified entries, separated by spaces
PBN/	A single string containing up to 8 of the approved alphanumeric descriptors No embedded spaces
NAV/	Free text field
COM/	Free text field
DAT/	Free text field
SUR/	Free text field
DEP/	Free text field

Indicator	Contents
DEST/	Free text field
DOF/	A single string in the specified date format (YYMMDD). No embedded spaces
REG/	A single string. No embedded spaces
EET/	One or more strings. Each string is: 2-5 alphanumeric characters –or– a LAT/LONG followed by a 4-digit elapsed time, from 0000 to 9959 (i.e., 0-99 hours followed by 0-59 minutes)
SEL/	A single string of four letters
TYP/	Free text <i>Note: Although the entry is structured when used for formation flights, it is also used when no designator is assigned and, therefore, may be any text description.</i>
CODE/	A single string of 6 hexadecimal characters
DLE/	One or more strings Each string consists of a valid Significant Point followed by a 4-digit elapsed time
OPR/	Free text field
ORGN/	Free text field
PER/	A single letter The letter must be one of those specified in PANS-OPS (Doc 8168), as below: <ul style="list-style-type: none"> • <i>Category A:</i> less than 169 km/h (91 kt) indicated airspeed (IAS) • <i>Category B:</i> 169 km/h (91 kt) or more but less than 224 km/h (121 kt) IAS • <i>Category C:</i> 224 km/h (121 kt) or more but less than 261 km/h (141 kt) IAS • <i>Category D:</i> 261 km/h (141 kt) or more but less than 307 km/h (166 kt) IAS • <i>Category E:</i> 307 km/h (166 kt) or more but less than 391 km/h (211 kt) IAS • <i>Category H:</i> Specific procedures for Helicopters.
ALTN/	Free text field
RALT/	Free text field
TALT/	Free text field
RIF/	Route information consistent with the format of a valid Field 15c
RMK/	Free text field

Table 5-1: Item 18 Indicator Validity Check

Processing location information in the DEP/, DEST/, ALTN/, RALT/ and TALT/ indicators in Item 18.

5.8 Amendment 1 specifies that Item 18 entries for DEP/, DEST/, ALTN/, RALT/ and TALT/ should contain the name and location of the aerodrome. It also requires that “...For aerodromes not listed in the relevant Aeronautical Information Publication [AIP], indicate location as follows ...”. The following guidelines will promote common interpretation and filing practices:

- a) If the aerodrome identifier is not in ICAO DOC 7910, *Location Identifiers*, but is an approved identifier per the AIP for the State where the aerodrome is located, the name of the aerodrome should be the identifier and no additional location information is needed.
- b) If the aerodrome is neither in DOC 7910 nor in a relevant AIP, the name of the airport should be included followed by a location as specified in the amendment. ANSPs should expect to be able to process the last text string provided as a location (Lat/Long, or bearing and distance from significant point, or fix name) to be usable in their flight plan route calculations.

Use of the DLE/ indicator in Item 18.

5.9 Amendment 1 defines a new DLE/ indicator for Item 18, after which a significant point and delay time at the significant point can be filed. The following guidelines regard filing and processing of this indicator:

- a) The significant point in the DLE/ indicator should be required to match a significant point in Field 15c (i.e. not an implied point along an ATS route). An FPL designating an unknown point in a DLE/ indicator should be handled in accordance with normal ANSP error message handling procedures.

6. Conversion from NEW format to PRESENT format

6.1 As described in the ICAO material in the attachment to State letter AN 13/2/1-09/9, conversion from NEW to PRESENT format will be required during the transition period and will affect Field 10a, Field 10b, and Field 18. It is extremely important that such conversions from NEW format to PRESENT format are consistently applied by Asia/Pacific ANSPs and, preferably, throughout all ICAO regions. The guidelines contained in the Conversion Tables for respective fields included below record regionally agreed conversions from NEW to PRESENT format for consistent application by ANSPs.

Conversion of Field 10a

6.2 Table 6-1: *Conversion of Field 10a*, as shown below, is to be used for conversion of NEW Field 10a to PRESENT Field 10a. In using the Table, ensure a check is made for the presence of the information in both the “Field 10a” and “Field 18” NEW columns and convert it to the information in both the “Field 10a” and “Item 18” in PRESENT columns.

'NEW' Data Content		Conversion to 'PRESENT' Data Content	
Field 10a	Item 18	Field 10a	Item 18
N		N	
S		V O L	
S F		S	
A		Z	NAV/GBAS
B		Z	NAV/LPV
C		C	
D		D	
E1		Z	COM/FMC WPR ACARS
E2		Z	COM/DFIS ACARS
E3		Z	COM/PDC ACARS
F		F	
G		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

'NEW' Data Content		Conversion to 'PRESENT' Data Content	
Field 10a	Item 18	Field 10a	Item 18
M2		Z	COM/MTSAT
M3		Z	COM/IRIDIUM
O		O	
P1-P9		<i>Reserved- should not be present. Remove items if present (i.e. do not make information part of the PRESENT format plan).</i>	
R	PBN/A1	R Z	NAV/RNP10
R	PBN/B1	R	
R	PBN/B2	R	
R	PBN/B3	R	
R	PBN/B4	R	
R	PBN/B5	R	
R	PBN/B6	R	
R	PBN/C1	R Z	NAV/RNAV2
R	PBN/C2	R Z	NAV/RNAV2
R	PBN/C3	R Z	NAV/RNAV2
R	PBN/C4	R Z	NAV/RNAV2
R	PBN/D1	P R	
R	PBN/D2	P R	
R	PBN/D3	P R	
R	PBN/D4	P R	
R	PBN/L1	R Z	NAV/RNP4
R	PBN/O1	P R	NAV/RNP1
R	PBN/O2	P R	NAV/RNP1
R	PBN/O3	P R	NAV/RNP1
R	PBN/O4	P R	NAV/RNP1

'NEW' Data Content		Conversion to 'PRESENT' Data Content	
Field 10a	Item 18	Field 10a	Item 18
R	PBN/S1	R Z	NAV/RNP APCH
R	PBN/S2	R Z	NAV/RNP APCH BARO VNAV
R	PBN/T1	R Z	NAV/AR APCH RF
R	PBN/T2	R Z	NAV/AR APCH
T		T	
U		U	
V		V	
W		W	
X		X	
Y		Y	
Z	COM/ nnnn	Z	COM/ nnnn
Z	NAV/ nnnn	Z	NAV/ nnnn
Z	DAT/ nnnn	Z	COM/ nnnn

Table 6-1: Conversion of Field 10a

Conversion of Field 10b

6.3 Table 6-2: *Conversion of Field 10b*, as shown below, is to be used for conversion of NEW Field 10b to PRESENT Field 10b. Ensure a check is made for the presence of the information in both the "Field 10b" and "Item 18" NEW columns and convert it to the information in both the "Field 10b" and "Item 18" in PRESENT columns.

'NEW' Data Content		Conversion to 'PRESENT' Data Content	
Field 10b	Item 18	Field 10b	Item 18
N		N	
A		A	
C		C	
E		S	
H		S	
I		I	

'NEW' Data Content		Conversion to 'PRESENT' Data Content	
Field 10b	Item 18	Field 10b	Item 18
L		S D	
P		P	
S		S	
X		X	
B1			COM/B1
B2			COM/B2
U1			COM/U1
U2			COM/U2
V1			COM/V1
V2			COM/V2
D1		D	
G1		D	

Table 6-2: Conversion of Field 10b

Conversion of Item 18

6.4 Table 6-3: *Conversion of Item 18*, as shown below, is to be used for Conversion of NEW Item 18 to PRESENT Item 18.

'NEW' Data Content	Conversion to 'PRESENT' Data Content
Item 18	Item 18
STS/	STS/ copy text over <ul style="list-style-type: none"> • 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 wide use.
DAT/	COM/
DLE/	RMK/ DLE <text after DLE/>

'NEW' Data Content	Conversion to 'PRESENT' Data Content
Item 18	Item 18
ORGN/	RMK/ ORGN
TALT/	RMK/ TALT <text after TALT/>
PBN/	See Table 5-1 above
All other indicators copy over directly, with additions to NAV/, COM/, and DAT/ as specified in Tables 6-1 and 6-2 above.	

Table 6-3: Conversion of Item 18

7. Differentiating between NEW format and PRESENT format

7.1 Although in most cases it will be evident when a FPL is in either the PRESENT or NEW format, situations can arise whereby the presentation of a particular FPL fully meets the parameters of both the PRESENT and NEW formats i.e. the same FPL is able to be interpreted using either of the PRESENT or NEW parameters. However, decoding the FPL using the PRESENT parameters could reach a different outcome than decoding the same FPL using the NEW format. For example, the letter “S” is used for standard equipment in Item 10 of both FPL formats, meaning V, F, O & L (i.e. VHF RTE, ADF, VOR and ILS) in PRESENT format but only V, O & L in NEW format (i.e. no ADF).

7.2 Accordingly, from the commencement of Phase 3 (1 July to 15 November 2012 - Airspace users testing and implementation) of the phased implementation strategy the following criteria should be used to determine if the filed FPL is in PRESENT or NEW format:

- a) If the FPL is filed prior to an ANSP accepting NEW, assume the Flight Plan is PRESENT.

7.3 Once an ANSP has announced it can accept NEW format, if any of the following is filed assume the filed Flight Plan is in PRESENT format:

- a) In Field 10a if the Qualifier J, M or D is filed.
- b) In Item 18 an entry used for STS/ is not in the allowed list for NEW.
- c) In Item 18 an entry used for PER/ is not a single letter in the allowed list.

7.4 Once an ANSP has announced it can accept NEW format, if any of the following is filed assume the filed Flight Plan is in NEW format:

- a) In Field 10a if any of the following qualifiers are filed: E1, E2 , E3 , J1, J2 , J3 , J4 , J5, J6, J7 , M1 , M2 , M3, P1, P2 , P3 , P4 , P5 , P6 , P7.

- b) In Field 10b if any of the following qualifiers are filed: E , H , L , B1 , B2 , U1 , U2 , V1 , V2 , O1 or G1.
- c) In Item 18 if PBN/ is filed.
- d) In Item 18 if SUR/ is filed.
- e) In Item 18 if DLE/ is filed.
- f) In Item 18 if TALT/ is filed.

7.5 If there are qualifiers from the PRESENT list and the NEW list in the same FPL, this indicates that the FPL is inconsistent and therefore should be rejected by automation to 'error queue' enable closer study. After November 15, 2012 all FPLs will be assumed to be in NEW format.

8. ATS Messages

Item 18 DOF

8.1 The FPL&AM/TF considers that ambiguity exists in relation to Item 18 and DOF which has implications on the composition of ATS messages as published in Amendment 1. The clarification provided for the requirement to include Item Type 18 in CHG, CNL, DLA, DEP and RQS messages states "*Field Type 18 with DOF specified is meant to uniquely identify the flight when the FPL is presented more than 24 hours in advance and there is no need to include all other Item 18 information*".

8.2 The clarification also offers an interpretation of the Field Type 16 Previous Field/Next Field Table. This clearly states that only the DOF indicator is included in these messages and only if filed with the original message. If DOF is not filed in the original message then Item 18 is omitted. However, this interpretation contradicts the composition and examples for the CHG, CNL, DLA, DEP, RQP and RQS messages detailed in the Amendment which refer to Item 18 "*Other information (using more than one line if necessary)*".

8.3 Accordingly, the following interpretation is applicable as an Asia/Pacific regional approach:

- a) Insert DOF/YMMMDD in Item 18 if that indicator has been previously specified;
- b) If the DOF/ indicator has not been previously specified insert zero (0) in Item 18

8.4 Example ATS messages based on this interpretation are shown below:

Modification (CHG) Messages

- (CHG-ABC123-NZAA2300-VTBS-DOF/091120-16/VTBD1151 VTBD)
- (CHG-ABC123-NZAA2300-VTBS-0-16/VTBD1151 VTBD)
- (CHG-ABC123-NZAA2300-VTBS-DOF/091120-13/NZAA0045-18/DOF/091121) *
* **Note:** if changing DOF insert the complete content of Item 18 in Item 22

Flight Plan Cancellation (CNL) Messages

- (CNL-ABC123-NZAA2300-VTBS-DOF/091120)
- (CNL-ABC123-NZAA2300-VTBS-0)

Delay (DLA) Messages

- (DLA-ABC123-NZAA2345-VTBS-DOF/091120)
- (DLA-ABC123-NZAA2345-VTBS-0)

Departure (DEP) Messages

- (DEP-ABC123/A0254-NZAA2347-VTBS-DOF/091120)
- (DEP-ABC123/A0254-NZAA2347-VTBS-0)

Request Flight Plan (RQP) Messages

- (RQP-ABC123-NZAA2345-VTBS-DOF/091120)
- (RQP-ABC123-NZAA2345-VTBS-0)
- (RQP-ABC123-NZAA-VTBS-DOF/091120)
- (RQP-ABC123-NZAA-VTBS-0)

Request Supplementary Flight Plan (RQS) Messages

- (RQS-ABC123/A0254-NZAA2345-VTBS-DOF/091120)
- (RQS-ABC123/A0254-NZAA2345-VTBS-0)

Arrival (ARR) Messages

- (ARR-ABC123-NZAA-VTBS1315)
- (ARR-ABC123-NZAA0145-VTBS1315) **
** **Note:** include EOBT (Field Type 13b) if known

– END –

Appendix A

Adopted by Conclusion 20/7 of APANPIRG/20 (September 2009)

ASIA/PACIFIC REGION INTERIM STRATEGY FOR THE IMPLEMENTATION OF NEW ICAO FLIGHT PLAN FORMAT AND SUPPORTING ATS MESSAGES

Recognizing that:

- 1) Dynamic information management will assemble the best possible integrated picture of the historical, real-time and planned or foreseen future state of the ATM situation and provide the basis for improved decision making by all ATM community members;
- 2) 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;
- 3) 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;
- 4) 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; and
- 5) The complexities inherent in automated computer systems preclude the adoption of a single regional transition date and transitions to the new flight plan provisions will therefore occur throughout the declared transition period. Accordingly, pursuit/adoption of a single 'global' implementation date is also not viable.

The Asia/Pacific implementation of Amendment 1 to the PANS-ATM shall:

- 1) Ensure that all States and airspace users implement the full provisions of Amendment 1 from 15 November 2012, not just selected aspects of the Amendment;
- 2) Acknowledge that States not implementing the full provisions of Amendment 1 from 15 November 2012 are obligated to publish the non compliance in State AIP as a 'significant difference' well in advance of the 15 November 2012 applicability date and will be included on the APANPIRG List of Deficiencies in the ATM/AIS/SAR Fields; and

- 3) Ensure that, from 15 November 2012, all States and airspace users accept and disseminate 'NEW' flight plan and associated ATS message formats only and capabilities for 'PRESENT' flight plan provisions are 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 Asia/Pacific transition to the PANS-ATM Amendment 1 provisions shall:

- 1) Comply with the regional guidance provided by APANPIRG's Asia/Pacific Flight Plan and ATS Messages Task Force (FPL&AM/TF);
- 2) Preserve global consistency in implementation by basing implementation activities, to the extent possible, on Guidelines 1 to 6 described in the ICAO guidance material in State Letter AN 13/2.1-09/9, dated 6 February 2009;
- 3) Ensure that the FPL&AM/TF undertakes coordination to facilitate harmonization with implementations in neighbouring regions;
- 4) Eliminate or minimize State specific constraints and, if constraints are identified as necessary, implement such constraints on a regional or sub regional basis in preference to an individual State basis;
- 5) Declare a transition period from 1 July 2011 until 15 November 2012, and encourage States to implement 'NEW' capability between 1 July 2011 and 1 July 2012;
- 6) Not implement 'NEW' capability by States or users before the commencement of the transition period (i.e. no 'NEW' before 1 July 2011);
- 7) Encourage States to immediately commence preparations to implement Amendment 1 provisions and report progress to the FPL&AM/TF periodic meetings;
- 8) Require States to inform the Regional Office of scheduled transition date by 1 July 2010 for relay to the FPL&AM/TF;
- 9) Consider a regional constraint on requiring acceptance of flight plans more than 24 hours prior to Estimated Off Blocks Time (EOBT) during the transition period, to mitigate Date Of Flight (DOF) complexities;

- 10) 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;
- 11) Encourage users to implement capability to simultaneously support 'PRESENT' and 'NEW' provisions from activation of their 'NEW' capabilities until the end of the transition period;
- 12) Recognize that until a number of adjacent States are providing 'NEW' capability, advantages do not accrue to users. Accordingly, users may not commence transition until the latter part of the transition period; and
- 13) Avail of States with expertise in automated ATM ground systems to support the conduct of a Regional Office Seminar during November 2009.

(last amended FPL&AM/TF/1, March 2009)

Appendix B

Amendment proposed by FPL&AM/TF/2 (November 2009)
for consideration by APANPIRG/21 (September 2010)

ASIA/PACIFIC REGION
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 implementation of the amended ICAO Flight Plan and ATS Message formats has been adopted by APANPIRG/20 as Regional Performance Objective 5, and
- 5) The complexities inherent in automated computer systems preclude the adoption of a single regional implementation date and transitions to the new flight plan provisions will therefore occur in accordance with the declared transition period described in this document.

The Asia/Pacific implementation of Amendment 1 to the PANS-ATM shall:

- 1) Ensure that all States and airspace users implement the provisions of Amendment 1 from 15 November 2012, not just selected aspects of the Amendment;
- 2) Acknowledge that States not implementing Amendment 1 from 15 November 2012 are obligated by ICAO provisions to publish, preferably by 12 January 2012, the non compliance in State AIP as a 'significant difference' and will be included on the APANPIRG List of Deficiencies in the ATM/AIS/SAR Fields; and

- 3) Ensure that, from 15 November 2012, all States and airspace users accept and disseminate 'NEW' flight plan and associated ATS message formats only and capabilities for 'PRESENT' flight plan provisions are 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 Asia/Pacific transition to the PANS-ATM Amendment 1 provisions shall:

- 1) Comply with the regional guidance provided by APANPIRG's Asia/Pacific Flight Plan and ATS Messages Task Force (FPL&AM/TF);
- 2) Preserve global consistency in implementation by basing implementation activities, to the extent possible, on Guidelines 1 to 6 described in the ICAO guidance material in State Letter AN 13/2.1-09/9, dated 6 February 2009;
- 3) Ensure that the FPL&AM/TF undertakes coordination to facilitate harmonization with implementations in neighbouring regions;
- 4) Minimize State specific constraints and, if constraints are identified as necessary, implement such constraints on a regional or sub regional basis in preference to an individual State basis;
- 5) Declare a transition period from 1 January 2012 until 15 November 2012, comprising;
 - 1 January to 31 March 2012 - ANSPs software delivery and internal testing,
 - 1 April to 30 June 2012 – ANSPs external testing and implementation, and
 - 1 July to 15 November 2012 – airspace users testing and implementation.
- 6) Not implement 'NEW' capability by States before the commencement of the ANSPs external testing and implementation period (i.e. no ANSP 'NEW' before 1 April 2012) and, insofar as possible, complete ANSP implementation of 'NEW' capability by the end of the ANSPs external testing and implementation period (i.e. complete ANSP 'NEW' before 30 June 2012);
- 7) Recognizing the risk to automated systems of having all 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;
- 8) Encourage 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 – 15 November 2012);

- 9) Encourage States and users to immediately commence preparations to implement Amendment 1 provisions in accordance with the declared transition period and report progress to the FPL&AM/TF periodic meetings;
- 10) Require States to inform the Regional Office of scheduled transition date by 1 July 2010 in accordance with APANPIRG Conclusion 20/8, for relay to the FPL&AM/TF;
- 11) To mitigate Date Of Flight (DOF) complexities, adopt a regional approach that does not require processing of flight plans more than 24 hours prior to Estimated Off Blocks Time (EOBT) during the declared transition period;
- 12) 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 15 November 2012), at which point 'PRESENT' capability shall be discontinued;

(last amended FPL&AM/TF/2, November 2009)

ASIA/PACIFIC REGION**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 implementation of the amended ICAO Flight Plan and ATS Message formats has been adopted by APANPIRG/20 as Regional Performance Objective 5, and
- 5) The complexities inherent in automated computer systems preclude the adoption of a single regional implementation date and transitions to the new flight plan provisions will therefore occur in accordance with the declared transition period described in this document.

The Asia/Pacific implementation of Amendment 1 to the PANS-ATM shall:

- 1) Ensure that all States and airspace users implement the provisions of Amendment 1 from 15 November 2012, not just selected aspects of the Amendment;
- 2) Acknowledge that States not implementing Amendment 1 from 15 November 2012 are obligated by ICAO provisions to publish, preferably by 12 January 2012, the non compliance in State AIP as a ‘significant difference’ and will be included on the APANPIRG List of Deficiencies in the ATM/AIS/SAR Fields; and
- 3) Ensure that, from 15 November 2012, all States and airspace users accept and disseminate ‘NEW’ flight plan and associated ATS message formats only and capabilities for ‘PRESENT’ flight plan provisions are 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 Asia/Pacific transition to the PANS-ATM Amendment 1 provisions shall:

- 1) Comply with the regional guidance provided by APANPIRG's Asia/Pacific Flight Plan and ATS Messages Task Force (FPL&AM/TF);
- 2) Preserve global consistency in implementation by basing implementation activities, to the extent possible, on Guidelines 1 to 6 described in the ICAO guidance material in State Letter AN 13/2.1-09/9, dated 6 February 2009;
- 3) Ensure that the FPL&AM/TF undertakes coordination to facilitate harmonization with implementations in neighbouring regions;
- 4) Minimize State specific constraints and, if constraints are identified as necessary, implement such constraints on a regional or sub regional basis in preference to an individual State basis;
- 5) Declare a transition period from 1 January 2012 until 15 November 2012, comprising:
 - 1 January to 31 March 2012 - ANSPs software delivery and internal testing,
 - 1 April to 30 June 2012 – ANSPs external testing and implementation, and
 - 1 July to 15 November 2012 – airspace users testing and implementation.
- 6) Not implement 'NEW' capability by States before the commencement of the ANSPs external testing and implementation period (i.e. no ANSP 'NEW' before 1 April 2012) and, insofar as possible, complete ANSP implementation of 'NEW' capability by the end of the ANSPs external testing and implementation period (i.e. complete ANSP 'NEW' before 30 June 2012);
- 7) Recognizing the risk to automated systems of having all 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;
- 8) Encourage 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 – 15 November 2012);
- 9) Encourage States and users to immediately commence preparations to implement Amendment 1 provisions in accordance with the declared transition period and report progress to the FPL&AM TF periodic meetings;
- 10) Require States to inform the Regional Office of scheduled transition date by 1 July 2010 in accordance with APANPIRG Conclusion 20/8, for relay to the FPL&AM TF;
- 11) To mitigate Date Of Flight (DOF) complexities, adopt a regional approach that does not require processing of flight plans more than 24 hours prior to Estimated Off Blocks Time (EOBT) during the declared transition period;
- 12) 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 15 November 2012), at which point 'PRESENT' capability shall be discontinued;

(last amended FPL&AM TF/2, November 2009)