International Civil Aviation Organization

The Twenty-Second Meeting of the APANPIRG ATM/AIS/SAR Sub-Group (ATM/AIS/SAR/SG/22)

Bangkok, Thailand, 25 – 29 June 2012

Agenda Item 4: Review outcome of relevant meetings

FLIGHT PLAN & ATS MESSAGES IMPLEMENTATION TASK FORCE OUTCOMES

(Presented by the Secretariat)

SUMMARY

This paper presents information from the Fifth Meeting of the Flight Plan & Air Traffic Services Messages Implementation Task Force and Seminar (FPL&AM/TF/5& Seminar, Manila, Philippines, 7 to 9 November 2011), and provides an update on current implementation issues.

This paper relates to –

Strategic Objectives:

A: ***Safety*** *– Enhance global civil aviation safety*

C: ***Environmental Protection and Sustainable Development of Air Transport*** *– Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment*

Global Plan Initiatives:

GPI-5 RNAV and RNP (Performance-based navigation)
GPI-12 Functional integration of ground systems with airborne systems
GPI-18 Aeronautical information
GPI-21 Navigation systems
GPI-22 Communication infrastructure

1. INTRODUCTION

1.1 The Fifth Meeting of the Asia/Pacific ICAO Flight Plan & Air Traffic Services Messages Implementation Task Force and Seminar (FPL&AM/TF/5& Seminar) was held in Manila, Philippines from 7 to 9 November 2011.

1.2 Seventy-six (76) participants from Australia, Brunei Darussalam, Cambodia, DPR Korea, French Polynesia, India, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Nepal, Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand, United States, Viet Nam, IATA, and industry organizations attended the meeting.

2. DISCUSSION

Amendment 1 Implementation Status Updates

2.1 The meeting discussed the latest results from the quarterly questionnaire, which was primarily intended to keep the Flight Plan Implementation Tracking System (FITS, located at http://www2.icao.int/en/FITS/Pages/home.aspx) website information up-to-date. The first quarterly questionnaire response was due on 1 July 2011, and the final on 1 July 2012. It was noted that the FITS database was upgraded to include additional columns for the questionnaire responses and that some other ICAO regions were conducting similar questionnaires to the Asia/Pacific region.

2.2 A State Letter T3/10.1.20 – AP077/11 (ATM) dated 7 June 2011 regarding the questionnaire was sent to all Asia/Pacific administrations, and due to the poor response, a reminder message AP-ATM0243 dated 25 July 2011 was sent to administrations with a Flight Information Region (FIR).

2.3 Indonesia advised that they had been having issues with the tendering approval process and that they expected to have approval in late 2012. They advised that some portions of Indonesian FIRs were likely to delay the implementation of the New FPL Format by 2013; however after 15 November 2012, flight plans would be processed via converters until the upgrade of ATM Systems was completed.

2.4 Indonesia would upgrade the ATM Systems used in Makassar ATS Center (MATSC) and ATC systems supporting some approach control units, to be ready for handling NEW FPL format by September 2012. However, there would be a delay in the implementation plan for Ujung Pandang ACC, Surabaya Approach and Bali Approach until June 2013.

2.5 Airlines would be able to file NEW format after 15 November 2012, which would be transformed using a converter in the Jakarta FIR. However between September 2012 and June 2013 all messages sent to Ujung Pandang FIR would be converted to PRESENT format by the Flight Data Management Centre located in MATSC except for Balikpapan Approach, which was expected to be ready for NEW FPL Format and AIDC by September 2012. The meeting noted that notwithstanding this, all adjacent FIRs would need to receive flight plans in NEW format from Indonesia.

2.6 IATA expressed concern regarding the use of manual handling for Ujung Pandang due to the workload. Philippine Airlines also expressed concern about the transfer of information from the Manila FIR to the Australian FIRs. In this case, Indonesia intended to forward the full original flight plan details to Australia.

Regional Guidance Material

2.7 Australia discussed the issue of flight planning mutually exclusive RVSM entries and highlighted the possible need for software code management check of contradictory entries to ensure that the flight planning of Reduced Vertical Separation Minimum (RVSM) capability was consistent within a flight plan (Australia would reject flight plans to the queue for manual processing when ‘W’ and ‘NONRVSM’ were both filed). As a result, a paragraph was added to Section 5 (Software Coding Considerations) of the Asia/Pacific Guidance Material as follows:

> *If W is filed in Item 10a then STS/NONRVSM must not exist in Item 18 and if STS/NONRVSM is filed in Item 18 then W must not exist in Item 10a.*

2.8 Amendment 1 stated that ORGN may be the originator's eight letter Aeronautical Fixed Telecommunication Network (AFTN) address or other appropriate contact details, in cases where the originator of the flight plan may not be readily identified, and recommended that the ORGN indicator be limited to eight alphanumeric characters, or other characters. The United States and India noted that ORGN was useful and preferred not to restrict this to AFTN addresses, while Japan was considering using the field for telephone numbers. EUROCONTROL restricted the length to 30 alphanumeric characters. The meeting concurred with the European position.

2.9 Australia proposed an order for conversion of the NEW Flight Plan DAT indicator in Field 18, for PRESENT flight plans. Table 6-1 (Conversion of Field 10a) of the Guidance Material included several entries where Field 10a conversions resulted in DAT/ and COM/ elements in Field 18 of the converted flight plan. Australia had interpreted this to mean:

- any existing DAT/ entries in the NEW format flight plan (submitted for conversion) were transferred to the COM/ indicator in Field 18 of the converted PRESENT flight plan (or message) - prior to conversion of the 10a equipment qualifiers; and
- any equipment qualifiers in Field 10a requiring conversion to DAT/ in accordance with the conversion table 6.1 (i.e. J1-J7) were to be entered into the DAT/ indicator of the converted PRESENT flight plan (or message) in accordance with table 6-1.

2.10 The meeting agreed that the suggested interpretation was consistent with the existing Guidance Material conversion tables. Industry representatives noted that this interpretation would mean a difference with EUROCONTROL, as S, H, V, and/or M in DAT/, it was not moved from DAT/ to COM/ (however, DAT/ was not expected to contain S, H, V, or M in the NEW format). The meeting did not recommend changing the Asia/Pacific conversion table to match the European table.

2.11 The Asia/Pacific Guidance Material stated that the preferred option for delaying a flight EOBT over midnight UTC was to use a CHG message; however the option to use a DLA message was available. Currently the Asia/Pacific Guidance Material contained the option to use either a CHG of a DLA message to provide advice of delays across midnight UTC, so States would needed to software code their systems to cater for the receipt of both messages types.

2.12 The meeting discussed the issue of DOF removal from item 18 of the flight plan when the EOBT was within 24 hours. Australia believed that removal of a filed DOF would create issues in automated systems where routine messages were exchanged for flights that crossed FIR boundaries, as DOF was now a message key and associated to the original flight plan. New Zealand clarified that the original intent was to support ATS Inter-facility Data-link Communications (AIDC) messages, suggesting removal of the first sentence in the Guidance Material, which the meeting agreed to.

2.13 Version 3 of 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) was dated 3 June 2011. Version 4 dated 9 November 2011 incorporated the agreed interpretations and lessons learnt from software implementation, in preparation for internal testing.

Transition to only NEW format

2.14 It was recognised that Air Navigation Service Providers (ANSPs) would have to determine their required changeover process when PRESENT plans would not be accepted after coordination with neighbouring affected States. This information was expected to be provided by the quarterly questionnaire process and placed on the FITS web site.

2.15 The European position on the changeover was as follows:

- IFPS (Integrated FPL System) would not accept FPLs with EOBT (Estimated Off-Block Time) more than 24 hours in advance during the period 12-15 November 2012;
- FPLs with EOBT on 15 November 2012 should be filed in NEW format even if submitted prior to midnight; and
- RPLs (Repetitive Flight Plans) for the Northern Hemisphere Winter 2012/13 season should be filed in NEW format.

2.16 States using NEW format were expected to software code their systems to down convert NEW format messages for ANSPs that are still only using PRESENT format. Australia had identified an issue relating to the submission of CHG messages (with changes to Field 18) that required conversion. Any change messages generated from a NEW format that would be 'down' converted containing changes to either field 10 or 18 in the amendment field 22 needed to be constructed from the NEW format, considering the dependent relationships of these two fields. This would ensure no data was lost after any down conversion.

2.17 IATA did not support transition with converter systems if it could be avoided. IATA's position was that converter systems should not be viewed as a long-term solution, and States with such systems should be encouraged to do so with a clear plan to implement capabilities to process NEW format as soon as practicable.

2.18 IATA was further concerned about the filing of long-haul flight plans when the plan itself was complex and large. Generally this required a significant amount of information to be included and transmitted, so certain states lengthy flight plans were filed in two sections (two plans). IATA suggested that NEW FPL format should support such long-haul plans. The USA legacy system only supported 48 elements in the route field at present, but the new system would allow 1,000 characters. The United States may continue to file long-haul flight plans that required splitting into two flight plans within their legacy systems.

2.19 IATA also espoused that transition plans must take into account aircraft that were airborne in the system at cut-over, together with their associated flight plans information. Systems needed to ensure these flights and associated flight plans information could be appropriately processed during the transition/cut-over phase.

2.20 French Polynesia described an issue with DOF regarding AIDC messages being received when Field 18 was filed with zero '0', then FPL Field 18 could be overwritten. Australia had elected not to translate any AIDC messages during the transition, as the only fields applicable to Amendment 1 changes were 10 and 18, which were optional in AIDC messages. Australia was prepared to differentiate the various neighboring FIRs as to the type of data that should be sent and did not recommend over-writing field 18 data.

2.21 After consultation with stakeholders, New Zealand decided not to allow the capability to receive flight plan data with an Expected Off-Blocks Time (EOBT) greater than 24 hours.

Support Strategies

2.22 ICAO, IATA, CANSO and other stakeholders were considering Strategic Support Teams (SST), led by ICAO. These were expected to provide more targeted support to address implementation issues.

Amendment 1 Seminar

2.23 ICAO HQ stated that all staff involved in the implementation of Amendment 1 must be adequately trained, not just some controllers. It was imperative that all stakeholders, including State agencies and the military, need to aware of the Amendment 1 changes.

2.24 It was stressed that administrations must continue to communicate with their Regional Office to ensure a harmonised application of changes. Moreover, the implementation date of 15 November 2012 was not expected to slip. In that regard, participants were reminded of the importance of compliance with the implementation timeline. It was noted that everyone should be ready to accept the NEW plan format by July, to allow airlines the opportunity to test well before November 2012. IATA were advising their members to switchover to NEW format around 15 November 2012, but this needed to be well planned.

2.25 Industry representatives stated that a convertor was not in the spirit of the amendment but met the requirement, and made a good contingency solution. They believed that PRESENT format could be ‘up’ converted to NEW format; however this would require additional training for dispatchers. Australia and ICAO HQ stated that up conversion was only possible for a previously down-converted NEW format flight plan.

2.26 The FPL Study Group had spent four years determining the changes required for Amendment 1. However it was apparent that there were various interpretations of several flight plan components. It was also very important for vendors that there were not different interpretations, so the software acted consistently. Asia/Pacific could create agreed interpretations that other regions could use, which was preferable to regional variations.

2.27 One issue that was highlighted were the actions required if an aircraft which had indicated advanced COM/SUR and NAV capabilities had a degraded performance during flight. In this case, it was not clear if controllers should be modifying the flight plan details and whether there needed to be phraseologies and standard procedures to deal with this. Current guidance was lacking in this area and this may be a subject for any PIR discussion.

2.28 Australia presented a map of their training plan that was expected to be delivered in early 2012 for their staff. Each State was unique, so training requirements would need to be tailored. Nevertheless, the map would provide a guide as to the possible requirements and delivery processes.

2.29 Australia already promulgated an Aeronautical Information Circular (AIC) in November 2011 and intended to update that with further details in 2012, and an AIP Supplement with the actual requirements. Communications strategies included a web site to convey information on the changes. French Polynesia also planned to issue an AIC in January 2012. New Zealand issued AIC 5/11, effective 7 April 2011. At the time of the Task Force meeting, no other States had issued an AIC.

Status Update Post FPL&AM/TF/5

2.30 Responses to the agreed quarterly questionnaire had generally been poor:

a) 1 Jul 2011 – 20 responses;

b) 1 Oct 2011 – 6 responses;

c) 1 Jan 2012 – 17 responses; and

d) 1 Apr 2012 – 7 responses.

2.31 Questionnaire responses are used to update the ICAO Flight Plan Implementation Tracking System (FITS) website. The website was publicly accessible, and was intended to ensure that States and Administrations, air navigation service providers, airspace users, and stakeholders from other ICAO regions had access to updated information on each FIR of interest, in order to plan and coordinate their testing and the operational implementation of the PANS/ATM amendment.

2.32 As recorded in the FITS website, there had been considerable schedule slippage within the region. Five States indicated planning to complete Phase 1 activities on schedule, but had not advised completion. Two states reported completing Phase 1 on schedule (by 30 Mar 2012). In all other cases either no information has been received, or the State had planned to commence Phase 1 later than the agreed schedule. While thirteen States planned to conduct Phase 2 activities in accordance with the agreed schedule (1 Apr – 30 Jun 2012), none had yet reported completing this work.

2.33 In order to quantify the degree of concern about the Region's progress, and to prioritize any ICAO activities to assist States in their transition to NEW FPL and ATS message format, the ICAO Asia/Pacific Regional Office conducted a risk assessment to determine the level of risk to the regional ATM network inherent in any administration's potential failure to transition to NEW format on or before 15 November 2012. The risk was assessed by using a simple likelihood and consequence risk analysis model, measuring the following criteria:

a) Attendance or non-attendance at FPL1 Jul 2011;

b) Indicated intention to comply or otherwise;

c) Planned timing of transition to PRESENT+NEW formats message handling;

d) Planned timing of transition to NEW ONLY format message handling;

e) Number of FIR administered by the State or Administration;

f) Number of quarterly questionnaire responses received;

g) Information received in quarterly questionnaire responses;

h) Effect of any State or Administration's potential failure on Major Traffic Flows (MTF);

i) Effect of any State or Administration's potential failure on neighbouring FIR; and

j) Volume of traffic handled by the State/Administration.

2.34 In the case of States and Administrations which have not provided quarterly questionnaire updates, the maximum level of likelihood assessment was applied to the *Information received in quarterly questionnaire responses* criterion. The assessed risk associated with the potential failure of each State/Administration was categorized as Very High, High, Medium, Low or Very Low. The risk was reassessed on receipt of any new information.

2.35 On 12 Apr 2012 State Letter T3/1.4, T3/10.1.20 – AP051/12 (ATM) was distributed to all States. Its attachments included the assessed risk category for the State/Administration, and a revised questionnaire for completion by 11 May 2012. The revised questionnaire included specific questions on the planned or achieved timing of each of the three implementation phases. Only nine replies were received by the due date, and as at 15 June only seventeen States/Administrations had responded.

2.36 A table of the latest results from the risk analysis is appended as **Attachment A**. An overall chart of Asia/Pacific risk results effective 15 June 2012 is provided at **Attachment B**.

2.37 The risk inherent in any State or Administration's potential failure to implement the FPL and ATS messaging changes was of pressing interest to airspace users and neighbouring air navigation service providers. Following review of questionnaire responses and other information received, and subject to further follow-up action by the ICAO Regional Office, the assessed risk for all States would be made available on the FITS website.

2.38 The following administrations had not provided a response to any questionnaire in 2012, and are thus invited to update the ATM/AIS/SAR Sub-group on progress:

- Afghanistan;
- Bangladesh;
- Bhutan (no FIR);
- Cook Islands (no FIR);
- Kiribati (no FIR);
- Marshall Islands (no FIR);
- Micronesia (no FIR);
- Myanmar;
- Nauru;
- Niue (no FIR);
- Palau (no FIR);
- Papua New Guinea;
- Samoa (no FIR);
- Solomon Islands;
- Timor Leste (no FIR);
- Tonga (no FIR); and
- Vanuatu (no FIR).

Commencement of PRESENT and NEW (mixed mode) Processing

2.39 The Asia/Pacific Region's implementation plan did not clearly specify a latest date for implementation of NEW FPL processing capability, which was expected involve the staggered commencement of a PRESENT and NEW mixed mode capability early in the Phase 3 period, July 1 – November 15 2012. Other Regions and ANSP including EUR/NAT and the FAA will commence accepting and processing NEW format FPL on 12 November 2012 and cease accepting PRESENT format on 16 November.

2.40 Information received in Asia/Pacific quarterly updates and in the updated questionnaire of April 2012 indicates that some States may now be planning a 'hard' cutover from PRESENT to NEW format message processing on 15 November, without a transitional phase of operational mixed mode processing. This may also be the case for States which have provided either insufficient or no information. This strategy would introduce a number of risks, including those associated with the volume of traffic being handled by Asia/Pacific States at the cutover time (0000 UTC on 15 November). It may also cause significant difficulty for airspace users in determining when all Air Navigation Service Providers along their planned routes had commenced accepting NEW format FPL.

2.41 Timelines of planned system capability for and operational implementation of the acceptance of NEW format FPL, as reported to the ICAO Asia/Pacific Regional Office, are provided at **Attachment C**.

2.42 In order to avoid the risks involved in a hard cutover, and to align with the strategies being employed in other Regions, the meeting is invited to consider the following Draft Conclusion:

Draft Conclusion ATM/AIS/SAR/SG/22/XX Transition to NEW FPL Format

That, States are urged to commence operational acceptance and processing of both PRESENT and NEW format FPL and ATS messages as early as possible, and in any event no later than 0000 UTC on 12 November 2012, in order to avoid the risks involved in direct transition from PRESENT to NEW processing.

Asia/Pacific Regional Guidance Material

2.43 Amendment 1 requires that RNAV5 Enroute navigation capability is indicated by insertion of the letter 'R' in field 10 of the flight plan, and the following indicators after PBN/ in field 18:

- B1 – RNAV 5 All permitted sensors;
- B2 – RNAV 5 GNSS;
- B3 – RNAV 5 DME/DME;
- B4 – RNAV 5 VOR/DME;
- B5 – RNAV 5 INS or IRS; and
- B6 – RNAV 5 LORAN.

2.44 As LORAN was rarely used, this would require the flight plans of most RNAV 5 aircraft to file PBN/B2B3B4B5 in Field 18. When added to other combinations of PBN indicators applicable to Oceanic, Terminal and Final flight phases, this may exceed the 16 character limit specified in PANS/ATM. The solution being considered was to use B1 to indicate all permitted sensors except LORAN. As ICAO HQ was currently considering a globally coordinated response, the Regional Guidance Material should not yet be amended to address this issue, although further information may be available during the ATM/AIS/SAR/SG meeting.

2.45 Table 5.1 of the Regional Guidance Material states that the Field 18 Estimated Elapsed Time (EET) string should be constructed as follows:

> 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)

2.46 This information could be misleading as it may be read to mean that the 4-digit elapsed time is only required if a LAT/LONG position is used. The following minor editorial amendment to the Regional Guidance Material is proposed:

> 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)

2.47 Table 5.1 also specifies that Field 18 Route Information (RIF) information should be consistent with the format of a valid Field 15c. As Field 15c may also include oblique strokes, this contravenes the provisions of PANS/ATM, which precludes the use of oblique strokes in Field 18, other than as the final character in the indicator, e.g. STS/, PBN/, NAV/, RIF/.

2.48 The purpose of the RIF/ element is to direct flight plan forwarding in the event of an in-flight re-file. PANS/ATM section 11.4.2.2.2 states "when a potential re-clearance in flight (RIF) request is indicated in the flight plan, the FPL message shall be sent to the additional centres concerned and to the aerodrome control tower of the revised destination aerodrome".

2.49 It is therefore also proposed that the Regional Guidance Material is amended to reflect the requirements of PANS/ATM for information following the Field 18 RIF/ indicator:

> The route details to the revised destination aerodrome, followed by the ICAO four-letter location indicator of the aerodrome.
>
> Examples: RIF/DTA HEC KLAX; RIF/ESP G94 CLA YPPH

2.50 Proposed amendments to the Regional Guidance Material are provided in **Attachment D**. Pages 6, 7 and 19 refer. The meeting is invited to consider the following Draft Conclusion

> **Draft Conclusion ATM/AIS/SAR/SG/22/XX FPL Guidance Material Version 5**
>
> That, 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) is updated as Version 5 in accordance with excerpts contained in **Attachment D to this Report**.

2.51 Successful implementation of the Amendment 1 changes is the highest priority ATM activity currently being undertaken in the Asia/Pacific Region. States are urged to ensure that all necessary resources are applied to this work, and to keep the ICAO Regional Office informed of progress and developments.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper;

b) discuss the apparent non-conformance of many Asia/Pacific States with the Asia/Pacific Guidance Material phased schedule and the possible implementation issues now apparent;

c) Discuss and adopt the proposed Draft Conclusions;

d) Update the meeting with any new or revised information; and

e) discuss any other relevant matters as appropriate.

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Very High Risk	Afghanistan*
	China
	Philippines
	Vietnam
	Papua New Guinea*
High Risk	Indonesia
	Lao PDR
	Myanmar
	Australia
	Mongolia
	Thailand
Medium Risk	Japan
	Maldives
	Sri Lanka
	Pakistan
	India
	Rep. of Korea
	Macau China
	Brunei Darassulam*
	Malaysia
	Cambodia
	Nauru*
	Solomon Islands*
	Bangladesh*
	Nepal
	New Zealand
	USA
Low Risk	Singapore
	Hong Kong China
	Fiji
	French Polynesia
Very Low Risk	DPR Korea

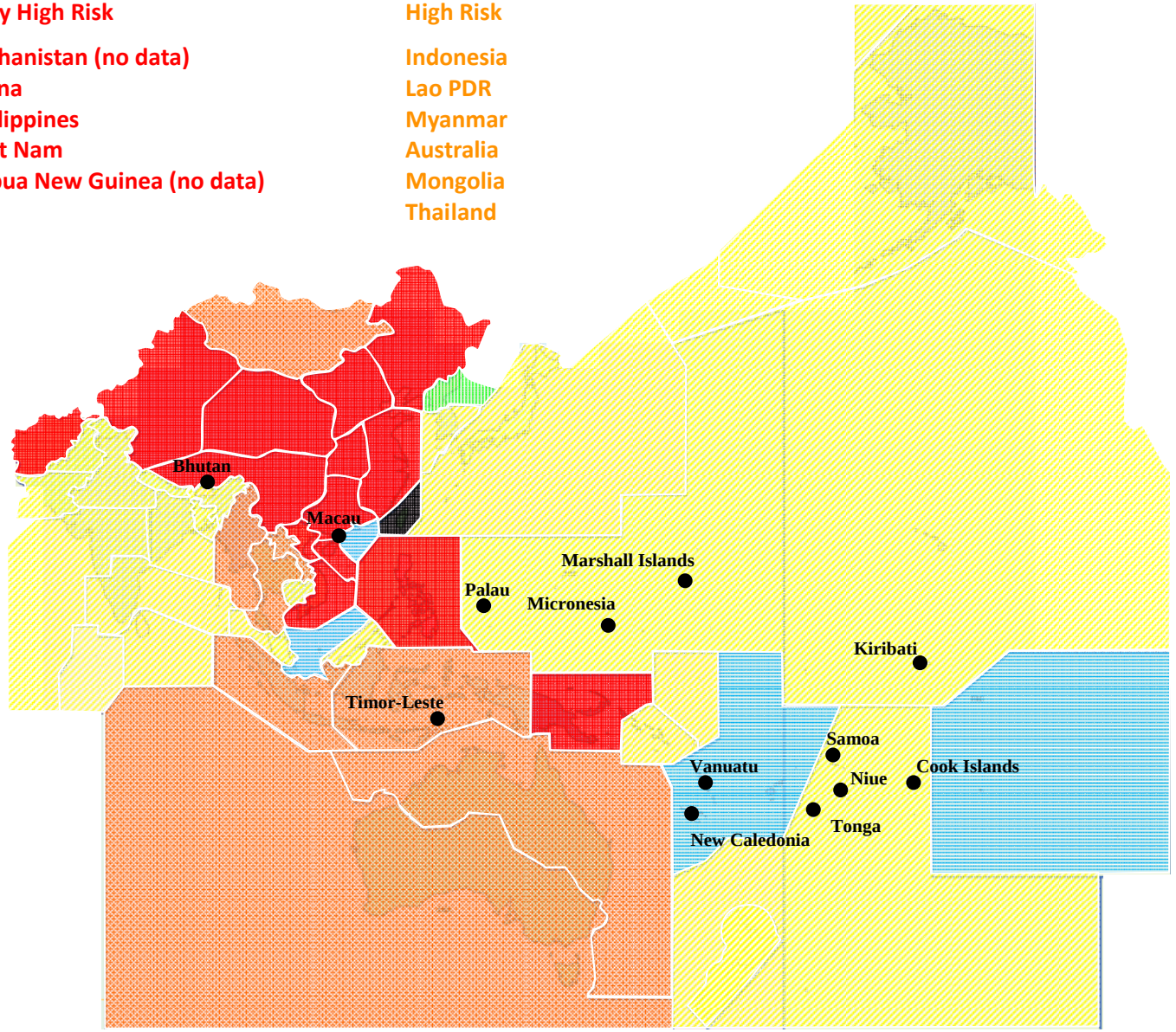
* No data received

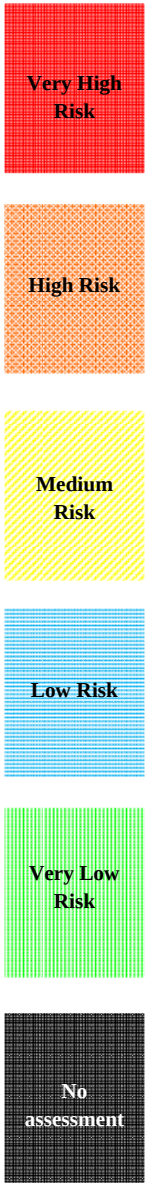
Very High Risk

Afghanistan (no data)
China
Philippines
Viet Nam
Papua New Guinea (no data)

High Risk

Indonesia
Lao PDR
Myanmar
Australia
Mongolia
Thailand

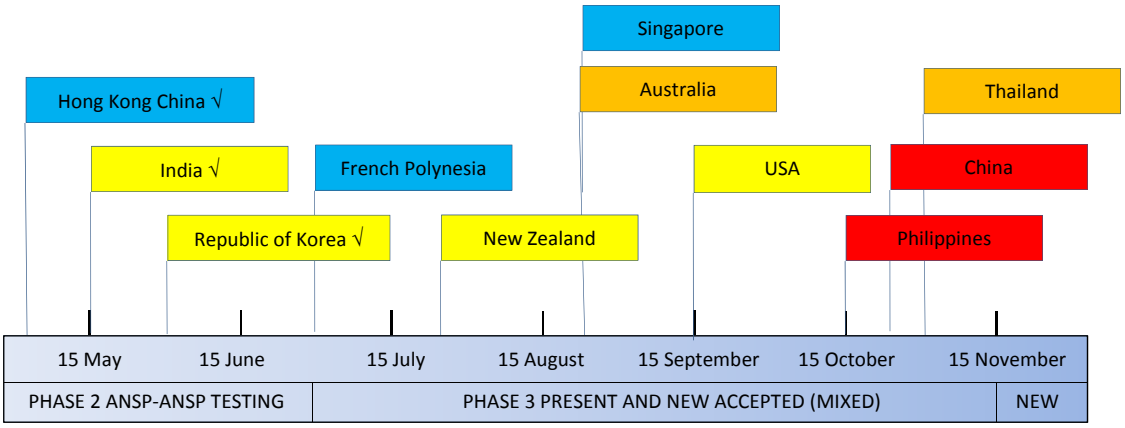




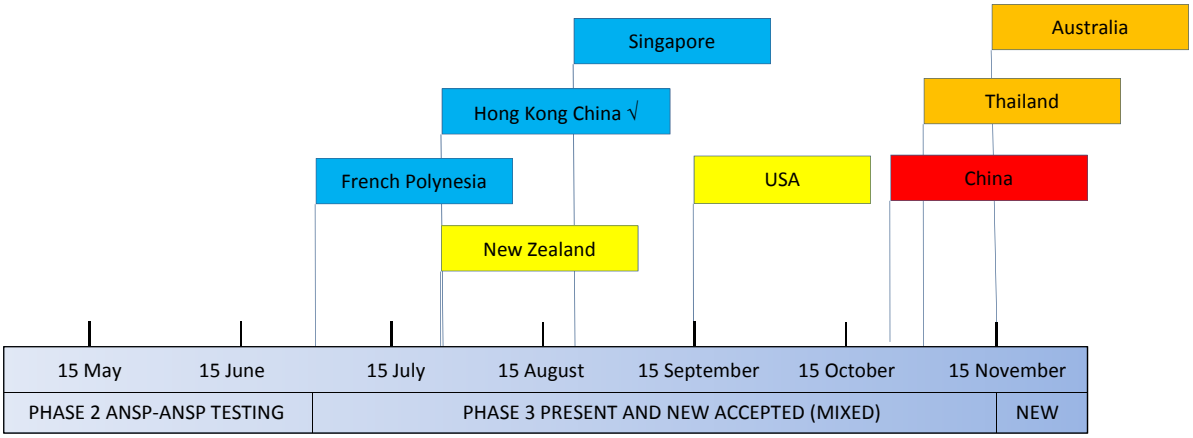
Effective 15 June 2012

Amendment 1 Phase 3 Implementation Progress –

Planned System Capability to Accept NEW Format FPL



Planned Operational Acceptance of NEW Format FPL



√ = System NOW capable

INTERNATIONAL CIVIL AVIATION ORGANIZATION

ASIA AND PACIFIC OFFICE

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)

Version 5, 29 June 2012

ISSUED BY THE ICAO ASIA/PACIFIC REGIONAL OFFICE, BANGKOK

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Appendix

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 identify 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, AIP supplementand/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.

4.7 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 was 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…"*.

4.8 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/ is not necessary in AIDC messages since flight data is generally first coordinated after departure. The inclusion of DOF/ in AIDC messages is subject to bilateral agreement between States.

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 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., "OD" or "SD" must appear in 10a);
- If B1, B5, or C1 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).

Consistency between Item 10a and STS/ in Item 18

5.6 Amendment 1 formalised flight plan filing of the mutually exclusive entries 'W' (in Item 10a) and "NONRVSM" (in Item 18 STS/). The use of NONRVSM in STS is to signify intent to operate as a Non-RVSM flight in RVSM airspace. To avoid contradictory RVSM indications and possible incorrect application of separation standards based on this, a consistency check should be coded to evaluate NEW FPL related messages per the following:

- If STS/NONRVSM is filed in Item 18 then ‘W’ should not exist in Item 10a.

Item 10b omission in Amendment 1

5.7 Amendment 1 omitted the Item 10b ‘N’ designator (i.e. no surveillance equipment for the route to be flown) in Appendix 3 whilst in Appendix 2 this was retained as a valid designator. This was clarified as being an inadvertent omission and consequently ‘N’ remains a valid character for use in Item 10b.

Item 10b advice to filers

5.8 In relation to the use of surveillance equipment and capabilities, Amendment 1 identifies alphanumeric entries in Item 10b. States should consider including in their flight planning manuals and/or the flight planning section of their AIP, the following guidelines:

a) ‘N’ or

b) SSR Modes A and C and S
   - Maximum of one entry is expected from either ‘A’ or ‘C’ or ‘E’ or ‘H’ or ‘I’ or ‘L’ or ‘P’ or ‘S’ or ‘X’ and/or

c) ADS-B
   - Maximum of one entry is expected from either B1 or B2 and/or
   - Maximum of one entry is expected from either U1 or U2 and/or
   - Maximum of one entry is expected from either V1 or V2 and/or

d) ADS-C
   - One or both of the entries ‘D1’ ‘G1’

Validity Checking & Processing of Item 18 Indicators

5.9 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.

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. If duplicate indicators are detected, their contents will be concatenated within a single occurrence of the indicator but with a space inserted between the two data streams.

5.10 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
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)~~ 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 (ie. 0-99 hours followed by 0-59 minutes)
SEL/	A single string of four letters
TYP/	Free text *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.*
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: • *Category **A:*** less than 169 km/h (91 kt) indicated airspeed (IAS)

Indicator	Contents
	• *Category **B:*** 169 km/h (91 kt) or more but less than 224 km/h (121 kt) IAS • *Category **C:*** 224 km/h (121 kt) or more but less than 261 km/h (141 kt) IAS • *Category **D:*** 261 km/h (141 kt) or more but less than 307 km/h (166 kt) IAS • *Category **E:*** 307 km/h (166 kt) or more but less than 391 km/h (211 kt) IAS • *Category **H:*** 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~~ The route details to the revised destination aerodrome, followed by the ICAO four-letter location indicator of the aerodrome. Examples: RIF/DTA HEC KLAX RIF/ESP G94 CLA YPPH
RMK/	Free text field

Table 5-1: Item 18 Indicator Validity Check

Allowable Indicators and Mandated Order in Item 18

5.11 Systems should accept indicators in Item 18 which are defined in the PANS-ATM. Consideration should also be given to system acceptance/handling of legacy indicators, not included in PANS-ATM, but approved by ICAO for continued use. It is recommended that APAC states either automatically:

a) remove on reception any non-standard indicators not approved for use in Asia/Pacific without rejecting the original message; or

b) automatically re-order these non-standard indicators on reception without rejecting the original message by inserting the non standard indicator and associated text as RMK/ and with the "/" removed between the non standard indicator and associated text.

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

5.12 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:

c) 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.

d) 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.

5.13 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.

Special handling (STS) indicator

5.14 MARSA - It is recommended that state guidance be provided to filers (AIP) to ensure consistent application of MARSA as follows:

- MARSA when submitted in the flight plan is an indication of an intention to declare MARSA, either:
    - for the flight duration (requires more than one aircraft in Item 9 of the flight plan); or
    - from a nominated point in the flight plan, to be stated in Item 18 RMK/ along with identification(s) of aircraft planned to participate in MARSA operations (e.g. RMK/MARSA COLT WIZZA240036.

5.15 ATFMX – States should consider including in their flight planning manuals and/or AIP flight planning section instructions to filers to, when intending to file ATFMX in STS/ for flights which cross more than one FIR, include in RMK/ the FIR (s) for which this exemption applies (e.g. RMK/ATFMX NZZO).

Use of ORGN

5.16 ORGN – It is recommended that ANSPs published specific guidance to filers for this Indicator. Other parts of the world have set character limits for this Indicator.

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.

6.2 Several ANSPs have indicated an intention to maintain their systems in PRESENT format post November 15th 2012 and to utilise retrofitted flight plan converters to accept NEW and convert NEW flight plans for their systems. Whilst not desirable, it is appreciated that for states using legacy systems with short term plans for replacement, this represents a viable option, however it must be understood this does not constitute compliance with the spirit of Amendment 1.

6.3 Amendment 1 mandates the order of Item 18 indicators (see 5.9 above). In order to reduce the degree of software development required it is acceptable for the order of both PRESENT and NEW format flight plan messages to be as per that defined in Amendment 1 for NEW format messages.

6.4 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. During the conversion process, duplication of entries should be avoided at all times. For example, if NEW flight plan contains PBN/B2B3 then the desired resulting Field 18 entry in the corresponding PRESENT plan should be NAV/RNAV5 B2 B3 and not NAV/RNAV5 B2 RNAV5 B3 as might be interpreted from the translation table. Conversion from PRESENT to NEW was never intended, nor recommended by ICAO. Up converting is considered high risk and should not be used in ‘live’ system operations.

Conversion of Field 10a

6.5 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 "Item 18" NEW columns and convert it to the information in both the "Field 10a" and "Item 18" in PRESENT columns. If, when per the table text is to be inserted inField 10 or Field 18, the text is already present, then it should not be inserted again. When inserting text in Field 18, if any information is already present due to having been filed or having been inserted by an earlier translation insertion, the text should be appended to the end of the existing text preceded by a space. For example, if PBN/B2 NAV/TCAS is filed in a NEW flight plan, then the resulting NAV/ entry in the corresponding PRESENT flight plan will be NAV/TCAS RNAV5 B2.

'NEW' Data Content		**Conversion to 'PRESENT' Data Content**	
Field 10a	**Item 18**	**Field 10a**	**Item 18**
N		N	
S		S	(refer para 5.4)
S F		SF	(refer para 5.4)
A		Z	NAV/GBAS
B		Z	NAV/LPV
C		C	
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	
H		H	
I		I	
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

‘NEW’ Data Content		Conversion to ‘PRESENT’ Data Content	
Field 10a	**Item 18**	**Field 10a**	**Item 18**
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
O		O	
P1-P9		*Reserved- should not be present. **Remove** items if present (i.e. do not make information part of the PRESENT format plan).*	
R	PBN/A1	RZ	NAV/RNAV10 RNP10 A1
R	PBN/B1	RZ	NAV/RNAV5 B1
R	PBN/B2	RZ	NAV/RNAV5 B2
R	PBN/B3	RZ	NAV/RNAV5 B3
R	PBN/B4	RZ	NAV/RNAV5 B4
R	PBN/B5	RZ	NAV/RNAV5 B5
R	PBN/B6	RZ	NAV/RNAV5 B6
R	PBN/C1	RZ	NAV/RNAV2 C1
R	PBN/C2	RZ	NAV/RNAV2 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

'NEW' Data Content		Conversion to 'PRESENT' Data Content	
Field 10a	**Item 18**	**Field 10a**	**Item 18**
R	PBN/L1	RZ	NAV/RNP4 L1
R	PBN/O1	PRZ	NAV/RNP1O1
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 BARO VNAV S2
R	PBN/T1	RZ	NAV/RNP AR APCH RF T1
R	PBN/T2	RZ	NAV/RNP AR APCH T2
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

6.6 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	

‘NEW’ Data Content		Conversion to ‘PRESENT’ Data Content	
Field 10b	**Item 18**	**Field 10b**	**Item 18**
A		A	
C		C	
E		SD	COM/E
H		S	COM/H
I		I	
L		S D	COM/L
P		P	
S		S	
X		X	
B1		D	COM/B1
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

Table 6-2: Conversion of Field 10b

Conversion of Item 18

6.7 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 • Except change “ATFMX” to “ATFMEXEMPTAPPROVED”
SUR/	RMK/ SUR <textafter SUR/>

'NEW' Data Content	Conversion to 'PRESENT' Data Content
Item 18	**Item 18**
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/>
ORGN/	RMK/ORGN <text after 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. *DAT conversion should therefore occur in two steps:* 1. *Any existing DAT/ entries in the NEW format flight plan (submitted for conversion) are transferred to the COM/ indicator in Field 18 of the converted PRESENT flight plan (or message) - prior to conversion of the 10a equipment qualifiers; then* 2. *Any equipment qualifiers in Field 10a requiring conversion to DAT/ in accordance with the conversion table 6.1 (i.e. J1-J7) are to be entered into the DAT/ indicator of the converted PRESENT flight plan (or message) in accordance with table 6.1.* *Note; After conversion is possible that there will be duplicate entries in DAT/ and COM/.*	

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 RTF, 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 E, J, M or P is filed without an associated numeric;

b) In Field 10b if the Qualifier D is filed without an associated numeric;

c) In Item 18 an entry used for STS/ is not in the allowed list for NEW; and

d) In Item 18 an entry used for PER/ is more than 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: A, B, E1, E2 , E3 , J1, J2 , J3 , J4 , J5, J6, J7 , M1 , M2 , M3, P1, P2 , P3 , P4 , P5 , P6 , P7, P8, P9.

b) In Field 10b if any of the following qualifiers are filed: E , H , L , B1 , B2 , U1 , U2 ,V1 , V2 , D1 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 isa unique qualifier from the PRESENT list and another unique qualifier from the NEW list co-existing in the same FPL, this indicates that the FPL is inconsistent and therefore should be rejected by automation (e.g. to an ‘error queue’). 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 Field Type 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 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”*. Consequently, states should be sending only the DOF element from field 18 or '0' (when no DOF is contained within the flight plan) in these message types. It is important to note that when the DOF/ element is modified by Field Type 22 in a CHG message, the complete Item 18 data must always be provided. If it is not, any elements omitted will be considered as modifications and they will be removed from the Item 18 content

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 Field Type 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 the last notified DOF/YYMMDD in Field Type 18 if that indicator has been previously specified; and

b) If the DOF/ indicator has not been previously specified insert zero (0) in Field Type 18.

8.4 To avoid possible confusion of DOF caused by subsequent DLA messages, a CHG message (instead of a DLA message) should always be used if a flight is delayed over 0000 UTC, indicating in Field 22 the amendments to both Field 13b and Field 18 i.e. both the EOBT and DOF; regardless of the existence of DOF in Field 18 of previously transmitted ATS messages. Similarly, a CHG message with a new EOBT in Field 13b and new DOF in Field 18 should always be used if the flight EOBT is advanced over 0000 UTC.

8.5 If states do elect to use a DLA message for this purpose (per 8.7 example 2 below), their automated systems should have the capacity to add a DOF in cases where one did not previously exist, or to add a day to the DOF where one did exist within Item 18 of the flight plan. Likewise, recipients of DLA messages across 0000 UTC should modify DOF in their systems in the same manner.

8.6 Example ATS messages based on these interpretations are shown below:

Reference FPL Messages

(FPL-ABC123-IS
-B77W/H-SDE1GIRWZ/SB1D1
-NZAA2300
-M083F360 DCT PAPTI A464 TN J251 DN B583 BRU M768 TSN R468 GOMES DCT DANNY1B
-VTBS1130
-PBN/A1B1C1D1L1 DOF/091120)

(FPL-ABC456-IS
-B77W/H-SDE1GIRWZ/SB1D1
-NZAA2300
-M083F360 DCT PAPTI A464 TN J251 DN B583 BRU M768 TSN R468 GOMES DCT DANNY1B
-VTBS1130
-PBN/A1B1C1D1L1)

Modification (CHG) Messages

- (CHG-ABC123-NZAA2300-VTBS-DOF/091120-16/VTBS1130 VTBD)
- (CHG-ABC456-NZAA2300-VTBS-0-16/VTBS1130 VTBD)
- Delaying the flight until the next day

  (CHG-ABC123-NZAA2300-VTBS-DOF/091120-13/NZAA0045-18/PBN/A1B1C1D1L1 DOF/091121)

  (CHG-ABC456-NZAA2300-VTBS-0-13/NZAA0045-18/PBN/A1B1C1D1L1 DOF/091121)

Note:

1. When changing DOF insert the complete content of Item 18 in Field 22
2. CHG message (instead of DLA message) including the new EOBT and the new date of flight should be used if a flight is delayed over 0000 UTC.

Flight Plan Cancellation (CNL) Messages

- (CNL-ABC123-NZAA2300-VTBS-DOF/091120)
- (CNL-ABC456-NZAA2300-VTBS-0)

Delay (DLA) Messages

- (DLA-ABC123-NZAA2345-VTBS-DOF/091120)
- (DLA-ABC456-NZAA2345-VTBS-0)

Departure (DEP) Messages

- (DEP-ABC123/A0254-NZAA2347-VTBS-DOF/091120)
- (DEP-ABC456/A0254-NZAA2347-VTBS-0)

Request Flight Plan (RQP) Messages

- (RQP-ABC123-NZAA2345-VTBS-DOF/091120)
- (RQP-ABC456-NZAA2345-VTBS-0)
- (RQP-ABC123-NZAA-VTBS-DOF/091120)
- (RQP-ABC456-NZAA-VTBS-0)

Request Supplementary Flight Plan (RQS) Messages

- (RQS-ABC123/A0254-NZAA2345-VTBS-DOF/091120)
- (RQS-ABC456/A0254-NZAA2345-VTBS-0)

Arrival (ARR) Messages

- (ARR-ABC123-NZAA-VTBS1115)
- (ARR-ABC456-NZAA2345-VTBS1115)

8.6 It is now mandatory to insert in FPL Item 18 the date of flight departure if the flight plan is filed more than 24 hours in advance of the estimated off-block time of the flight. This also impacts on associated flight plan update messages (ARR, CHG, CNL, DLA, DEP).

8.7 The DOF provided in Field 18 of the update messages must always refer to the last notified Off Block Date (EOBD). This is very important and proper application of the rule may appear to result in information being presented in a counter-intuitive way as shown in the following examples:

- Field 18 in the original Flight Plan: STS/HOSP PBN/B3 DOF/100304
- Field 13b in the original Flight Plan: 2230

Example 1: CHG message – Preferred Method

It is recommended to use a CHG message if a flight is delayed over 0000 UTC, indicating in Field 22 the amendments to both Field 13b and 18, the EOBT and the DOF.

(CHG-ABC123-NZAA2230-VTBS-DOF/100304-13/NZAA0200-18/STS/HOSP PBN/B3 DOF/100305)

Note that the first DOF reference in the CHG message is 04 March, which was the previous notified date; however the modification in Field 22 shows the correct, new Date of Flight which is 05 March.

If the flight is further delayed until 0400 on 05 March, the corresponding DLA message will look like this:

(DLA-ABC123-NZAA0400-VTBS-DOF/100305)

The DLA message refers to the DOF as 05 March since this is the EOBD last communicated by the previous CHG message.

Example 2: DLA message

A DLA message could also be used to communicate a delay over 0000 UTC but is ambiguous and subject to confusion. It is therefore strongly recommended that a CHG message is used to communicate a delay over 0000 UTC as per Example 1.

The new EOBT/EOBD advised in a DLA message must always be understood as a date/time that is later than previously notified.

(DLA-ABC123-NZAA0200-VTBS-DOF/100304)

Note that the DOF reference in the DLA message is 04 March which was the previous notified date; however it is implicit that the new EOBD is 05 March.

Ifthe flight is further delayed to 0400 on 05 March; the corresponding DLA message will look like this:

(DLA-ABC123-NZAA0400-VTBS-DOF/100305)

The DLAmessage refers to the DOFas 05 March since this is the EOBD last communicated by the previous DLA message.

8.8 The use of the DLA message to communicate a delay over 0000 UTC (Example 2) is deceptive in that the new EOBD is not explicitly stated and the DOF in Field Type 18 does not correlate with the new EOBT.

8.9 Where multiple flight plans have been filed (same Aircraft Identification, Departure, Destination but different DOF) it is recommended that CHG messages, including DOF, are used to advise delays. This will enable automated systems to clearly identify which flight is being referenced.

9. Cutover to NEW format

9.1 States will be asked by ICAO to provide their exact cutover timing for promulgation on the FITS website. States should consider planning this timing in conjunction with neighbouring states.

9.2 States are urged to commence operational acceptance and processing of PRESENT and NEW format FPL and ATS messages as early as possible, and in any event no later than 0000 UTC on 12 November 2012.

Appendix

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 inAmendment 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, adopted by APANPIRG/20, September 2010)