EUR 2012 TEST PLAN

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

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DOCUMENT CHANGE RECORD

The following table records the history of the successive editions of the present document.

EDITION NUMBER	EDITION DATE	REASON FOR CHANGE	PAGES AFFECTED
0.1	1 June 2011	First draft	All
1.0	1 Nov 2011	Update scenarios and registration info. Include non-CFMU participation.	All
1.1	12 Dec 2011	Updated to reflect the change of timing during the OPT sessions as agreed at the Task Force meeting on 6th December	All

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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.

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.cfmu.eurocontrol.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.cfmu.eurocontrol.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.cfmu.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 system[1].

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

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 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.
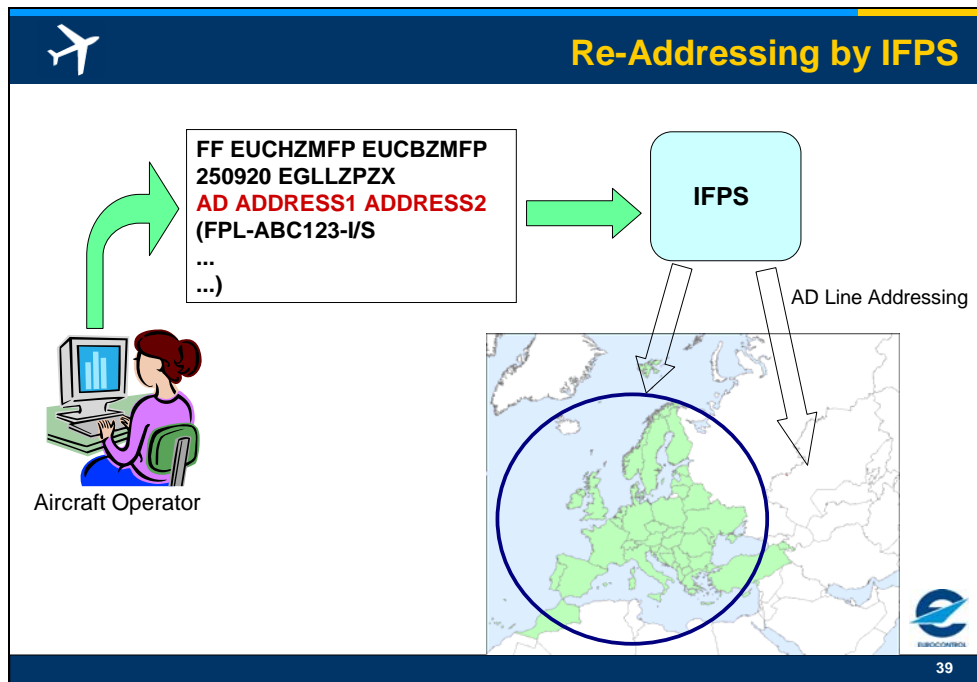

Figure 2 IFPS Re-Addressing Function (AD Line addressing)

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)
```

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**.

Standard Test Configuration – IFPS States

"00:00 UTC 15 Nov"
IFPS Switch ('S')
Wed. 07:00 UTC

"12:00 UTC 16 Nov"
2012 Ready Date ('R')
Thur. 11:00 UTC

28 hrs

IFPS acceptance of Old + New

IFPS acceptance of New only

Old only received by ATCUs → reception of IFPS translation.

New only received by ATCUs

Note: If a mixture of both Old + New is required by an ATCU then the '2012 Ready' parameter must be set to an earlier date/time for that unit. To be requested via Registration Form.

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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
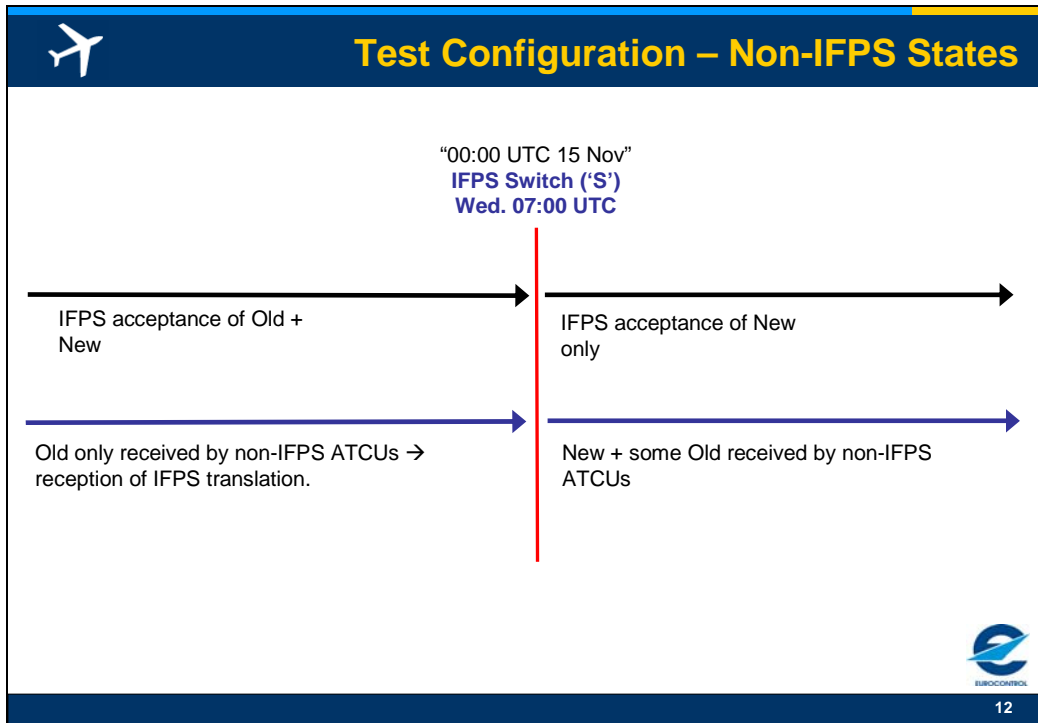
Figure 4 Test Configuration for non-IFPS States

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:

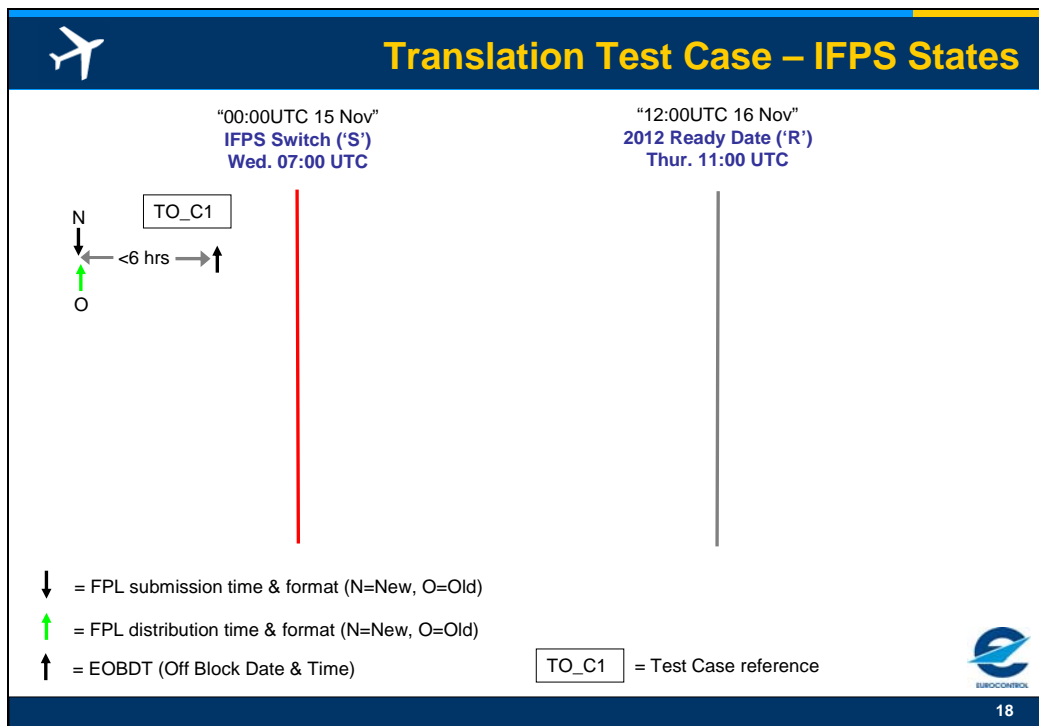| Reference	TRANSLATION_OLD (TO)
Objective	1. Demonstrate the ability of IFPS to convert New format into Old format in accordance with ICAO_2012_READY_DATE parameter setting of the addressee 2. Demonstrate the ability of an ATC unit to process Old format converted from New format.
Pre-requisites (see §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	1. Demonstrate the ability of IFPS to provide New format in accordance with ICAO_2012_READY_DATE parameter setting of the addressee. 2. Demonstrate the ability of an ATC unit to process 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 message sent to IFPS after 'R' with an entry time into the ATC units airspace (EOBDT) less than 6hr in the future 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 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
Expected Result	C1. New format messages provided by IFPS to the ATC unit C2. Old format messages provided by IFPS to the ATC unit C3. New format message provided by IFPS to the ATC unit 6 hr before EOBDT.
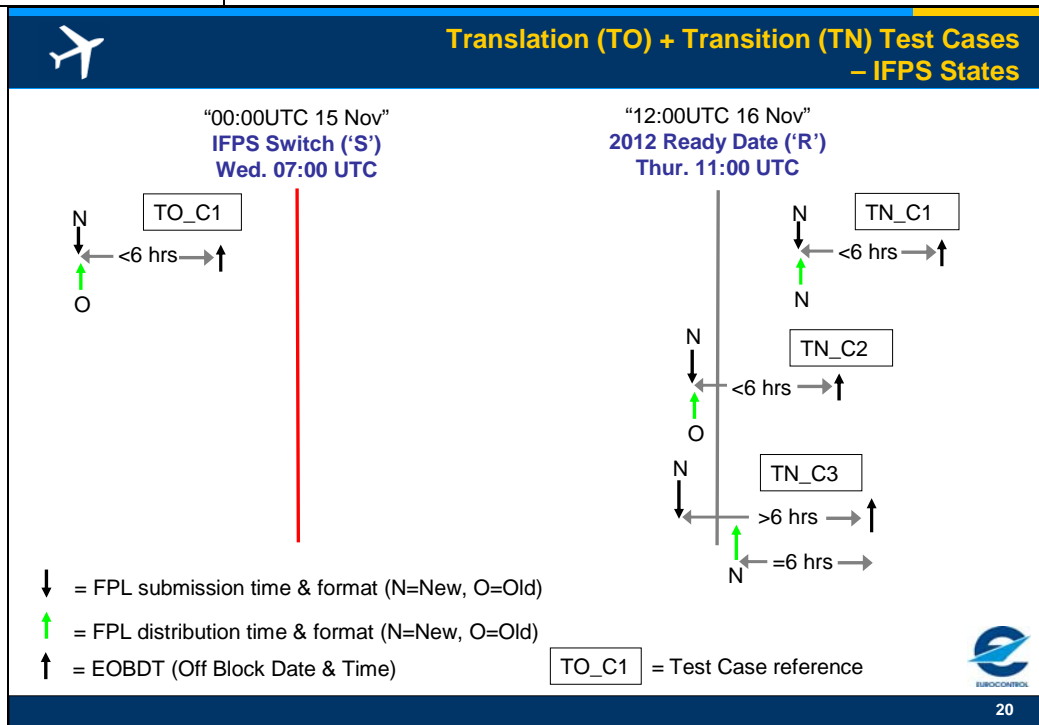
Figure 6 Translation & Transition Test Cases for IFPS States

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.

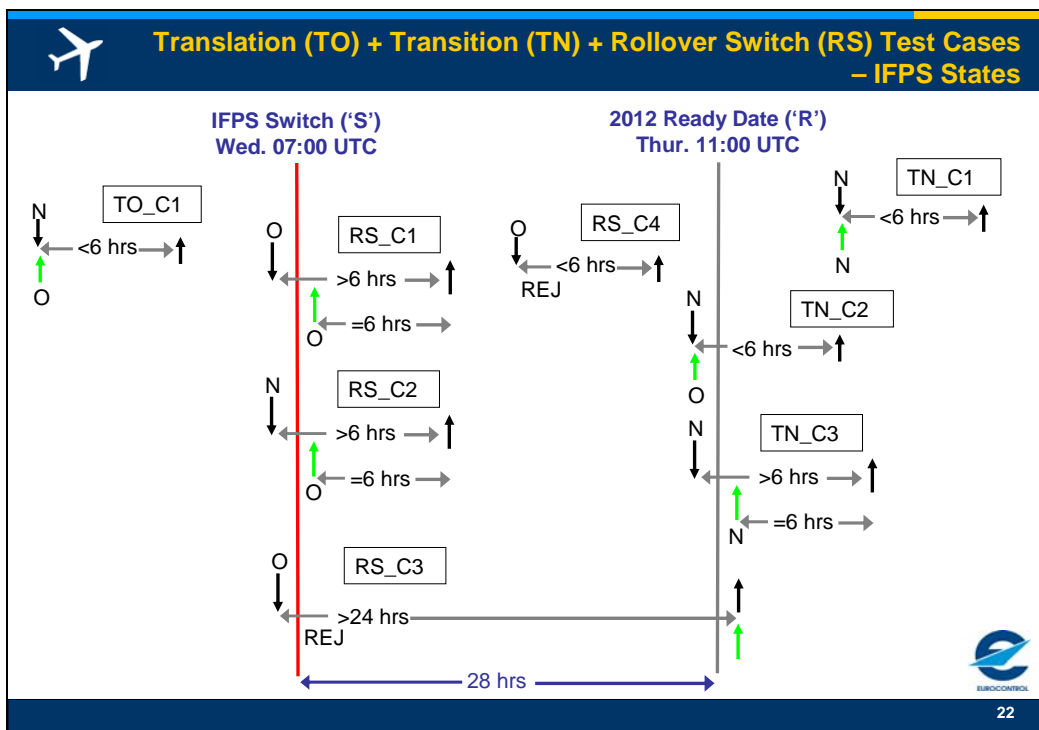| Reference	ROLLOVER_SWITCH (RS)
Objective	1. Demonstrate the ability of IFPS to switch from accepting both Old and New formats to accepting New format only. 2. Demonstrate the ability of an ATC unit to achieve a clean switch from Old to New format.
Pre-requisites (see §4.5.2)	<IFPS_SWITCH> set to 'New 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	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
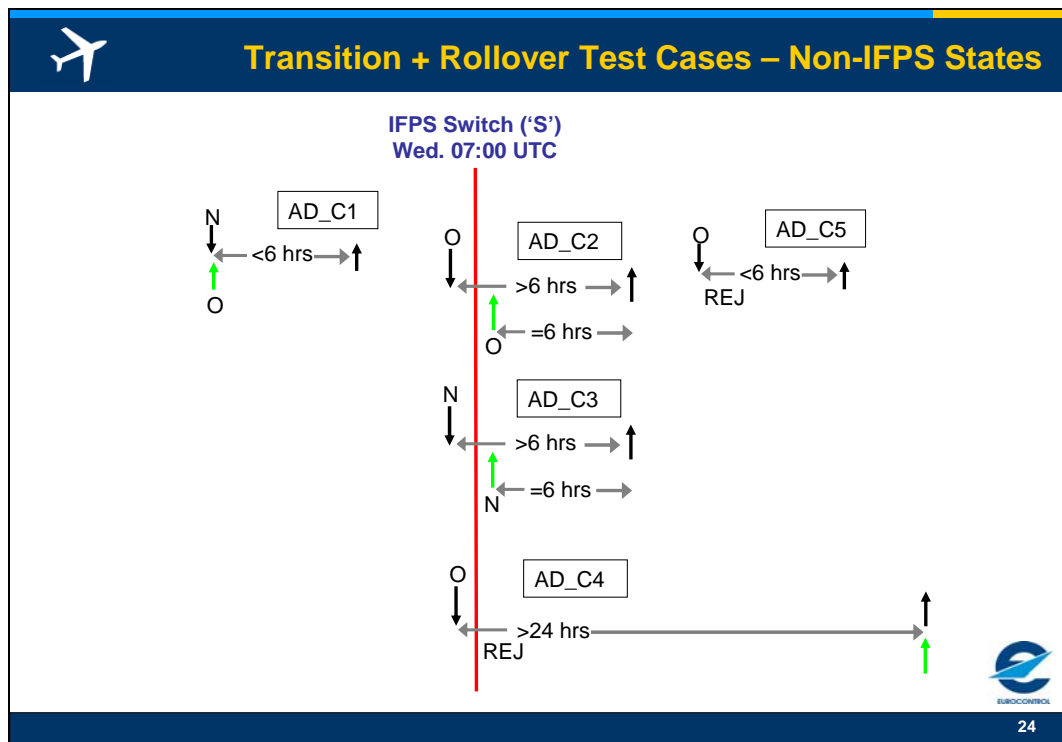
Figure 8 Transition & Roll-Over Test Cases for Non-IFPS States

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 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 <u>each</u> 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 :

<div style="border:1px solid #000; width:300px; height:60px;"></div>

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 <u>receive</u> flight plan data.

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

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

<div align="center">

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

</div>

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

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:

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.