



International Civil Aviation Organization
Eastern and Southern African Office

**Fourth Meeting of the AFI Flight Plan Transition Task Force
 (FPLT TF/
 (Mahe, Seychelles, 20 - 22 February 2012)**

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

REVIEW AND DEVELOPMENT OF GUIDELINES

(Presented by the Secretariat)

SUMMARY
This working paper calls for review of existing guidance including material developed in other Regions, identification of the need for further guidance for AFI States, as well the development of such guidance if deemed necessary
Action by the meeting is at paragraph 3.
REFERENCES
APIRG/17 Report FPLT TF/3 Report
This Working Paper is related to Strategic Objectives: A

1. INTRODUCTION

1.1 Subsequent to State Letter AN 13/2.1-08/50 dated 25 June 2008 which communicated the Council approval of Amendment 1 to the 15 Edition of Doc 4444, ICAO circulated State Letter AN 13/2.1-09/09 dated 6 February 2009, providing Guidance for implementation.

1.2 At its first meeting in Johannesburg in September 2010, the FPLT Task Force developed the AFI Strategy for Implementation of the NEW ICAO Flight Plan Format, which has been reviewed and updated by subsequent meetings of the Task Force.

1.3 It is logical that as the preparation for implementation of the new FPL provisions on 15 November 2012 progresses, further guidance might be necessary to ensure ongoing harmonization in the efforts to achieve readiness.

2. DISCUSSION

Transition testing

2.1 During its deliberations on transitional issues, the FPLT TF/3 meeting in Dakar, September 2011, was informed about the EUR Region preparations for the systems testing and that the AFI Region could participate. It was agreed that FPLT TF/4 should review the status of AFI States preparedness and agree on the week to be coordinated with the EUR Region for the tests.

2.2 The *EUR 2012 Test Plan* which was being finalized at the time of the FPLT TF/3 meeting has since been released and copy thereof is provided at **Appendix A** to this working paper. The document was also circulated to delegations who, as of 10 February 2012, had confirmed their FPLT TF/4 meeting attendance.

2.3 With the forgoing, the meeting may wish to review the *EUR 2012 Test Plan* and:

- a) Assess the need for further guidance to AFI States to participate in the EUR Operational Testing (OPT) Sessions, including guidance to the States (ANSPs) to facilitate widest benefit that extend to ANSPs that may not be directly participating in the OPT Sessions; and
- b) Develop the guidance envisaged in a) above.

Implementation guidance

Primary Guidance

2.4 In order to guide preparation and implementation, ICAO circulated State Letter Ref.: AN 13/2.1-09/09 dated 6 February 2009, inter alia, providing the “Guidance for implementation of flight plan information to support Amendment 1 of the *Procedures for Air Navigation Services — Air Traffic Management*, Fifteenth Edition (PANS-ATM, DOC 4444).”

2.5 The Task Force has also developed other guidance, including the Regional Strategy for implementation and the “Conversion Table for New to Present.” Based on experience since the Task Force’s first meeting in September 2010, global developments and available information, the Task Force may wish to review existing guidance in order to update it if necessary and consider the need for further guidance. In this regard, the meeting is invited to consider guidance developed in other Regions. Particular reference is made to the guidance developed for APAC States, copy of which is at **Appendix B** to this working paper.

Guidance for non-automated FPL processing systems

2.6 The meeting will recall that the FPLT TF/3 meeting finalized development of guidance for ANSPs that are operating manual/non-automated flight plan processing systems as at **Appendix C** to this working paper. The meeting may wish to review and if necessary update or improve on the guidance.

Other guidance to be developed

2.7 The meeting will recall that in accordance with its Work Programme supporting the Terms of Reference of the Task Force, it is to develop the following:

- (a) Mechanism for receiving test reports during the transition period of 1st July to 14 November 2012, as well as response plan for issues that require Regional intervention,
- (b) Guidance on required Aeronautical Publications and dates with regard to:
 - i. latest AIRAC date/s for AIP Supplement on implementation requirement of Amendment 1 to Doc 4444 15th Edition
 - ii. latest date that FPL on PRESENT format can be submitted, and to inform users that **changes** for departures from before 15 November 2012 to 15 November or later will require cancellation of FPL and **re-filing** as new format.

FPL 2012 Coordination Workshop/Meetings (FCWM)

2.8 In order to support more specific coordination and cooperation as necessary, the Secretariat has arranged FCWMs, to be hosted by Main AFTN Communication Centres as follows:

Main AFTN Com Centre	Planned Dates	Remarks
Addis Ababa	April 17-18	
Nairobi	April 24-25	
Johannesburg	May 8-9	
Dakar	May 22-23	

2.9 Expected participation to these FCWMs, which are based on the AFI Rationalized AFTN as reflected on **Appendix D** (Chart CNS 1A (Doc 7474)) will be as follows:

- (a) All States which operate Tributary AFTN Com Centres are invited to the FCWM hosted by the Main AFTN Com Centre to which they are connected.
- (b) The meeting may wish to make recommendations to States operating Tributary Centres that are connected to more than one Main Centre, as to which FCWM to attend, if unable to attend more than one.
- (c) In order to reduce costs, Tributary Centres connected to Main Centres that are operated by ASECNA are invited to the Dakar FCWM.
- (d) States in other ICAO Regions, which are in the interface area and connected to the specific AFI AFTN Centres will be invited to the FCWMs to which they are connected.

Note: Formal State Letters will be circulated by the Regional Offices to concerned States inviting them to the specific FCWM.

2.10 The meeting may wish to recognize that, as awareness and state of urgency increase, there is a likelihood of high numbers of participants per State, wishing to attend the FCWMs. However, effective planning will be necessary in order for the hosting States to optimally accommodate delegations from the Tributary Centres. Accordingly, States will be urged to evaluate the composition of their teams to the FCWM more closely to ensure that the most value is realized in the participation, and to:

- (a) Restrict the number of participants to a specific number, expected to be two (2) or three (3) depending on the agreed capacity of facilities provided by the hosting State;
- (b) Confirm participation by the deadline, in order to allow logistical planning to be based on known numbers of participants;
- (c) Note that participation confirmed after the deadline **may be declined** if its acceptance will fit not within planned logistical arrangements.

2.11 Where resources permit and sufficient justification exist, AFI States in the interface areas with other ICAO Regions are encouraged to participate in coordination meetings involving States in the relevant adjacent regions to which they are connected.

Challenges relating to missing plans

2.12 The meeting will recall that the FPLT TF/3 meeting in Dakar, September 2011 agreed on carrying out surveys to establish the issues related to missing flight plans and accordingly formulated Draft Conclusion 3/1: *Addressing Missing Flight Plans*, calling for various measures to address the issue of missing flight plan including surveys. The Draft Conclusion was also to be considered by APIRG/18 to supersede Conclusion 17/42. In this regard, State Letter ES AN 1/6.2 – 0146 dated 9 February 2011, calling for a survey from 5 to 19 March 2012 was circulated to AFI States and Eurocontrol for action as appropriate. States are urged to take necessary preparatory and operational measures to ensure the best outcome of the survey.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Review the information in this working paper;
- b) Consider development of guidance for AFI States to participate in the EUR OPT Sessions;
- c) Review the ICAO guidance provided in February 2009 and other available material and if necessary develop/adopt detailed updated guidance;
- d) Review and if necessary update *Guidance for non-automated flight FPL processing systems*;
- e) Develop the guidance highlighted under **paragraph 2.7** of this working paper; and endorse the role of States reflected in this working paper, particularly with regard to optimum participation in FCWMs, and missing flight plan surveys.

EUR 2012 TEST PLAN

FOR THE OPERATIONAL EVALUATION WITH EXTERNAL CLIENTS OF FUNCTIONALITY ASSOCIATED WITH AMENDMENT 1 TO PANS-ATM

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1. INTRODUCTION

This Test Plan defines the purpose, scope, procedures and schedule of activities for the Operational Testing of new or amended features in IFPS associated with Amendment 1 to PANS-ATM.

The intended audience of this Test Plan are the ICAO 2012 EUR Task Force members, all EUR region States, Aircraft Operators and all other ANSPs, Regions and Organisations involved in the operational deployment of Amendment 1 to PANS-ATM.

1.1. Scope

The testing activities described in this document are intended to address the flight planning changes introduced within the EUR region as a result of Amendment 1 to PANS-ATM. The main emphasis therefore is upon IFPS related processes and procedures.

This document describes only the testing activities involving external participation where stakeholders are encouraged to participate. It does not include the various internal testing activities i.e. Acceptance Testing, Regression Testing and Integration Testing.

The Operational Testing described in this document will permit participants to evaluate the impact of the modifications on procedures and systems.

1.2. Co-ordination

Overall co-ordination of 2012 Testing activities will be achieved via the 2012 Task Force and described within this document. Any change to the testing schedule, objectives or scenarios described in this document will be notified via amendment to:

- a) 2012 Task Force members;
- b) Test Coordinators - those having registered their participation to the OPT testing activities using the forms provided.

The practical execution of the different test activities described in this document will be performed by the System Acceptance Team (SAT) of Network Operations, referred throughout this document as the 'Test Team'.

1.3. Release Content

The functionality to support ICAO 2012 will be implemented within two release cycles of the CFMU development process, CFMU 15 in March 2011 and CFMU 16 in March/April 2012.

The CFMU 15 release contained the majority of functionality related to ICAO 2012 and agreed by the Task Force in June 2010. The CFMU 16 release will contain the additional changes agreed by the Task Force in November 2010 in addition to the implementation of changes to the CFMU profile calculation resulting from ICAO 2012 modifications e.g. DLE processing.



Not available until CFMU 16

- **REG syntax increase**
 - Modification of CFMU profile due to:
 - DLE
 - DEPT/, DEST/ location
 - AFTN line limit support
 - **NONRNAV → RNAVX**
 - **Use of NAV/, COM/, DAT/ for exemptions instead of EUR/**
 - **Use of EUR/ for PROTECTED indicator**
 - Clarified treatment of duplicate Field 18 Indicators
 - Modified translation of some New STS indicators & modified Old/New decision logic
- Incorporation of additional indications within Mode S and B-RNAV checking algorithms
 - Clarified priority treatment for STS indicators MEDEVAC & FFR
 - Acceptance of Old and/or New format messages for the same FPL
 - Update of SUR eqpt via AFP (EQCST)
 - RPL acceptance of New before 15 Nov



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Figure 1 - CFMU 16 Content

1.4. Release Planning

CFMU 16 will be available for testing purposes from November 2011.

CFMU 16 will be available on the operational platforms IFPUV + IFPS from March 2012.

1.5. Documentation

There are three main reference documents for testing purposes which describe the CFMU implementation:

CFMU 2012 Requirements (URD)

CFMU Interface Manual for ICAO 2012 (UID)

IFPS & RPL Dictionary of Messages (DOM)

The URD describes all necessary changes, related to ICAO 2012 implementation, to be made to the CFMU systems. It is by definition a document that relates primarily to the CFMU systems. Some of the exchanges and data items described in the URD concern only CFMU and ANSPs making the URD a more suitable reference for ANSP stakeholders.

The UID describes the necessary changes from an external readers perspective and although it includes exchanges exclusive to CFMU/ANSPs it is nevertheless a better reference document for Aircraft Operators and flight plan originators generally.

The DOM is primarily an engineering document providing a detailed syntactic description of all CFMU related message exchanges in both ICAO and ADEXP formats. Unlike the URD

and UID it provides a complete description of the IFPS & RPL data exchanges, not just the 2012 related changes.

These documents are available via :

http://www.cfm.eucontrol.int/cfmu/public/standard_page/nos_work_programme_fpl_2012_impl_details.html

The **IFPS User Manual** has not yet been updated to reflect 2012 procedures. However, participants may have the need to consult current procedures. The IFPS User Manual is available via the CFMU Library under 'Handbook & Guides':

http://www.cfm.eucontrol.int/cfmu/public/standard_page/library_handbook_supplements.html

1.6. Objectives

1.6.1. General Objectives

The overall objectives of 2012 testing are to:

- a) demonstrate the new software functionality;
- b) enable the new functionality to be tested against client systems;
- c) enable knowledge to be gained of new procedures;
- d) enable familiarisation of client staff and CFMU staff with the new functionality.

1.6.2. Main Functional Objectives

- a) Demonstrate the ability of IFPS to correctly identify and validate New format flight plan and associated messages;
- b) Demonstrate the ability of flight plan originators to create New format flight plan and associated messages;
- c) Demonstrate the ability of ATC units to accept New format flight plan and associated messages;
- d) Demonstrate the ability of IFPS to accept and correctly distinguish between Old format and New format flight plans and related messages;
- e) Demonstrate the ability of IFPS to translate New format into Old format;
- f) Demonstrate the ability of IFPS to provide a transition from Old format to New format when required by the recipient and indicated via an environment setting specific to that recipient;
- g) Demonstrate the ability of IFPS to ensure that flight planning indicators specific to the CFMU and used to communicate between IFPS and client systems are not distributed to non-client addresses.

1.7. Test Activities

There are four main types of testing activities foreseen :

Activity	Main Participants
FPL Creation (IFPUV)	AO, ARO, CFSP
Static / Bulk Testing (Test Data)	ATC, AO, ARO, CFSP
Operational Testing (OPT)	ATC, AO, ARO, CFSP
Passive Testing	ATC, AO, ARO, CFSP

2. FPL CREATION (IFPUV)

The IFPS Validation facility (IFPUV) is available via several different means (see below) and can be used for two main purposes:

- a) to determine the validity of a New (or Old) format FPL message;
- b) to assist in finding a valid route or route portion within the CFMU area.

The IFPUV has been available since March 2011 for testing the validity of NEW format FPL messages, while at the same time continuing to support OLD format. In addition to the new error messages resulting from the new 2012 syntax, warning messages have been added to the application to ensure users are aware that New format should not be provided to the operational IFPS system until it is ready to accept New format in Spring 2012.

The function within the IFPUV to provide a valid route can be useful in the preparation of test FPL data. However, the route finding function is only available to those with secured (Protected) access to the CFMU portal.

2.1. Considerations

1. It should be noted that not all 2012 related syntax changes will be supported by IFPUV until the CFMU 16 release in March 2012 (see Figure 1 - CFMU 16 Content).

2. IFPS will accept and automatically correct some errors. Therefore a message accepted by IFPUV/IFPS as 'valid' is not always an accurate reflection of the message that IFPS will distribute to ATC units. For example, IFPS/IFPUV will accept Field 18 indicators in any order but will provide them to ATC units in the correct order.

2.2. Non-CFMU / External Users

Most 2012 changes are syntax related. As syntax errors are the first to be reported by IFPUV a valid route, even a route within the CFMU area, is not necessary to test the validity of a New format FPL. If the Dept, Dest and route do not penetrate the CFMU area of operations a 'No Errors' result will never be achieved however, once the error 'Not relevant to IFPS' has been reported (or any other route related error) the message has already passed the syntax.

2.3. Access

- a) Internet (CFMU Portal):
<https://www.public.cfm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html>
(the IFPUV is on the lower right hand side of the portal)

Note: depending upon your browser settings the IFPUV application may not appear, particularly if you are using Internet Explorer versions 8 & 9. If this happens you will need to enable 'Compatibility mode', via the 'Tools' tab of your browser, and then re-start your browser session. If this does not resolve the problem please contact the CFMU Technical Helpdesk at: +32 2 7451997

- b) AFTN Address: EUCHZMFV
- c) SITA Address: BRUEY7X

d) B2B

Dedicated access chain for 2012 test system¹.

3. STATIC / BULK TESTING

Static testing involves the sharing of input/output test data in the format of a file delivered via e-mail (see §6. CONTACTS). Messages are processed off-line in batch mode and results provided also via file format.

Static testing provides the following advantages:

- a) being able to test the complete suite of messages (eg. FPL→DLA→CHG→CNL);
- b) being able to create a large test file well in advance;
- c) being able to analyse the results off-line taking whatever time may be needed;
- d) being able to easily repeat the tests following some modifications and compare results
- e) no need for complex synchronisation of systems, test addresses, timing etc. as necessary for on-line testing

Care should be taken in the creation of the test data, in particular:

- any use of the DOF indicator vis-à-vis the date/time the tests are being performed;
- test data should be consistent with current environment data.

See also 4.5.2 & 4.8.

3.1. ATC Units

The IFPS Test Team has available a file of valid 2012 messages, primarily FPL and CHG messages, which can be used in the testing of ATC systems. Initially this file contains relatively simple examples of the more straight forward syntax modifications but as time progresses this file will increase in terms of test scenarios, adding more complex examples such as DOF changes etc.

The IFPS Test team will also make available a file containing examples of invalid test messages.

It should be noted that while an effort has been made to ensure the test data referred to above is relevant (penetrates the airspace) of as many ACCs as possible, the Test Team does not have the resources to provide dedicated static test data specific to each individual ACCs or airspace. However, as the route is generally of little consequence to the test objectives, which are primarily syntax related, it is not difficult for recipients of the test data to modify the Dept/Dest and Route in order to make it relevant to the system concerned. If necessary the IFPUV can be used to find valid routes.

3.2. Flight Plan Originators

In addition to the use of IFPUV (for FPL messages only), flight plan originators are encouraged to provide the CFMU Test Team (see CONTACTS) with a file containing

¹ Those interested in obtaining B2B access for the first time should consult the following brochure for further information and access application.
http://www.cfm.eucontrol.int/cfm/gallery/content/public/library/services/service_leaflets/leaf_b2b_latest.pdf

representative samples of all New format messages eg. FPL→DLA→CHG→CNL. The Test Team will process the file and provide the resultant IFPS output.

3.3. Non-CFMU / External Users

ANSPs located outside the IFPS area of operations and flight plan originators (Aircraft Operators, Flight Plan Service Providers, AROs) can participate in the exchange of static flight plan data. The only constraint is that the flights must have at least one portion of route within the IFPS area of operations.

4. OPERATIONAL TESTING (OPT)

On-line testing via normal networks using a dedicated CFMU test platform and supported by IFPS Operators. All OPT test session will include a pre-determined test scenario or test configuration which simulates the 15th Nov switch-over date. A detailed description is provided in § 4.14 and 4.15.

The OPT test sessions enable the complete suit of messages (FPL, CHG, CNL, DEP, DLA, RQP, RQS, AFP, APL, ACH, ACK, MAN, REJ) to be tested involving both flight plan originators (AOs, AROs, CFSPs) and ATS units (ACCs, UACs, APPs, TWRs, AROs).

4.1. Non-IFPS / Non-EUR Participation

4.1.1. Flight Plan Originators / Aircraft Operators

Flight Plan originators not normally operating into the IFPS or European region can participate but should be aware of the following:

- a) flight plans must contain at least one portion of the route within the IFPS area of operation;
- b) the result of the IFPS processing of each test message is provided via the appropriate ACK, MAN or REJ messages (see the IFPS User Manual for details) and will be returned to the address from which the test message was received.

4.1.2. ANSPs / ATC Units

An ANSP or ATC Unit located outside the IFPS area of operation can participate to an OPT session however in order to ensure that IFPS will send the resultant message to the unit concerned the test flight plan data must be submitted making use of the 'Re-addressing' feature of IFPS.

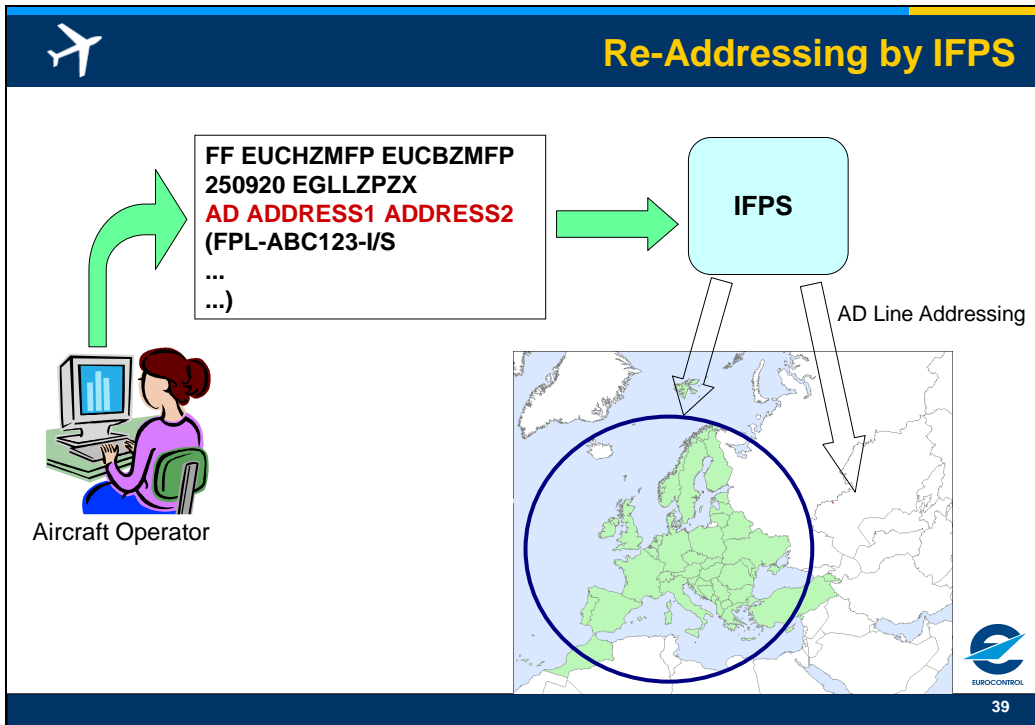


Figure 2 IFPS Re-Addressing Function (AD Line addressing)

For example: If Hong Kong ATC wishes to participate, using the test address 'VHHHZQZT' they should ensure test FPLs are submitted such as;

```

FF EUCHZMFT           ← IFPS test address
AD VHHHZQZT          ← Hong Kong test address provided via re-addressing mechanism
(FPL-VHH01XX-IS     ← callsign using 'XX' to identify it as a test message
-B744/H-SXDE1GHIJ4J5RWYZ/SB2    ← 'New' format
-EGLL1125           ← relevant to IFPS
-N0480F310 BPK7F BPK M185 CLN UL620 ARNEM UP147 RKN UL980
PENEK UM994 DENKO UN858 OSKUD/N0488F330 UN858 LAVAR UM874
ASKIL/K0902S1010 B102 UK R11 FV G3 AL B365 BK B923
GUTAN/K0888S1010 A368 URL G3 AKB A360 NALIK/K0880S1110 A360
ERULA/K0883S1130 A360 REVKI A460 KCA L888 SADAN Y1 OMBON B330
POU R473 SIERA
-VHHH1110 ZGSZ
-PBN/B2B3B4B5L1D2D3D4 NAV/RNVD1E2A1 EET/EHAA0021 EDVV0041 EDUU0100
EPWW0115 EYVL0154 UMMV0205 UUWV0228 UWPP0318 UWWW0340 UATT0359
UACC0454 UAAA0538 ZWUQ0633 ZLHW0732 ZPKM0851 ZGZU0957 VHHK1043
SEL/ADHJ REG/BHOT)
  
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To assist with the creation of test messages which are relevant to the ATC unit concerned, it is highly recommended that an ATC unit participates together with its local Aircraft Operators and/or ARO.

It should however be noted that:

- c) flight plans must contain at least one portion of the route within the IFPS area of operation;
- d) the result of the IFPS processing of each test message is provided via the appropriate ACK, MAN or REJ messages (see the IFPS User Manual for details) and will be returned to the address from which the test message was received. If these messages are not needed or cannot be received this must be indicated via the Registration Form.

4.2. Test Schedule

The following on-line test sessions (OPT) are foreseen between February 2012 and November 2012. All sessions will use the CFMU 16 software release which means that all 2012 functionality will be available.

OPT1: 30 January – 3 February 2012

OPT2: 20 – 24 February 2012

OPT3: 7 – 11 May 2012

OPT4: 11 – 15 June 2012

OPT5: 3 – 7 September 2012

OPT6: 24 – 28 September 2012

The first day (Monday) of each test session will primarily be a technical testing day (OPT-TECH) enabling each participant to ensure that the test configuration is correct and that their addresses and parameter settings are correctly set.

The following generic schedule will apply to each session:

OPT-TECH (D-1, usually a Monday)

One session: 0900 to 1200 UTC

OPT SESSION (D → D+4, usually Tue-Fri)

Morning Session: 0900 to 1200 UTC

Afternoon Session: 1200 to 1500 UTC

4.3. Environment Data

The CFMU OPT test system will be loaded with the operational environment data at each AIRAC cycle. It will therefore remain consistent with current operations in terms of basic environment data. This is something that should be kept in mind by those maintaining test data.

In order to participate to a test session it may be necessary (particularly for ATC participants) for the Test Team to modify some of the information held in the CFMU database for the unit concerned. Typically this will concern address data and some 'flags' or parameter settings, see §4.5.

4.4. Registration

Those intending to participate in an OPT session are required to complete and return the appropriate 'Registration Form', at annex.

It should be noted that **registration is required for each individual OPT test session**. Failure to register, even if having participated to a previous OPT session, will mean the necessary addresses will not be configured in the CFMU communications system. As a result no messages may be received from or sent to that address.

4.5. Participant Configuration & Setup

The settings described below, will be automatically maintained over AIRAC cycles and will therefore last until the end of all OPT testing or until otherwise modified in accordance with the registration data provided for a subsequent OPT session.

4.5.1. Participant Address Data

Participants to the OPT testing sessions will be required to provide, via the Registration Form, an indication of:

For flight plan originators (Aircraft Operators, AROs, CFSPs):

1. the address from which test flight plans will be sent to IFPS;
2. willingness to receive the resultant ACK, MAN, REJ at the address specified under 1 above;

For ATC Units:

3. the operational unit or entity for which messages are requested to be received e.g. Amsterdam ACC, Brussels TWR, etc.
4. the test address to be used i.e. the test address that IFPS will assign to the unit specified under 3;
5. the information under 1 & 2 above in case the ATC unit also intends (or needs!) to submit test flight plans to the IFPS test system

4.5.2. Participant Parameter Settings (IFPS States only)

The following parameters will, by de-fault, be set by the IFPS Test Team for each participant in order to achieve the scenario described under §4.16 for all test sessions. If a unit wishes to deviate from the planned scenario then they should indicate the appropriate settings they wish to achieve via the registration form.

ICAO_2012_READY_DATE: a new parameter allowing the unit to indicate the date and time after which New format output will be accepted. Prior to the date/time specified, messages will be provided by IFPS in Old format only. After the date/time specified, messages will be provided in either Old or New format depending upon how they were received/accepted by IFPS.

FPL_DIST_TIME : an ATC unit can indicate how far in advance it wishes to receive flight plan data. A large setting will cause flight plans to be sent by IFPS almost immediately allowing an instant analysis of test results. The Test Team will automatically set this parameter to 360 mins. (6 hours) for each participating unit.

ICAO_ADEXP: the unit can specify whether ICAO or ADEXP format is required. The format specified in the Ops environment for the entity concerned shall be retained, unless otherwise specified.

4.6. Technical Test

A technical test exercise is scheduled the first day of the OPT session (see 4.2).

During the time period allocated for technical testing (usually the Monday morning), input/output to/from participating test addresses will be enabled.

Participants to the OPT session are invited to check that test messages are received by the IFPS test system and that output from the IFPS test system arrives to the correct test address(es). Any anomalies should be reported to the Test Team. See CONTACTS.

4.7. Reception of Test Messages

The operational repetitive flight plans (RPLs) will also be generated on the IFPS test system. This means that a participant ATC Unit may receive a copy of the operational flight plans generated by the test system from RPL data (in Old format of course).

In addition it should be remembered that other participants are also generating test flight plans which may penetrate 'your' airspace. A participating ATC unit may therefore receive many different test messages from different sources. It is therefore very important to clearly distinguish your test messages, see 4.8 below.

4.8. Test Flight Plans Identification

Test flight plans should be clearly identifiable so that IFPS Operators and recipient addressees can quickly identify them as such and identify their source.

It is strongly recommended that the callsign is modified to reflect the test nature of the message and the test participant. The following logic is proposed:

firstly: ICAO three letter designator of the AO or a three letter designator that is not one of the ones already allocated by ICAO (see ICAO Doc 8585) for an ATS participant (ARO)
followed by : a two digit reference number
followed by : the letters 'XX'
E.g.
DLH01XX 01st test FPL from Lufthansa
DDW14XX 14th test FPL from ARO Bremen

By following this rule test messages should not accidentally associate to either operational messages copied from the operational system or to other test messages.

4.9. Test Purpose Indication

It is highly recommended that an indication is made in Field 18 of the feature being tested e.g. RMK/PBN TEST or RMK/F10B SYNTAX TEST. This will assist the Test Team, who will be monitoring the invalid queue of messages, to know whether a particular error may be integral to the test or whether it is irrelevant to the test and could therefore be manually corrected.

4.10. Manual Message Processing

The IFPS test system will not be manned to the same level as the operational system. IFPOs will give priority to the treatment of test messages, identified by the callsign, see 4.8. IFPOs will reject the message when an error is encountered which is considered to be the main purpose of the test but will correct any other errors considered to be incidental. In this way the originator of the message can 'see' the system reaction through the error message received.

It should be noted that IFPO correction logic will, therefore, not be the same as under operational conditions. Telephone co-ordination will not normally be initiated and more manual rejections will result.

4.11. CFMU Test System Addresses / Access

Test messages may be sent directly to the test systems using the following addresses:

IFPS Test : AFTN : EUCHZMFT SITA : ANREP7X

Access to the test system will also be available via B2B.

4.12. IFPS Output

The distribution of messages by IFPS (ACK, MAN, REJ to flight plan originators and FPL, CHG, etc. messages to ATC units) shall be limited to those having indicated their willingness to participate in the testing through completion of the registration process.

Participants shall consider all messages that carry the IFPS test address (EUCHZMFT) as originator as having a non-operational status.

4.13. Telephone support during OPT Sessions

Test participants may contact the IFPOs (Test Team) during a test session for assistance when needed. As the Test Team may be very busy participants are encouraged to resolve their problems (and perhaps improve their own understanding in doing so!) and only contact the Test Team as a last resort, for example, when several corrections and re-submissions fail to provide the desired result.

4.14. Test Configuration for IFPS States (inc. 'Copy' Addressees)

The creation and management of the necessary settings to achieve the type of migration testing described below for different participants at different times throughout each of the test sessions would be extremely difficult to manage and chaotic to work with.

It is therefore planned to create a **standard test scenario for every test session which will apply to all participants.**

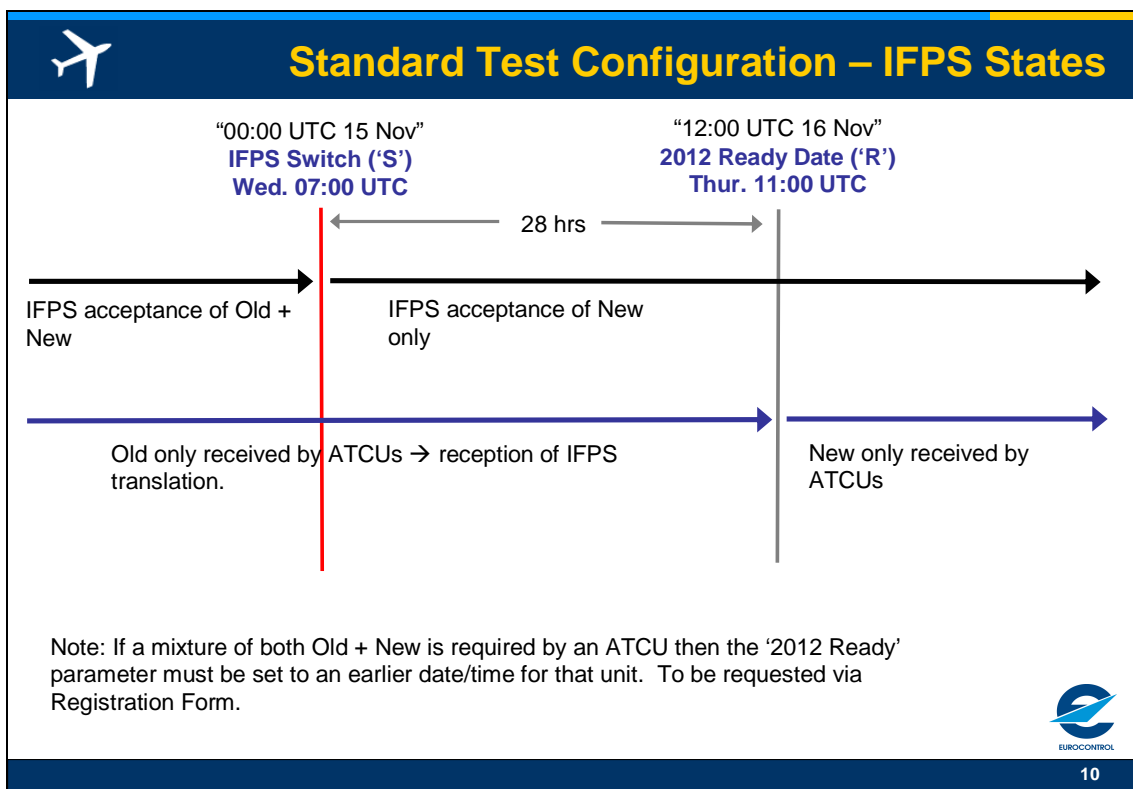


Figure 3 Test Configuration for IFPS States

The standard scenario sets the '2012 Ready Date' parameter to a setting 28 hours after the IFPS switch, thus allowing a clean switch from Old to New without the need for a period of mixed reception of both Old and New formats.

If an ATC Unit wishes to receive New format earlier than the de-fault setting, and therefore receive both Old and New formats, this must be indicated via the Registration form.

4.15. Test Configuration for Non-CFMU States

Non-CFMU States, including non-EUR States, can participate to the test sessions via use of the Re-Addressing function ('AD-line Addressees'), see § 4.1.

The '2012 Ready' parameter is not available to non-IFPS States. The IFPS processing for AD-line addressees is therefore different and as a result the scenarios, as shown below, for these States with regard to the 'Transition' and 'Rollover' tests are slightly different.

During the 2012 operational roll-over period IFPS will distribute FPLs to AD-line addressees:

- in Old format only prior to 00:00 UTC on 15 Nov 2012
- in New format, plus some residual Old format, from 00:00 UTC on 15 Nov 2012 onwards

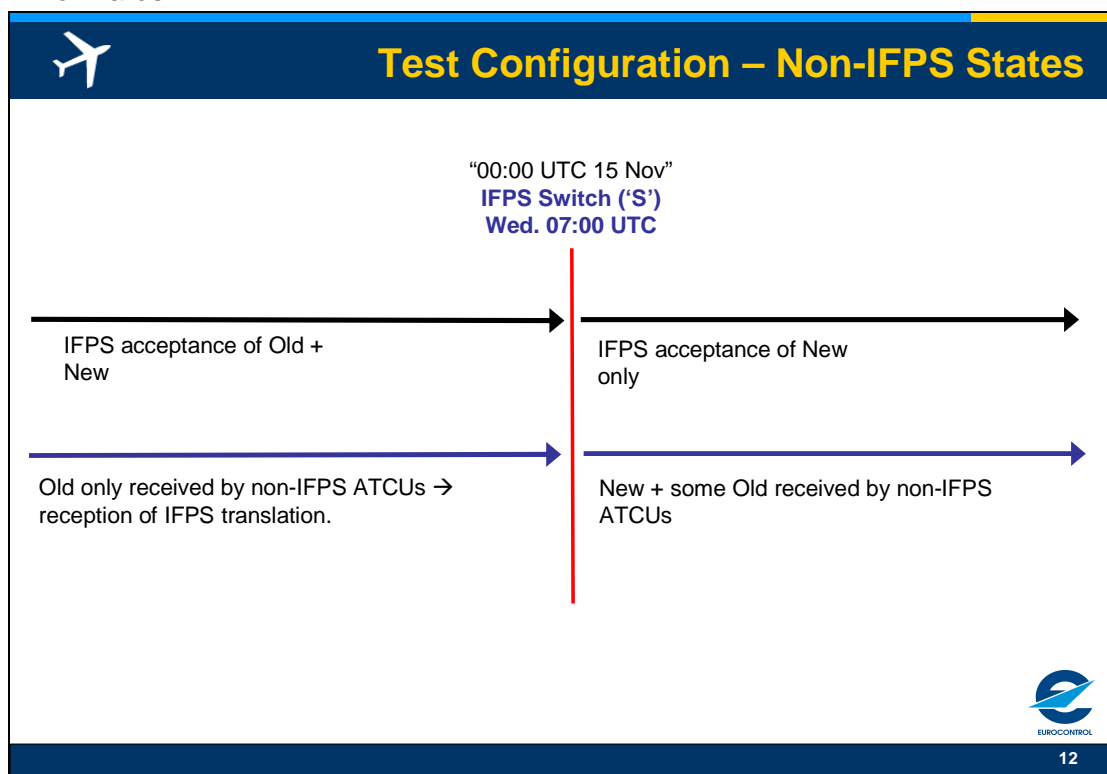


Figure 4 Test Configuration for non-IFPS States

4.16. OPT Test Cases

The main test areas can be categorized as follows:

- a) Message Syntax
- b) Transition and Translation
- c) Ops Date Rollover - IFPS acceptance of New only

4.16.1. Message Syntax

There are many basic syntax and semantic checks that can be performed on each of the impacted fields and within each of the different message types.

Most of these tests are simple to create meaning that no specific setup or configuration of the environment data, parameters etc., is required. Participants are therefore free to engage in syntax testing throughout any or all of the test sessions, as required.

It should be noted that, in accordance with configurations described above :

- a) IFPS acceptance of New format messages can be tested throughout the complete session;
- b) IFPS refusal of Old content can only be tested after 07:00 UTC on Wednesday;
- c) Reception by ATC units within the IFPS area (and Copy addresses) of New format can only be achieved after 11:00 UTC on Thursday;
- d) Reception by ATC units outside the IFPS area of New format can only be achieved after 07:00 UTC on Wednesday;
- e) Reception by ATC units within the IFPS area (and Copy addresses) of Old format messages translated from New can only be achieved prior to 11:00 UTC on Thursday;
- f) Reception by ATC units outside the IFPS area of Old format messages translated from New can only be achieved prior to 07:00 UTC on Wednesday.

4.16.1.1. DOF

Care needs to be taken in the creation of test data designed to test the DOF functionality. The inclusion of a DOF coupled with the date/time at which the test is to be performed and taking the parameters described in 4.5.2 into consideration, may have an impact upon the outcome and achievement of the desired objective.

4.16.2. Transition and Roll-Over

4.16.2.1. Test Case Description for IFPS States

Example Scenarios:

Reference	TRANSLATION_OLD (TO)
Objective	1. Demonstrate the ability of IFPS to convert New format into Old format in accordance with ICAO_2012_READY_DATE parameter setting of the addressee 2. Demonstrate the ability of an ATC unit to process Old format converted from New format.
Pre-requisites (see §4.5.2)	<IFPS_SWITCH> set to 'New only' at time 'S' <ICAO_2012_READY_DATE> set to time 'R' (R = S + 28hr) <FPL_DIST_TIME> set to 6hr <MAX_FILING_TIME> set to 24hr
Test Data	C1. Valid New format messages relevant to the ATC unit concerned and with an entry time into the ATC units airspace (EOBDT) before 'R'
Expected Result	C1. Old format messages provided by IFPS to the ATC unit

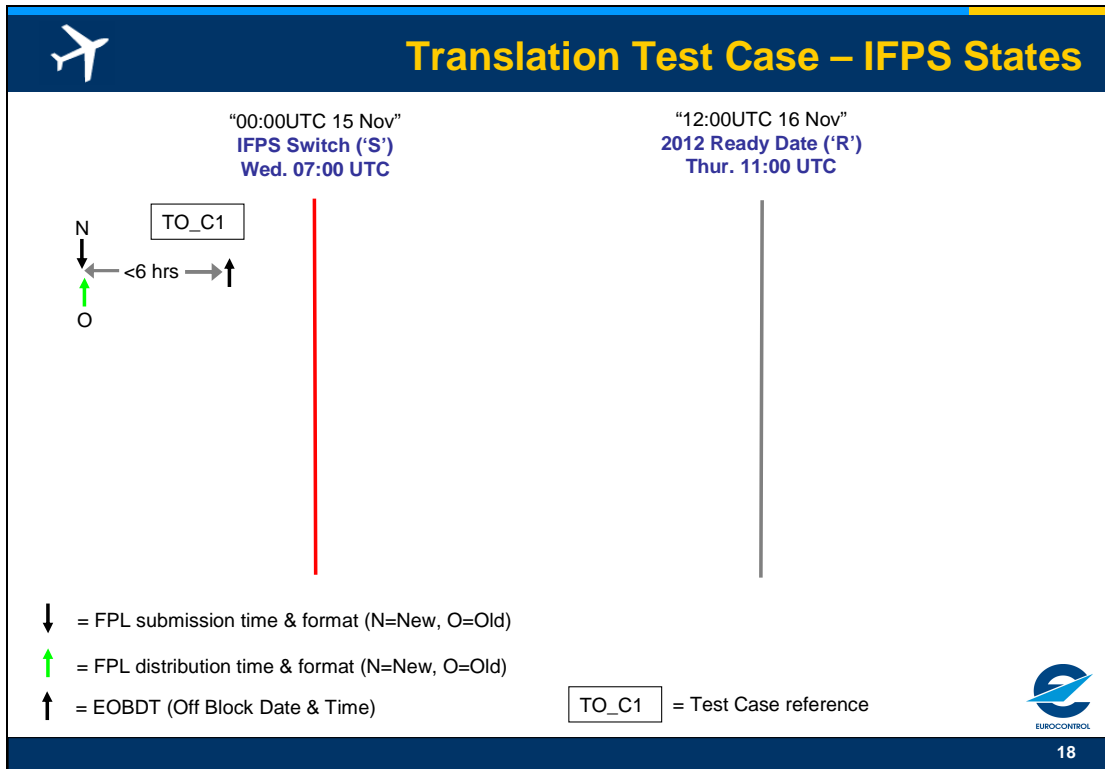


Figure 5 Translation Test Case for IFPS States

Reference	TRANSITION_NEW (TN)
Objective	<p>1. Demonstrate the ability of IFPS to provide New format in accordance with ICAO_2012_READY_DATE parameter setting of the addressee.</p> <p>2. Demonstrate the ability of an ATC unit to process New format.</p>
Pre-requisites (see §4.5.2)	<p><IFPS_SWITCH> set to 'New only' at time 'S'</p> <p><ICAO_2012_READY_DATE> set to time 'R' (R = S + 28hr)</p> <p><FPL_DIST_TIME> set to 6hr</p> <p><MAX_FILING_TIME> set to 24hr</p>
Test Data	<p>C1. Valid New format message sent to IFPS after 'R' with an entry time into the ATC units airspace (EOBDT) less than 6hr in the future</p> <p>C2. Valid New format message sent to IFPS before 'R' with an entry time into the ATC units airspace (EOBDT) less than 6hr in the future</p> <p>C3. Valid New format message sent to IFPS less than 1 hr before 'R' with an entry time into the ATC units airspace (EOBDT) greater than 7hr in the future</p>
Expected Result	<p>C1. New format messages provided by IFPS to the ATC unit</p> <p>C2. Old format messages provided by IFPS to the ATC unit</p> <p>C3. New format message provided by IFPS to the ATC unit 6 hr before EOBBDT.</p>

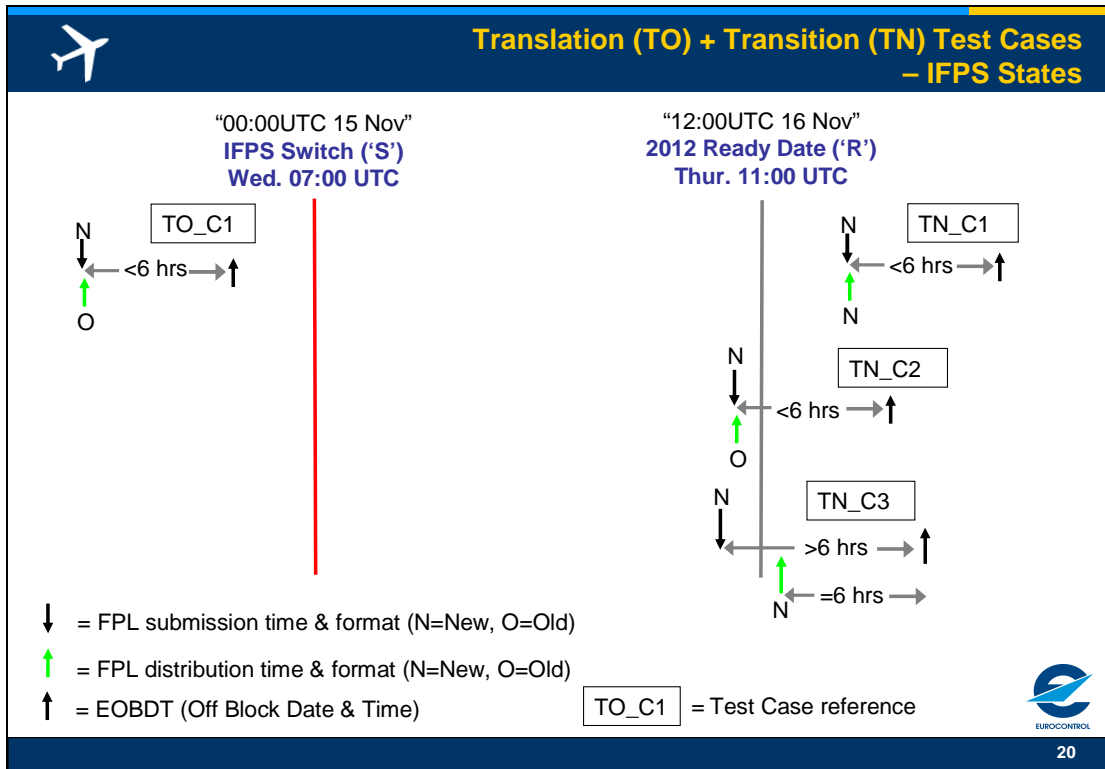


Figure 6 Translation & Transition Test Cases for IFPS States

Ops Date Rollover

At a given time (Operations = 00:00UTC on 15 Nov 2012) a switch can be set in IFPS to indicate that Old format messages processed from that moment onwards will no longer be accepted.

An ATC unit can achieve a clean switch from Old to New (no period of mixture of both Old and New) 36 hrs or more after IFPS stops accepting Old but for the purpose of testing we will use a period of 28 hrs.

Reference	ROLLOVER_SWITCH (RS)
Objective	1. Demonstrate the ability of IFPS to switch from accepting both Old and New formats to accepting New format only. 2. Demonstrate the ability of an ATC unit to achieve a clean switch from Old to New format.
Pre-requisites (see §4.5.2)	<IFPS_SWITCH> set to 'New only' at time 'S' <ICAO_2012_READY_DATE> set to time 'R' (R = S + 28hr) <FPL_DIST_TIME> set to 6hr <MAX_FILING_TIME> set to 24hr
Test Data	C1. Valid Old format messages sent to IFPS before 'S' with an entry time into the ATC units airspace (EOBDT) less than 'R'. C2. Valid New format messages sent to IFPS at any time with an entry into the ATC units airspace (EOBDT) less than 'R' C3. Valid Old format messages sent to IFPS before 'S' with an entry into the ATC units airspace (EOBDT) after 'R' C4. Valid Old format messages sent to IFPS after 'S'
Expected Result	C1. Reception from IFPS in Old format, at EOBDT-6 hrs C2. Reception from IFPS in Old format, as translated by IFPS, at

	EOBDT -6hrs i.e. prior to <ICAO_2012_READY_DATE> time C3. Error – EOBDT outside acceptable range (<24hr in advance) C4. Error – Old format not accepted
--	---

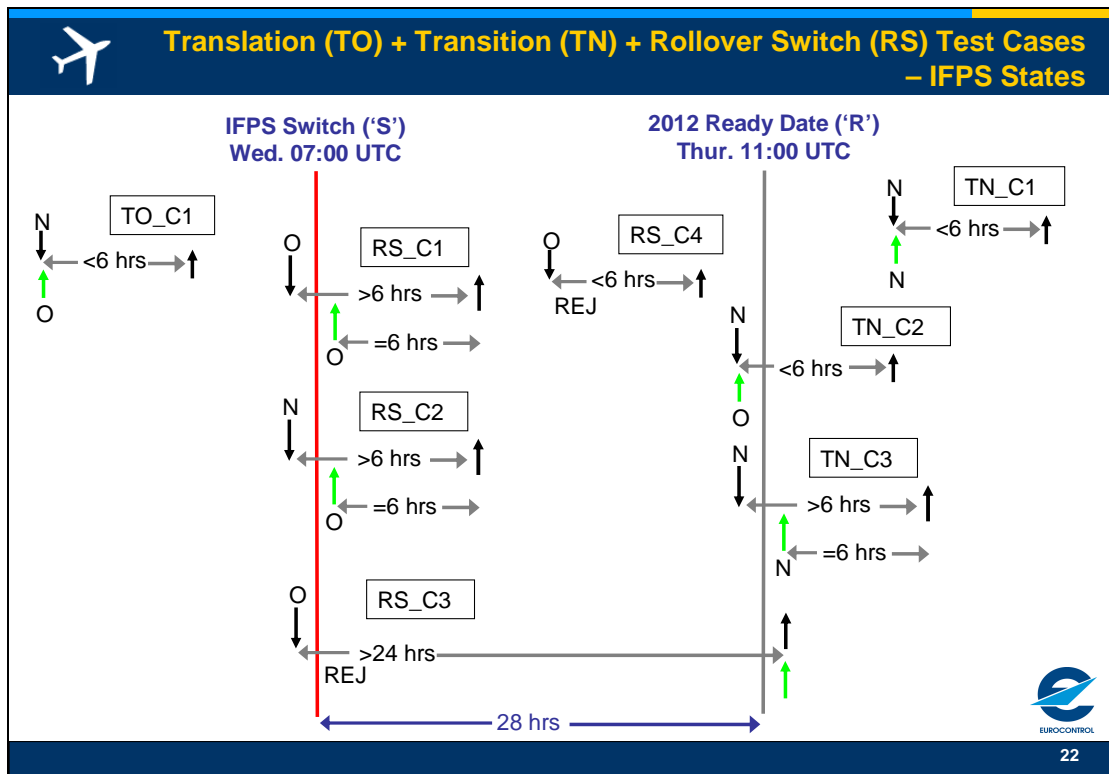


Figure 7 All Migration Test Cases for IFPS States

4.16.2.2. Non-IFPS States

Reference	AD-Line (AD)
Objective	<ol style="list-style-type: none"> 1. Demonstrate the ability of IFPS to switch from accepting both Old and New formats to accepting New format only. 2. Demonstrate the ability of IFPS to distribute to AD line addressees in Old format only ahead of the IFPS Switch date/time. 3. Demonstrate the ability of IFPS to distribute in New format following the IFPS Switch date.
Pre-requisites (see §4.5.2)	<IFPS_SWITCH> set to 'New only' at time 'S' <FPL_DIST_TIME_FOR_AD ADDRESSEES> set to 6hr <MAX_FILING_TIME> set to 24hr
Test Data	C1. Valid New format message sent to IFPS before 'S' with an entry time into the ATC units airspace (EOBDT) before 'S'. C2. Valid Old format messages sent to IFPS before 'S' with an entry time into the ATC units airspace (EOBDT) after 'S'. C3. Valid New format messages sent to IFPS before 'S' with an entry into the ATC units airspace (EOBDT) after 'S' C4. Valid Old format messages sent to IFPS before 'S' with an entry into the ATC units airspace (EOBDT) > 24hr in the future C5. Valid Old format messages sent to IFPS after 'S'
Expected Result	C1. Reception from IFPS in Old format

	C2. Reception from IFPS in Old format, at EOBDT-6 hrs C3. Reception from IFPS in New format at EOBDT -6hrs C4. Error – EOBDT outside acceptable range (<24hr in advance) C5. Error – Old format not accepted
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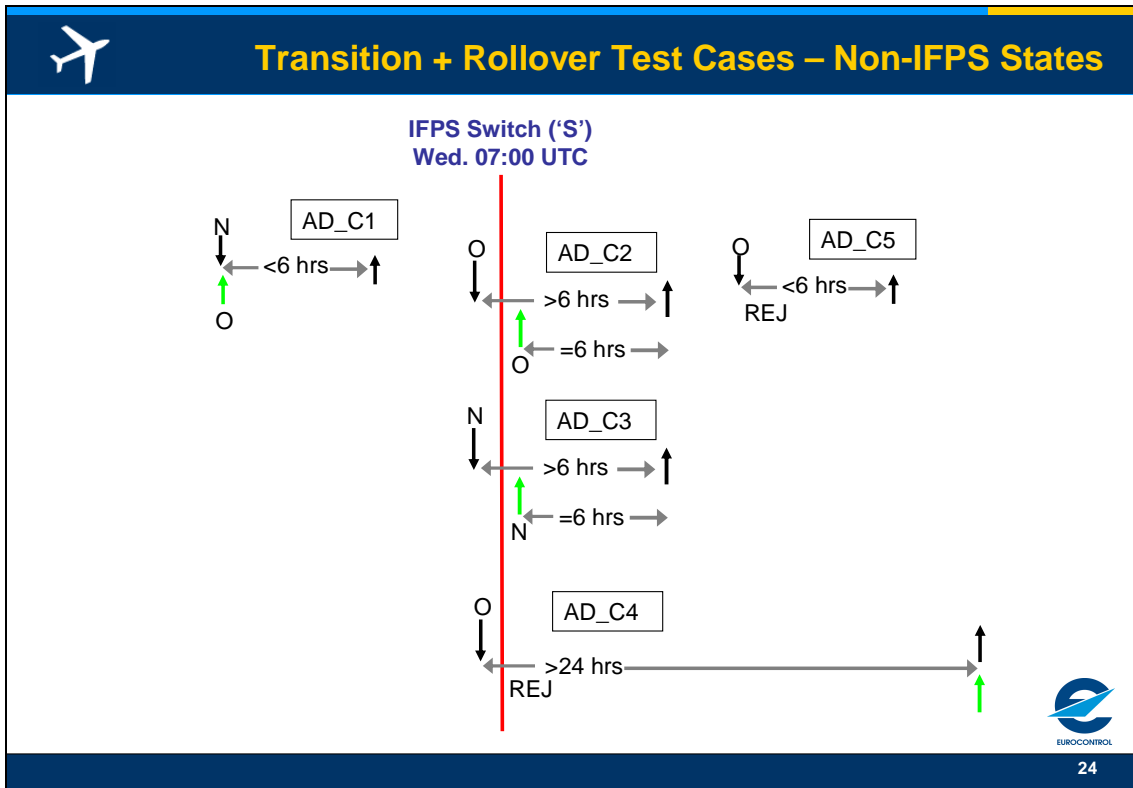


Figure 8 Transition & Roll-Over Test Cases for Non-IFPS States

5. PASSIVE TESTING

Passive testing refers to the ability of a stakeholder to continue to use the IFPS test platform outside the formal OPT test sessions.

No support however will be available in the form of manual intervention by the Test Team

5.1. Configuration

Normally the environment setup (addresses, parameters, etc.) that existed following the previous OPT session will remain and will be maintained across AIRAC cycles. This means the system will normally be in post-Nov 2012 mode i.e. IFPS acceptance of New only. Participants will therefore be able to send test 2012 format messages and receive the automated IFPS response.

It should be noted that the IFPS test system normally receives a copy of all operational messages (except during formal OPT sessions when it will be disabled). This means that, if you participated to OPT using an operational address, during Passive testing you will receive duplicate messages concerning these copied operational messages.

5.2. Participation

The IFPS test platform can be made available between OPT sessions to those having already registered and having participated to the previous OPT session.

The Test Team should be contacted 24 hrs in advance to determine whether or not the test platform is available and to ensure the correct addresses are configured in the CFMU communications system. Modification of parameter settings will only be possible if workload and test system usage for internal purposes permits.

6. CONTACTS

All testing related queries and requests :

Test Team:

E-Mail: dnm.fpl2012@eurocontrol.int

Phone: +32 2 7299785

Registration Form for 2012 Operational Evaluation (OPT)

- FLIGHT PLAN ORIGINATOR -

This form should be used by:

- Aircraft Operators;
- Aerodrome Reporting Offices (AROs);
- Flight Plan Service Providers;
- Others engaged in the creation of flight plans.

Note: One form should be returned for each unit/address wishing to participate.

Please complete using block letters and return as an e-mail attachment to:

SAT Team,
Operational Requirements & Acceptance
E-mail: dnm.fpl2012@eurocontrol.int

DO NOT USE THIS FORM IF YOU WILL PARTICIPATE AS AN ATC UNIT

A) Company Name : ICAO Designator :

B) Contact Person Name :
 Telephone :
 Fax :
 E-mail :

C) Indicate the session(s) in which you want to participate by inserting an 'X' in the appropriate space in the table below.

Test Session	Participation (Please place an 'X' if you wish to participate)
OPT1 : 30 January – 3 February 2012	
OPT2 : 20 – 24 February 2012	
OPT 3 : 07 – 11 May 2012	
OPT 4 : 11 – 15 June 2012	
OPT 5 : 03 – 07 September 2012	
OPT 6 : 24 – 28 September 2012	

Registration Form for 2012 Operational Evaluation (OPT)

- FLIGHT PLAN ORIGINATOR -

D) Indicate the address from which you will send messages to the IFPS Test system :

E) Is the address given in D) your operational address? YES / NO

Note : If YES care should be taken to ensure that the ACK, MAN, REJ messages from the IFPS test system are **NOT** used operationally.

Registration Form for 2012 Operational Evaluation (OPT)

- ATC UNIT -

This form should be used by:

ATC Units (ACC, UAC, TWR, APP, ARO) wishing to receive flight plan data.

Note: One form should be returned for each unit/address wishing to participate.

Please complete using block letters and return as an e-mail attachment to:

SAT Team,
Operational Requirements & Acceptance
E-mail: dnm.fpl2012@eurocontrol.int

DO NOT USE THIS FORM IF YOU WILL PARTICIPATE AS AN AIRCRAFT OPERATOR OR FLIGHT PLAN SERVICE PROVIDER

A) State :

B) ATS Unit:

C) Contact Person Name :

Telephone :

Fax :

E-mail :

D) Indicate the session(s) during which you wish to participate by inserting an 'X' in the appropriate space in the table below

Test Session	Participation (Please place an 'X' if you wish to participate)
OPT1 : 30 January – 3 February 2012	
OPT2 : 20 – 24 February 2012	
OPT 3 : 07 – 11 May 2012	
OPT 4 : 11 – 15 June 2012	
OPT 5 : 03 – 07 September 2012	
OPT 6 : 24 – 28 September 2012	

E) Indicate the address where flight planning messages from the IFPS Test system are requested to be received:

Registration Form for 2012 Operational Evaluation (OPT)

- ATC UNIT -

- F) If the address given in E) is a test address, indicate the operational address(es) or unit(s) it replaces or simulates for the purpose of testing:

- G) If you intend to send test messages to the IFPS test address indicate the address you will use i.e the address from which IFPS will receive these messages:

Do you wish to receive ACK, MAN, REJ messages ? Yes / No

- H) If you are an IFPS State the standard test configuration will provide you with a clean switch (no mixed reception of both Old & New formats) from Old to New format at 11:00 UTC on the Thursday of each test session.

If you wish to change this configuration please indicate when you want to allow reception of New format messages:

Day: Time (UTC):

Note: If you change the standard configuration then the test data descriptions provided in this document (EUR Test Plan) concerning 'Transition' will not be applicable.

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 4, 9 November 2011

ISSUED BY THE ICAO ASIA/PACIFIC REGIONAL OFFICE, BANGKOK

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Appendix

Appendix: Strategy for the Implementation of ICAO New Flight Plan Format and Supporting ATS Messages (APANPIRG)	A-1
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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 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 supplement and/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 equipment, 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)
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.

Indicator	Contents
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

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 in Field 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		<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	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 <ul style="list-style-type: none"> • 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
<p>All other indicators copy over directly, with additions to NAV/, COM/, and DAT/ as specified in Tables 6-1 and 6-2 above.</p> <p><i>DAT conversion should therefore occur in two steps:</i></p> <ol style="list-style-type: none"> 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. <p><i>Note; After conversion is possible that there will be duplicate entries in DAT/ and COM/.</i></p>	

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 is a 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 PAPT1 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 PAPT1 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.

If the flight is further delayed to 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 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.

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 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, adopted by APANPIRG/20, September 2010)

FPL 2012 Programme

1 Manual Programme Phases

1.1 Negotiation and Approval Phase

1.1.1 Acceptance and agreement of the changes to the Flight Plan Form by States

All State differences to be identified in the AIP

All Regional differences to be identified in the SUPPs so long as they do not conflict with the Amendment 1

1.1.2 Approval of the amendment by the ICAO Council

1.1.3 This Phase is complete (01/May/2010)

1.2 Impact Assessment and Requirements Phase

1.2.1 Awareness of impact of changes

Regional Task Force meetings

All regions have now had several Task Force meetings with others planned throughout the duration of the programme

Regional Seminars and Workshops

Many have commenced and all regions are planning future events.

All regions are now conducting advanced Seminars and workshops

ICAO HQ guidelines and amendment changes identification

1.2.2 This Phase is still ongoing in some States and was planned to complete end of Dec 2010

1.3 Solution Production Phase

1.3.1 Identify manual processes. Who uses the process? and is the process written in a document?

Source of incoming Flight Plan message

AFTN

AMHS

Telephone

Any other method of incoming Flight Plan?

Data checking of the Flight Plan

Who checks the flight plan has been filed correctly?

Correct addressing

Route Checking

Format checking

IS the flight plan rejected if incorrectly filed

If the Flight Plan is rejected how is this done?

Do you return a typed AFTN message to the originator saying FPL rejected

Do you return a typed AFTN message to the originator saying what changes are required to make the Flight Plan acceptable to your Facility

Do you telephone the originator?

To advise that the Flight Plan has been rejected

To advise which changes are required to make the flight plan acceptable to your Facility

Do you do nothing and ignore the message

Is the received Flight plan manually modified by your staff if it requires changes?

Who makes the changes to the received Flight Plan?

AFTN Operator

Air Traffic Controller

Do you inform the originator that the flight plan was modified?

Does the flight plan now have a new Number/ ident?

Is the Flight Plan information manually written on a Flight Strip?

Is the Flight plan information manually printed on a flight strip?

Does the printing machine require modification?

Does the format of the flight strip require modification?

Metrics/statistics information systems

Route Charges

1.3.2 Identify which of your processes will be affected by the Amendment 1.

From the Inventory identify those Systems and Interfaces which will require a change.

1.3.3 Solution Identification

Will this be done In-house?

Will the changes to your processes be identified by someone else?

Ensure all other systems, interfaces or operations which use Flight Plan data are identified

Local Airport

Local Airline

1.3.4 Will the changes to your processes have any safety impact on your operation

1.3.5 Do you need to conduct a safety hazard analysis of the changes

1.3.6 Solution Production (new documents produced)

Will this be done In-house?

Will the changes to your documents be provided by someone else?

1.3.7 Ensure there is sufficient time to review and proof-read the new documents

1.3.8 This Phase should complete by 31st Dec 2011

1.4 Transition Phase 1

1.4.1 ANSP Implementation

Practice your changes to the processes offline

Development system

Offline system

Training system

Identify Key Transition Entry criteria

All safety assurances available

All training complete

All documentation produced and distributed

Operational Interfaces checked with adjacent centres using FPL data of NEW, PRESENT and NEW to PRESENT

Transition rehearsals complete on Operational Systems

Produce a Transition Plan

walk-through the Plan

Produce and validate a reversion Plan

walk-through the Plan

Operational Readiness Demonstration (ORD)

to Users

to Management

to Regulators

to any other Key Stakeholders

Produce a training Plan

Conduct the training

Test the changes offline with your neighbours or other stakeholders

1.4.2 Guideline 5: use the FITS database

1.4.3 1 Jan 2012- 31 March 2012

1.5 Transition Phase 2

1.5.1 Transition into Operations

Guideline 1 : ANSPs will support PRESENT and NEW as they Transition

Guideline 2: Coordinated regional transitions. New information may not be coordinated with ANSPs who have yet to transition

Guideline 5: use the FITS database

1.5.2 01 April 2012 -30 June 2012

1.6 Transition Phase 3

1.6.1 Airspace User Implementation

Guideline 3: Airspace users can file PRESENT or NEW

Guideline 4: ANSP accepting NEW will not be able to coordinate NEW with ANSP using PRESENT

Guideline 5: use the FITS database

1.6.2 01 July 2012 - 14 Nov 2012

1.7 Closure phase

1.7.1 Only NEW Flight Plans filed

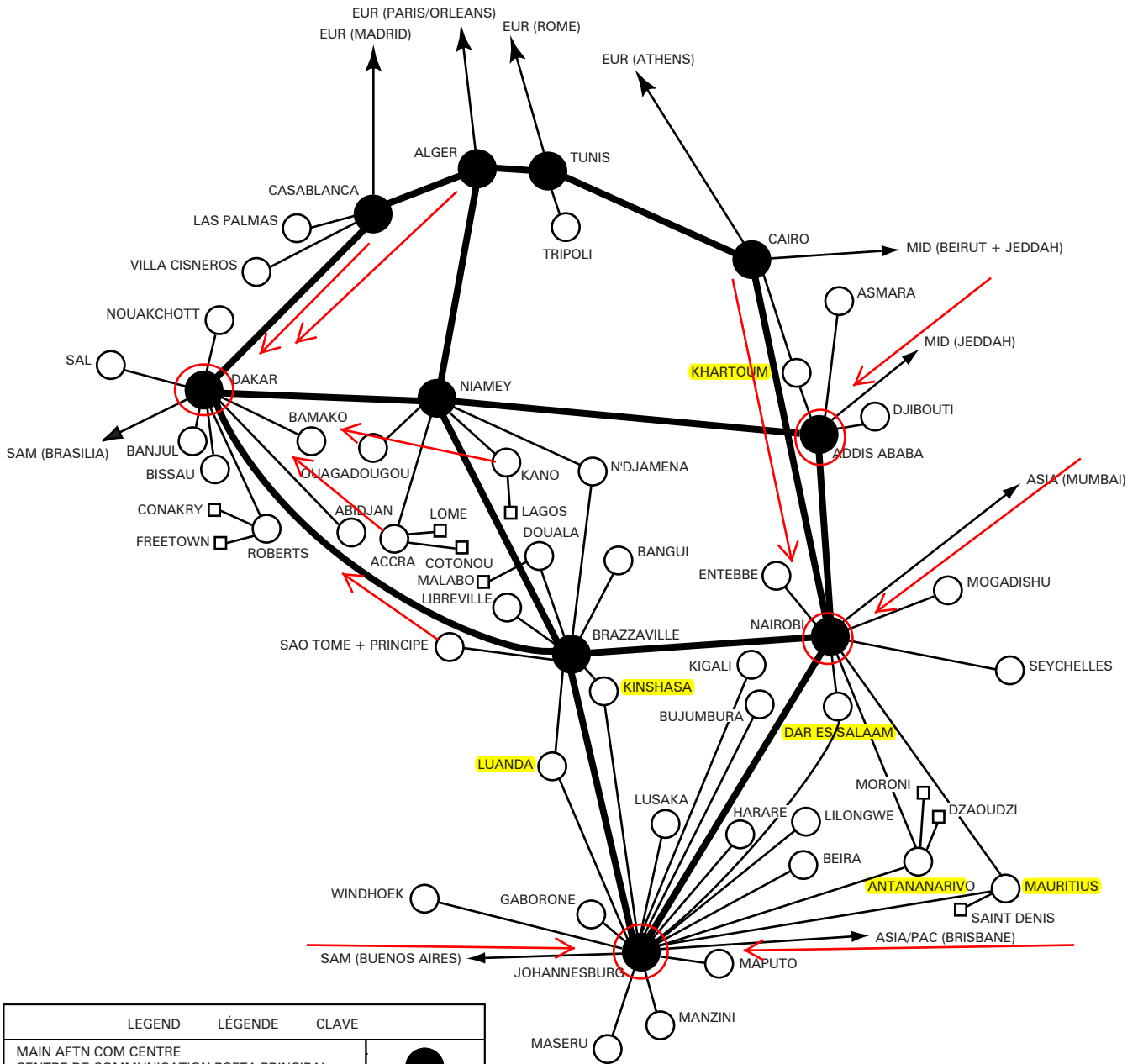
Guideline 6: PRESENT flight Plans will be rejected.

1.7.2 From 15 Nov 2012 onwards

RATIONALIZED AFTN PLAN SHOWING MAIN AFTN CENTRES AND TRIBUTARY CONNECTIONS
 PLAN DE RSFTA RATIONALISE (CENTRES RSFTA PRINCIPAUX ET LES LIAISONS TRIBUTAIRES)
 PLAN DE LA AFTN PARA LA REGION AFI (CENTROS PRINCIPALES AFTN Y ENLACES TRIBUTARIOS)

AFI FASID

CHART CNS 1A



LEGEND	LÉGENDE	CLAVE
MAIN AFTN COM CENTRE CENTRE DE COMMUNICATION RSFTA PRINCIPAL CENTRO PRINCIPAL COM AFTN		●
TRIBUTARY AFTN COM CENTRE CENTRE DE COMMUNICATION RSFTA TRIBUTAIRE CENTRO TRIBUTARIO COM AFTN		○
AFTN STATION STATION RSFTA ESTACIÓN AFTN		□
MAIN CIRCUIT CIRCUIT PRINCIPAL CIRCUITO PRINCIPAL		—
TRIBUTARY CIRCUIT CIRCUIT TRIBUTAIRE CIRCUITO TRIBUTARIO		—