

NM23.0 OPT INSTRUCTIONS

-NM OPT session planned 28 February 2019 – 28 March 2019

Edition Number : 1.300
Edition Validity Date : 12/02/2019

DOCUMENT CHARACTERISTICS

Document Title	Document Subtitle (optional)	Edition Number	Edition Validity Date
NM23.0 OPT INSTRUCTIONS	-	1.300	12/02/2019
Abstract			
This document provides instructions to external users for participating to the NM 23.0 OPT (Operational Testing) session.			
Author(s)			
Gerard Mulholland			
Contact Person(s)	Tel/email		Unit
Contact mailbox	nm.opt@eurocontrol.int		General Queries
Gerard Mulholland	gerard.mulholland@eurocontrol.int		SAT Manager

STATUS AND ACCESSIBILITY			
Status		Accessible via	
Working Draft	<input type="checkbox"/>	Intranet	<input type="checkbox"/>
Draft	<input type="checkbox"/>	Extranet	<input type="checkbox"/>
Proposed Issue	<input type="checkbox"/>	Internet (www.eurocontrol.int)	<input checked="" type="checkbox"/>
Released Issue	<input checked="" type="checkbox"/>		

TLP STATUS		
Intended for	Detail	
Red	<input type="checkbox"/>	Highly sensitive, non-disclosable information
Amber	<input type="checkbox"/>	Sensitive information with limited disclosure
Green	<input type="checkbox"/>	Normal business information
White	<input checked="" type="checkbox"/>	Public information

©2019 The European Organisation for the Safety of Air Navigation (EUROCONTROL). This document is published by EUROCONTROL for information purposes. It may be copied in whole or in part, provided that EUROCONTROL is mentioned as the source and the extent justified by the non-commercial use (not for sale). The information in this document may not be modified without prior written permission from EUROCONTROL.

Edition History

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

Edition History

Edition No.	Edition Validity Date	Author	Reason
1.000	18/11/2018	MUL	Initial Draft
1.100	20/12/2018	MUL	Planning update and scope added
1.200	07/02/2019	MUL	OSM content added
1.300	12/02/2019	PUI	Update to FB1000 scenario

Table of Contents

1 INTRODUCTION 5

2 OBJECTIVES..... 6

2.1 GENERAL OBJECTIVES6

2.2 MAIN FUNCTIONAL OBJECTIVES6

3 NEW FUNCTIONALITIES..... 7

3.2 FUNCTIONAL BLOCKS.....7

3.3 TESTING OF THE CHMI.....17

3.4 TESTING OF THE NOP PORTAL20

3.5 TESTING OF THE NM B2B SERVICES.....20

3.6 TP1 ACCESS DURING EXTERNAL OPT (FB1000)21

3.6.1 GENERAL21

3.6.2 NOP PORTAL21

3.6.3 CHMI.....21

3.6.3.1 NM MANAGED PC21

3.6.3.2 NON NM-MANAGED PC21

3.6.4 B2B.....21

4 HOW TO PARTICIPATE..... 23

4.1 MESSAGES EXCHANGE23

4.2 TEST MESSAGE EXCHANGE ON OPT.....23

5 PARTICIPANT CONFIGURATION & SETUP 25

5.2 PARTICIPANT ADDRESS DATA25

5.3 OUTSIDE IFPS AREA.....25

6 OPERATIONAL TESTING (OPT) 26

6.2 MESSAGES STORED WITHIN THE TEST PLATFORM26

6.3 NON-EUR PARTICIPATION.....26

6.4 TEST FLIGHT PLANS IDENTIFICATION.....28

6.5 TEST PURPOSE INDICATION.....28

6.6 MANUAL MESSAGE PROCESSING28

6.7 IFPS OUTPUT.....29

6.8 SUPPORT DURING OPT SESSIONS29

6.9 CONTACTS DURING THE OPT29

6.10 IMPORTANT NOTIFICATIONS RELATED TO NM 23.0.....29

7 DOCUMENTATION..... 31

8 SUGGESTED SCENARIOS..... 32

8.1 FB917: DCB MEASURE PROPOSAL VIA B2B.....32

8.2 FB891: API IMPROVEMENTS.....33

8.3 FB943: AIRSPACE34

8.4 FB971: NM AIRSPACE DATA MODEL EVOLUTION.....35

8.5 FB972 (ASM - ADVANCED FUA PROCESS IMPROVEMENT)36

8.6 FB973: PERFORMANCE WORK PROGRAMME.....37

8.7 FB980: PREDICTABILITY: YO-YO FLIGHT PLANS IDENTIFICATION38

8.8 FB977: REROUTING EVOLUTIONS.....39

8.9 FB999 - FLIGHT PLANNING DOMAIN IMPROVEMENTS.....40

8.10 FB1000: AIRSPACE DATA DOMAIN IMPROVEMENTS41

8.11	FB1001: ATFCM DOMAIN IMPROVEMENTS	41
8.12	FB1012: FF-ICE FILING FUNCTION - FILE EFPL.....	42
8.13	FB1019: E-HELPDESK IMPROVEMENTS	44
9	REGISTRATION REQUEST (OPT)	46

1 Introduction

- (1) This Test Plan defines the purpose, scope, procedures and schedule of activities for the Operational Testing (OPT) of new software release of NM 23.0.
- (2) The intended audience of this Test Plan is all EUR region States, Airports, Aircraft Operators and all other ANSPs, Regions and Organisations.
- (3) The testing activities described in this document are intended to address the software changes introduced within the NM 23.0 release.
- (4) This document describes only the testing activities involving external participation where stakeholders are encouraged to participate. It does not include the various NM internal testing activities i.e. Acceptance Testing, Regression Testing and Integration Testing.
- (5) The Operational Testing described in this document will permit participants to evaluate the impact of the modifications on their procedures and systems.
- (6) The content for NM 23.0 can be found in the NM Release notes which are published on the EUROCONTROL website:
<https://www.eurocontrol.int/sites/default/files/content/documents/nm/network-operations/release-deployment/nm-release-notes-next.pdf>
- (7) The presentation to Externals of NM 23.0 (slides and recording) will be available at:
http://www.eurocontrol.int/lists/publications/network-operations-library?title=&field_term_publication_type_tid=252&year%5bvalue%5d%5byear
- (8) OPT session will take place from the 28/02/2019 08:00 UTC to the 28/03/2019 15:00 UTC.
- (9) The platform will be available 7/7 but assistance only during week days.

2 Objectives

2.1 General Objectives

- (1) The overall objectives of NM 23.0 OPT 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 NM staff with the new functionality.*

2.2 Main Functional Objectives

- (1) Demonstrate the ability of IFPS to correctly validate messages against the new NM software updates.
- (2) Demonstrate the ability of flight plan originators to create / validate flight plan and associated messages.
- (3) Demonstrate the ability of ATC units to accept messages received from NM 23.0 software.

3 New functionalities

- (1) This section lists new functionalities included in the NM 23.0 release for NM Systems that may be of interest to external users where they may feel the need to perform validation. For full scope of all functional requirements for each item impacting Externals, please consult the NM Release Notes.
- (2) Tests of these functionalities will be executed on the standalone SAT (System Acceptance Testing) test platform. They will not be executed on the NM operational platform.

3.2 Functional Blocks

3.2.1 FB917: DCB Measure proposal via B2B

- (1) The Operational objective of this functional block is to improve the coordination between NMOC and FMP by supporting via B2B actions that are today coordinated manually. It also consists in supporting local coordination between AO and FMPs on specific STAM rerouting measure.
- (2) **CR_044626: New B2B service - flight based**
This CR contains the creation of new service available in B2B to FMPs to propose to NM to exclude flights from an existing regulation and to propose to NM to force a flight in a regulation.
- (3) **CR_044628: M-CDM fine tuning for rerouting STAM**
This CR will support FMP-AO coordination on proposed STAM: it will align the M-CDM mechanism to a simplified STAM workflow.
- (4) If externals decide to use the functionalities, they will need to modify their systems and possibly their HMIs. As the services support the coordination in existing procedures between FMP and NMOC, there is no need to change procedures with NMOC. There is a possible impact on FMP internal procedures.
- (5) No impact if not used

3.2.2 FB891: API improvements

Enhancement of arrival planning processes

FB891 is part of a programme of small incremental improvements including NM B2B related services.

CR_044609: Extends the flight arrival information included into NM B2B services

NM will provide additional information via NM B2B webservice, in particular:

- The minimum/maximum acceptable TTA (Target Time of Arrival).
- The currently selected STAR (to know the stack where the flight is going to).
- The Estimated Time Over the metering fix (to initialize the arrival sequence).

CR_044640: Improves the selection of the TTO fix included in SAM / SRM messages

NM will remove terminal and heliports from SAM/SRM messages.

CR_044611: Improved Cherry pick feature:

- Extends the fields available to the network cherry pick measure proposal requests

NM will provide the optional Regulation Rate and Update Capacity fields via NM B2B webservices.

Improves the treatment of arrival planning information in a network cherry pick measure.

FB891 will have no impact to the general population (those not participating NM Arrival Planning via B2B).

13. Impact to clients' systems

FB891 will have an impact on users that are specifically developing their end system towards extended arrival management or AOP-NOP integration.

- The users may now choose to include the new arrival planning information fields into their local algorithms.
- Network Cherry Pick measure via NM B2B may now be proposed with a defined rate that can update the TV capacity monitoring value. Network Cherry Pick measure slot times no longer artificially blocked by exempted flights when applying Arrival Planning Information.

FB891 will have an impact on clients' systems that were previously unable to process SAM/SRM messages containing PTID with numeric characters (these points will no longer be presented in SAM/SRM messages)

3.2.3 FB980: Predictability: Yo-Yo flight plans identification

- (1) NM is committed to support reduction of flight plans with Yo-Yo profile.
- (2) A Yo-Yo flight can be defined as following a vertical profile that is planned to (after reaching initial top of climb and before reaching final top of descent during the cruising phase) descent certain amount of FLs and then climb certain amount of FLs is Yo-yo flight.
- (3) Purpose of this FB is to carry out predictability enhancements defined in Flight Plan Predictability Action Plan approved by NDOP, with goal to increase level of predictability in tactical operations.
- (4) NM System will detect filed flight plans containing Yo-Yo profile. Information on flight plans with Yo-Yo profile will be available to AOs concerned and FMPs through CHMI/NOP Portal flight list.
- (5) For additional information on FB980, please contact nm.flightefficiencysupport@ops.cfm.eurocontrol.int
- (6) NM system will be used for live YoYo detection based on predefined detector parameters. Flight plans and change messages submitted will be checked on YoYo presence. This kind of detection, upon FPL or CHG message submission, will enable enough time for reaction on YoYo profiles.
- (7) If YoYo is detected, information will be distributed through CHMI/NOP flight list "YY" column to AOs and FMPs concerned.
- (8) When detected, this information will be used by AOs and FMP in CDM process in order to agree on actions:

to refile flight plan without YoYo profile
or to adhere to the flight plan with YoYo profile

Service reference:

[B9-2 Network Operations Portal](#)

[B9-1 Collaboration Human Machine Interface](#)

3.2.4 FB971: NM airspace data model evolution

- (1) NM Airspace model evolution in preparation of downloading airspace data from EAD

- (2) **CR_039807: Valid ICAO SID/STAR Identifiers cannot be recognized as such in NM CACD**

It will no more be possible for NM to enter new TP (Terminal Procedure) synonyms having an ICAO non-compliant identifiers (e.g. AMVAR11) into CACD.

TP Identifier according to ICAO is AAA(AA) + N + A or AAA(AA) + N (A = letter, N = figure)

TPs are published with a name: beacon + number only. According to ICAO Annex 11 appendix 3 (SERA too), the route indicator (final letter) is only mentioned where required.

ANSPs having ICAO non-compliant TP identifiers agreed at ODSG and RND SG to adapt their publications. As soon as the TP identifiers are ICAO compliant, NM will update TP identifiers to ICAO-compliant format and TP synonyms will gradually disappear

- (3) **CR_042415: Review of NM Point models towards AIXM 5.1 – part 3**

NM will align the CACD data model towards AIXM, more particularly the Collocated points: VOR and DME are 2 separate physical devices, which usually have slightly different geographical locations, but they can be a part of a “merged” NAVAID of type VOR/DME.

CACD supports collocated NAVAIDs, meaning that VOR/DME and its parts, VOR and DME, may have slightly different geo-positions.

Before the change, the coordinates of the reference points (RFP) were calculated using the distance and radial measurements from the VOR/DME position.

After the change, the distance will be measured from the precise DME location, whilst the radial will be taken from the precise VOR location.

- (4) **CR_043842: Timesheet to allow sunsets and sunrises**

In CACD, timesheets associated to AD will allow definition of the time intervals based on sunsets (SS) and sunrises (SR) plus/minus a number of minutes, as defined in AIXM model, for example from SS+10 to SR-20.

The exact time values of Sun Set and Sun Rise will be calculated by CACD, using the coordinates of the Aerodrome Reference Point (ARP) and the

Aerodrome elevation. Both relative time (eg S S+10) and explicit values will be propagated to the client systems.

Impact for external users:

CR_039807: Valid ICAO SID/STAR Identifiers cannot be recognized as such in NM CACD

I0. No impact.

CR_042415: Review of NM Point models towards AIXM 5.1 – part 3

I2. Impact on Human-Machine interface.

CR_043842: Timesheet to allow sunsets and sunrises

I1. Impact on procedures.

I2. Impact on Human-Machine interface.

I3. Impact on clients' systems.

3.2.5 FB972 (ASM - Advanced FUA process improvement)

The objective is to provide more flexible solutions to manage airspace structure data via AUP/UUP

FB972 will provide the following AFUA process improvements:

CR_036912: CDR expansion to consider RELATED/CROSSING/OFFLOAD routes vertical limits

CDR expansion will trigger NEARBY routes as they are specified, and not limit the update to the vertical limits of the allocated RSA.

CR_042424: Restriction Grouping

The fine tuning of the selection of traffic to be validated by FUA Restrictions requires a combination of multiple Restrictions

This improvement is a pre-requisite to manage complex FUA restrictions.

CR_042633: Complex FUA restrictions

Complex FUA restrictions will be composed by basic restrictions identified by sub-codes. The single complex FUA restriction and all sub-restrictions associated will be activated simultaneously whatever restriction and/or sub-restriction selected.

CR_041209: FUA KPIs Updated Reports

FUA KPIs Updated Reports will improve data visualization and reporting capabilities for the measurement of FUA application achievements linked to performance monitoring obligations

CIAM: Possibility to specify if expansion of allocated airspaces should go below and/or above the allocation

CIAM: Possibility to select/deselect all sub-restrictions belonging to a complex FUA restriction clicking on any of them

CIAM: AMCs will be able to create a UUP with a different start time than the start time for the next EUUP.

ASM local tools: adapt local tools to support management of complex FUA restrictions (sub-codes only), vertical expansion of CDRs, multiple UUPs creation
NM B2B: support the reception of FUA restrictions (only sub-codes), vertical expansion of CDRs, multiple UUPs creation generated by local ASM tools, including required error/warning messages.

NM B2B: support the transmission of FUA restrictions (only sub-codes), vertical expansion of CDRs, multiple UUPs to AOs/CFSPs via eAMI message.

NM B2B: Based on the validation of Complex FUA restriction, an error message will be notified to local ASM tools if not all sub-codes are activated simultaneously.FB891 API (Arrival Planning Information) Improvements

3.2.6 FB973: Performance Work Programme

- (1) Objective of the FB is to correct the ATFM delay calculation where the current delay calculation method doesn't respect the philosophy adopted by the NDOP delay calculation Task Force and agreed by NDOP/NMB.
- (2) The en-route ATFM delay is the delay calculated by NM as defined in Commission Regulation (EU) No 255/2010 of 25 March 2010.
It is expressed as the difference between "the take-off time requested by the aircraft operator" and the calculated take-off time allocated by ETFMS (CTOT).
- (3) The NDOP Delay Calculation Task Force identified situations where updates to "the take-off time requested by the aircraft operator" are not considered in the (current) delay calculation.
- (4) CR_044410: ATFM delay resulting from a TTOTs after the STW (due to OBT update) shall be re-calculated taking into account the latest OBT update from the T-DPIs. (Plus other ATFM delay calculation improvements that are needed).
- (5) NM shall monitor the impact of the improvement on the ATFM delay and consequently on KPIs and statistics.
- (6) New calculation of ATFM delay will be reflected in the various reports produced by NM and available in NMIR. Users using them may have to update their procedures or systems to take care of this change.
- (7) Impact for external user:
 - Impact on procedures.
 - Impact on clients' systems.

3.2.7 FB977: Rerouting Evolutions

In NM release 23.0, the NM will focus on aligning the interfaces of AOWIR and IFPUV and enhance the interface of both to ease the use of these rerouting tools.
CR_044707: Permit identification of the flow impact (CTOT) before filing the flight plan (IFPUV).

The IFPUV system will provide the CTOT to the AO before filing the flight plan.

CR_044706: Avoid ATFM measures function in AOWIR in IFPUV proposed routes. Currently aircraft operators have to follow a cumbersome procedure when they need to avoid ATFM measures (e.g. regulations or scenarios). The new function improves usability and simplifies the steps. It allows aircraft operators to avoid regulated areas with the objective to decrease delay.

CR_043722: Present last validity value for route proposals in IFPS and IFPUV.

By displaying the last validity in the NOP/CHMI interfaces, NM will inform aircraft operators with the maximum time to which the OBT of the flight may be shifted without triggering IFPS errors

CR_044708: AOWIR overload is no longer an error.

NM systems will no more forbid AOs to file the flight plans through the overloaded areas

CR_044707: Permit identification of the flow impact (CTOT) before filing the flight plan (IFPUV).

The change enhances the HMI in both IFPUV / NOP and IFPUV / CHMI. A new column on the route list will present the expected CTOT of the proposed route. It is important to remark that the CTOT presented does not trigger a booking of the slot. Therefore it represents an approximate value.

CR_044706: Avoid measure function in CHMI / NOP IFPUV and CHMI/NOP AOWIR.

The NM systems will provide a list of measures affecting the initial route. The aircraft operator will be able to select the measure from the list. The reference location of this measure will populate the "Avoid airspace"/"Avoid point" field so the NM systems produce only the routes avoiding the specified airspace/point.

CR_043722: Give last validity for route proposals in IFPS and IFPUV.

A new column "Last validity" will contain two potential values: "+" if the route is valid for more than 4 hours and "<" if the validity period of the route in IFPS is less than 4 hours.

CR_044708: AOWIR overload is no longer an error.

The alternate routes generated in the NOP Portal / CHMI AOWIR and the IFPUV will be presented even if traffic volumes along the routes are overloaded. Note that overloaded traffic volumes may eventually become regulated.

Impact on Human-Machine interface.

3.2.8 FB1012: FF-ICE filing Function - file eFPL

- (1) FF-ICE/1 enhances the flight plan data exchanges facilitating a CDM process between AOs/CFSPs, the Network Manager and ANSPs in the pre-departure phase of the flight. The aim is to improve the consistency and the accuracy of 4D flight trajectories maintained by the different stakeholders.
- (2) The FB builds on existing NM systems functionality and evolves them towards the latest ICAO flight plan provisions (FF-ICE flight plan) and the associated latest flight information exchange format version (FIXM v4.1.0) in order to provide filing of FF-ICE flight plans in FIXM format.
- (3) External users choosing to use the FIXM services will have to adapt their systems to provide FPLs in FIXM format.
- (4) Impact for external user:

Impact on procedures.

Impact on clients' systems.

3.2.9 FB943: Airspace

- (1) Objective of the FB is to replace the CIREN application (CHMI for ENV Coordinators)
- (2) This FB will provide a replacement for the CIREN application with a browser-based functionally equivalent and a new map component.
- (3) This FB provides a new application (named "Airspace") functionally equivalent to CIREN but with a new User Interface (UI), more modern and more user friendly. This application does not require client side installation, just a browser access via internet or PENS.

Initially all current CIREN users are invited to use the new Airspace application while the CHMI CIREN will be available until NM23.5. After this period all CIREN users shall use operationally the new application.

Other users who are accessing Airspace read-only data such as CIFLO or CIAO users will have access as from NM23.5 to Airspace data through an embedded instance of the new Airspace application into the CIFLO, CITO and CIAO.

CIREN will be phased out in NM24.0.

Note: CIFLO, CITO and CIAO users will continue to use their application and the embedding of the FB943 into CIFLO, CITO, and CIAO is expected from NM23.5 onwards.

(4) Service reference:

[B1-2 Airspace data](#)

(5) Impact for external users:

I2. Impact on Human-Machine interface.

3.2.10 FB999 - Flight Planning Domain Improvements

Change IFPS behaviour as requested by the EUROCONTROL NM Stakeholders

NM have received complaints that the occurrences of FPLs containing IFPSROUTEMOD is too high, the following has been agreed by the ODSG.

The only time that the IFP/IFPSROUTEMOD indicator is included in a FPL:

1. IFPS manually changes the route when FPL contains IFPSRA.
2. IFPS manually changes the route when FPL contains a special status indicator (e.g. MEDEVAC) and no contact possible with the flight plan originator

The ANSPs that receive FPLs that contain the IFP/IFPSROUTEMOD indicator should understand the new rules for the inclusion in IFPS.

Impact : none

3.2.11 FB1000: Airspace Data Domain improvements

- (1) Early access to ENV Test Airspace data and PRE VAL Airspace Data
- (2) In NM22.5 IFPUV doesn't allow to receive FPLs more than 120 hours in advance. This prevents from processing FPLs against Test tape (AIRAC + 1) Data.

Users (AOs, ANSPs and CFSPs in particular) would like to check FPLs earlier (more than 5 days before the AIRAC)

To allow this, NM23.0 will provide a PREVAL_IFPUV access to selected users to:

ENV Test Airspace data AIRAC +1 and AIRAC + 2 (when available)

PRE VAL Airspace Data (when available)

Access will be provided via IFPUV on the CHMI or the NOP Portal. Access via NM B2B service is under assessment.

(3) Impact for external users:

I1. Impact on procedures.

I2. Impact on Human-Machine interface.

I3. Impact on clients' systems.

3.2.12 FB1001: ATFCM Domain improvements

(1) Improvement of existing ATFCM services.

(2) CR_044350: FAM reduction

The Flight Activation Monitoring mechanism parameter for suspension of:

- Flights departing from FAM-enabled areas,
 - Or flights departing from non FAM-enabled areas and less than three hours of Estimated Elapsed Time (EET) with a destination/crossing a FAM-enabled areas,
- will be reduced by 5 minutes; from 25 minutes to 20 minutes.

The stepped reduction of the parameter was decided at ODSG/41 to support flight planning and predictability in the European ATM Network.

The change is aligned with ICAO: any changes to the EOBT of more than 15 minutes for any IFR flight within the IFPZ shall be communicated to the IFPS. (ICAO Doc 7030, 2.3.2.1).

This implementation is the second step of the parameter reduction. Further information can be found at:

<http://www.eurocontrol.int/sites/default/files/publication/files/fam-reduction-leaflet-2018.pdf>

(3) Possible impact on flights departing from FAM-enabled areas or of flights departing from non-FAM-enabled areas and less than three hours of Estimated Elapsed Time (EET) with a destination/crossing a FAM-enabled areas that are not reported as airborne. Such flights will be shifted in their CTFM by 5-minute steps three times (currently four) and will be eventually suspended after another 5 minutes if not reported as airborne (FSA, CPR message received by the NM). FMPs, airports and AOs should be advised of the change and ensure that adequate operational actions are taken.

(4) Impact for external users:

I1. Impact on procedures.

I3. Impact on clients' systems.

3.2.13 FB1019: e-HelpDesk improvements

Improvements on the e-HelpDesk services.

The network situation as experienced during summer 2018 will repeat or even deteriorate in the coming summer seasons. The NM is now investing in changes to enhance the e-HelpDesk service for Summer 2019. The implemented changes will help to keep high quality levels of the service, prioritize the most urgent network requests by keeping acceptable levels of workload of the different actors involved. The changes included in release NM23.0 initiates transformation that will permit a focus service.

CR_045011: E-helpdesk access for TWR and FMP.

By providing the e-HelpDesk service to the FMP and TWR users, the new users will
The network situation as experienced during summer 2018 will repeat or even deteriorate in the coming summer seasons. The NM is now investing in changes to enhance the e-HelpDesk service for Summer 2019. The implemented changes will help to keep high quality levels of the service, prioritize the most urgent network requests by keeping acceptable levels of workload of the different actors involved. The changes included in release NM23.0 initiates transformation that will permit a focus service.

CR_045011: E-helpdesk access for TWR and FMP.

By providing the e-HelpDesk service to the FMP and TWR users, the new users will have the possibility to use an electronic exchange to accommodate their requests. The electronic exchange permits NMOC to visualize and sort the most urgent requests. TWR and FMP will have the possibility to request Slot extension, Slot improvement and Exclusion from regulation. NM will provide the necessary training, documentation and practical guidelines for the new users.

CR_045012: Prioritization of FMP / TWR / AO requests.

By extending the access to new users, it is necessary to associate a business prioritisation logic. This logic permits to respond based on the urgency of the requests. The prioritization rules consider amongst others, the type of request (e.g. extension versus improvement), the proximity to the CTOT to the time stamp of the requests and the originator of the request.

CR_045014: Extend Duplicate request rule.

NM noted a large quantity of multiple requests for the same flight. From the release NM 23.0, NM will strengthen this rule to ensure that the relevant request is replied, CDM improved and avoid unnecessary workload on requester and NMOC side.

CR_045015: Automatic processing of requests before SIT1.

The change supports the automatic processing of requests for slot improvement and extension that are sent before the slot is allocated at SIT1, EOBT-2 hours. The processing of requests received before allocation, often delays or prevents the processing of more urgent requests. Acting on pre-allocated flights would prevent NMOC to act on urgent requests and would have a potential negative effect on delay reduction.

CR_044319: Automatic processing of requests based on average delay.

By implementing this change, NM will enable the possibility to automatically process the requests based on the local average delay of a regulation. The selection criteria for

automatic processing will be based on the delay of a flight versus the local average delay of surrounding flights in the most penalising regulation. NMOC staff will have the possibility to fine tune the local average delay by specifying a weighting factor.

Impact description

CR_045011: E-helpdesk access for TWR and FMP.

By enabling the e-HelpDesk services to TWR / FMP, these external users will be able to access NOP Portal via token, to request Slot extension, Slot improvement and Exclusion of flight from regulation. Adequate web training, documentation and information campaign will be done as part of release.

CR_045012: Prioritization of FMP / TWR / AO requests.

An external request can be queued based on the defined priorities. If AO and TWR are making the same type of request for the same flight, the TWR request will overwrite the request from AO. Priority of the users is defined on the following order: TWR, FMP, AO.

CR_045014: Extend Duplicate request rule.

External user is not supposed to send multiple e-HelpDesk requests of a same type for the same flight. New system behaviour will automatically reject that kind of requests.

CR_045015: Automatic processing of requests before SIT1.

Requests for slot improvement/extension coming before SIT1 (2h before off-block time) will be automatically processed, NM will provide appropriate response message.

CR_044319: Automatic processing of requests based on average delay.

If the request is automatically processed, external users will be provided with appropriate message including information about local average delay and explanation for performing the automatic processing of the request. The local average value will be equally presented in a new column in the e-helpdesk list

I1. **Impact on procedures.**

I2. Impact on Human-Machine interface.

I3. Impact on clients' systems.

3.2.14 CR_043914: TACT activation versus Expecting FSA & AOWIR services

CR_043914 brings an improvement to eliminate one of the statuses present in ETFMS, the TACT Activation triggered by T-DPI-s messages. The T-DPI-s marks the departure sequencing at the local CDM platform.

The TACT Activation status in ETFMS is linked to the creation of the CTFM.

Normally, this is expected to happen when the flight is off-blocks, but no confirmation from ATC (e.g. FSA, DEP, CPR) has been received yet. The passing to TACT Activation status forbids the use of AOWIR by the AO and the ETFMS counts the flight as expected to receive the first FSA in the next few minutes.

However, when a valid T-DPI-s is processed by ETFMS, an early TACT Activation may occur. This blocks the AOWIR functionality for AOs from that moment, which may take place up to 40 minutes before TOBT. Moreover, in order to prevent counting such flights as about to receive a FSA, currently, A-CDM departures are removed from the expecting FSA count, which is displayed in CHMI, NOP Portal and via B2B.

T-DPI-s messages will not trigger the early TACT Activation in ETFMS. This will result in:

- AOWIR will remain available after sequencing; providing AOs with an extended use of the feature for A-CDM departures.
- The expecting FSA count will re-include departures from A-CDM, providing FMPs with accurate counts on flights that are expected to be airborne shortly.

TACT Activation for A-CDM departures will take place later than today, at reception of A-DPI. This status is reflected in the CHMI and NOP Portal with 't' in the status column/field 'Type of Flight Data'; 'TA' via B2B and the generation of EFD and FUM messages with status 'TA' and 'CDMSTATUS PRESEQUENCED'.

3.3 Testing of the CHMI

3.3.1 For NM-managed PC

- (1) No registration is required.
- (1) The CHMI will be pushed on the PC between 26/02/2019 & 05/3/2019 22h00 UTC (standard maintenance window).
- (2) As from the 28/02/2019 (10:00 UTC - start of the OPT session), to use the CHMI-OPT, please navigate through the Windows Start menu and launch: Start->All Programs->NM Applications->OPSTEST-CHMI 15.0.4 via Extranet
- (3) Read carefully the warning message ("You have selected the OPSTEST SATI shortcut [...]") and type "Y" and ENTER-key if you agree.
- (4) A second warning pop-up message will be displayed ("This CHMI version is for TEST and TRAINING purposes [...]"). Click "Continue" if you agree.



Figure 1: Second warning message

- (5) Log-in with your userID and token.
- (6) After a successful authentication, you will be connected to the OPT environment.

3.3.2 For non NM-managed PC

- (7) No registration is required.
- (8) You need to install the CHMI first; installation documentation will be available as from the 28/02/2019:
http://www.nm.eurocontrol.int/chmi_appsoft/CHMI/15.0.4/chmiaoinst15.0.4.pdf
- (9) Download and installation can be done as from the as from the 27/02/2019 at 10:00 UTC but access to the CHMI-OPT will be available only as from the 28/02/2019 (10:00 UTC - start of the OPT session).
- (10) As from the 27/0/2019 (10:00 UTC), access to the CHMI-OPT will be done via:
 - a) *For Windows 10 64 bits* `c:\Program Files (x86)\Eurocontrol\NM Applications\15.0.4\bin\chmi\run_CHMI_15.0.4_via_test1sc.bat`
 - b) *For Windows 10 32 bits*: `c:\Program Files\Eurocontrol\NM Applications\15.0.4\bin\chmi\run_CHMI_15.0.4_via_test1sc.bat`
- (11) Read carefully the warning message (“You have selected the OPSTEST SATI shortcut [...]”) and type “Y” and ENTER-key if you agree.
- (12) Log-in with your userID and token.
- (13) After a successful authentication, you will be connected to the OPT environment.

3.3.3 Check of the environment (OPT/OPS) used by the CHMI

- (14) To ensure that you are connected to the CHMI-OPT environment, check the “SAT/I” reference in the ATFCM Information window and in the CHMI title bar.

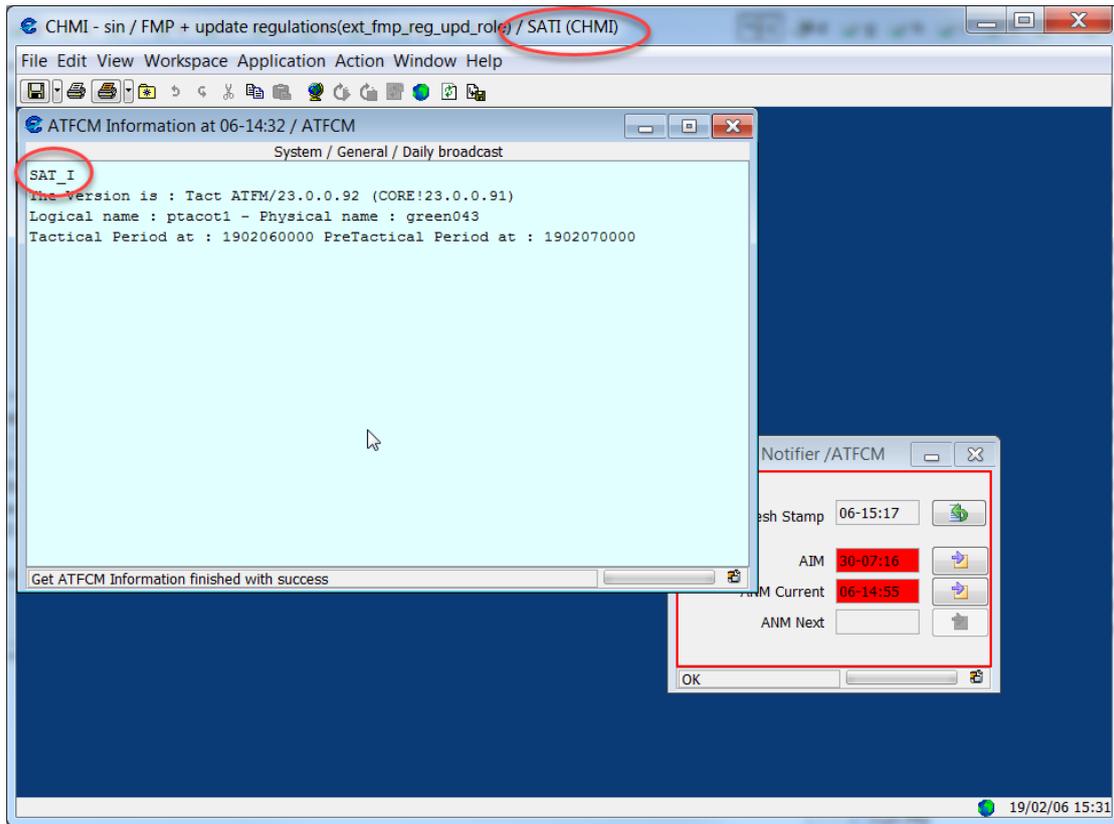


Figure 2: CHMI in OPT environment

3.4 Testing of the NOP Portal

- (15) No registration is required.
- (16) As from the 28/02/2019 (10:00 UTC - start of the OPT session), please use the following URL to test the NOP Portal-OPT:
<https://www.test1.nm.eurocontrol.int/PORTAL/gateway/spec/index.html>
- (17) Log-in with your userID and token.
- (18) After a successful authentication, you will be connected to the OPT environment.
- (19) To ensure that you are connected to the NOP Portal-OPT environment, check the “SAT/I” reference, under Network Headline News;

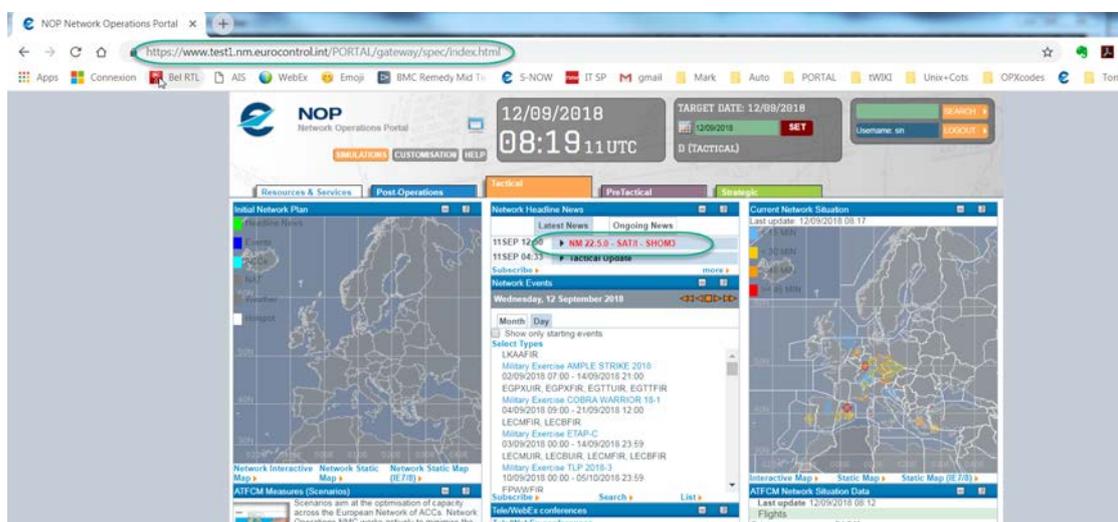


Figure 3: NOP in OPT environment

3.5 Testing of the NM B2B Services

- (20) No registration is required. NM 23.0 B2B Pre-ops platform will be available as from 01/04/2019 14:00 UTC to be confirmed
- (21) Draft documentation for NM 23.0 **preops** will be available (in pdf and HTML format) in a dedicated folder containing “NM 23.0” in its title on the OneSkyTeam web site:
<https://ost.eurocontrol.int/sites/B2BWS/Shared%20Documents/Forms/AllItems.aspx>

3.6 TP1 access during External OPT (FB1000)

3.6.1 General

- (1) During the External OPT exercise, external customers will be able to access the ENVPREVAL.SAT environment (TP1 chain).

3.6.2 NOP Portal

- (1) ENVPREVAL.SAT NOP Portal can be accessed via url https://www.test1.nm.eurocontrol.int/PORTAL_TP1/gateway/spec/index.html .
- (2) RSA Token and userid must be used to log in.

3.6.3 CHMI

3.6.3.1 NM Managed PC

- (1) The CHMI will be installed on the PC before the External OPT starts.
- (2) During the External OPT, please navigate through the Windows Start menu and launch:
Start->All Programs->NM Applications->OPSTEST-CHMI
ENVPREVAL.SAT 15.0.4 via Extranet
- (3) RSA Token and userid must be used to log in.

3.6.3.2 Non NM-managed PC

- (1) You need to download and install the CHMI first.
- (2) During the External OPT, the ENVPREVAL.SAT can be access as below:

For Windows 10 64 bits c:\Program Files (x86)\Eurocontrol\NM Applications\15.0.4\bin\chmi\run_CHMI_15.0.4_ENVPREVAL.SAT_via_test1sc.bat

For Windows 10 32 bits: c:\Program Files\Eurocontrol\NM Applications\15.0.4\bin\chmi\run_CHMI_15.0.4_ENVPREVAL.SAT_via_test1sc.bat

RSA Token and userid must be used to log in.

3.6.4 B2B

- (1) The ENVPREVAL.SAT environment can be accessed via a dedicated url.
- (2) The authentication must be done with the **PREOPS** certificate.

- (3) Only requests related to the download of AIXMDatasets and Flight Plan Validation and Route Generation are allowed.

B2B_Service_Group	B2B_Service	B2B_Operation
airspace	AirspaceStructure	CompleteAIXMDatasetRequest
airspace	AirspaceStructure	IncrementalAIXMDatasetRequest
flight	FlightPreparation	FlightPlanValidationRequest
flight	FlightPreparation	RoutingAssistanceRequest

Url to access ENVPREVAL.SAT:

https://www.b2b.test1.nm.eurocontrol.int/B2B_TP1/gateway/spec/mn.n.n/

4 How to participate

The testing session will take place weekdays from the 28/02/2019 to the 28/03/2019

4.1 Messages exchange

- (1) If you want to receive a message exchange between systems via AFTN or SITA for TACT IFPS please send registration form on §9 with the following information to nm.opt@eurocontrol.int
- (2)
 - a) *Full Name*
 - b) *Company/Organisation*
 - c) *Business Email Address*
 - d) *Phone Number*
 - e) *Token number (like p0abc) (if applicable)*
 - f) *Indicate the address from which you will send messages to the IFPS/ETFMS Test system*

Note: If this address is your operational address, then double ORMs will be received for all

Operational messages (as these are copied to the IFPS test system). Care should be taken to ensure that the ORMs from the IFPS/ETFMS test system are NOT used operationally.

4.2 Test message exchange on OPT

- (1) Go to the Internet (NM Portal) - Test platform) to connect to IFPUV:
<https://www.public.test1.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html>
- (2) 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 NM Technical Helpdesk at: +32 2 7451997

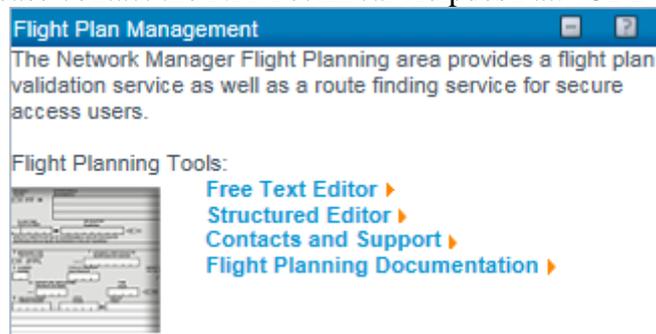


Figure 4: IFPUV in the NOP

- (3) NOP AFTN Address: EUCHZMFV
- (4) NOP SITA Address: BRUEY7X

- (5) OPT participants that wish to communicate with the NM via the AFTN/SITA test platforms must ensure that they communicate to NM the AFTN/SITA test address that will be used to receive messages sent by IFPS/ETFMS.
- (6) Test messages may be sent directly to the Acceptance test systems using the following addresses:

IFPS Test	:	AFTN: EUCHZMFT	SITA: ANREP7X
ETFMS	:	AFTN: EUCHZMTT	SITA: ANREA7X

5 Participant Configuration & Setup

- (1) 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.

5.2 Participant Address Data

- (1) Participants to the OPT testing sessions can provide, via mail to nm.opt@eurocontrol.int, an indication of:
 - a) *For flight plan originators (Aircraft Operators, AROs, CFSPs):*
 - i) The address from which test flight plans will be sent to IFPS;
 - ii) Willingness to receive the resultant ACK, MAN, REJ at the address specified under 1 above;
 - b) *For ATC Units:*
 - i) The operational unit or entity for which messages are requested to be received e.g. Amsterdam ACC, Brussels TWR, etc.
 - ii) The test address to be used i.e. the test address that IFPS will assign to the unit specified
- (2) Details should be sent via the registration process described.

5.3 Outside IFPS area

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

6 OPERATIONAL TESTING (OPT)

- (1) On-line testing via normal networks: using the dedicated NM test platform which will be supported by the SAT test team.
- (2) The OPT test sessions enable the complete suite 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).

6.2 Messages stored within the Test platform

- (1) The test platform is a mirror of the operational platform. The system has a copy of the ops feed however there will be limited manual processing of messages on the test platform so the ops database and the test platform database will not be fully aligned. Since the automatic pass rate is above 90% the Test platform database will still have a high volume of flights. For information on manual processing please see section 6.5.

6.3 Non-EUR Participation

6.3.1 Flight Plan Originators / Aircraft Operators

- (1) 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.*

6.3.2 ANSPs / ATC Units

- (1) 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.

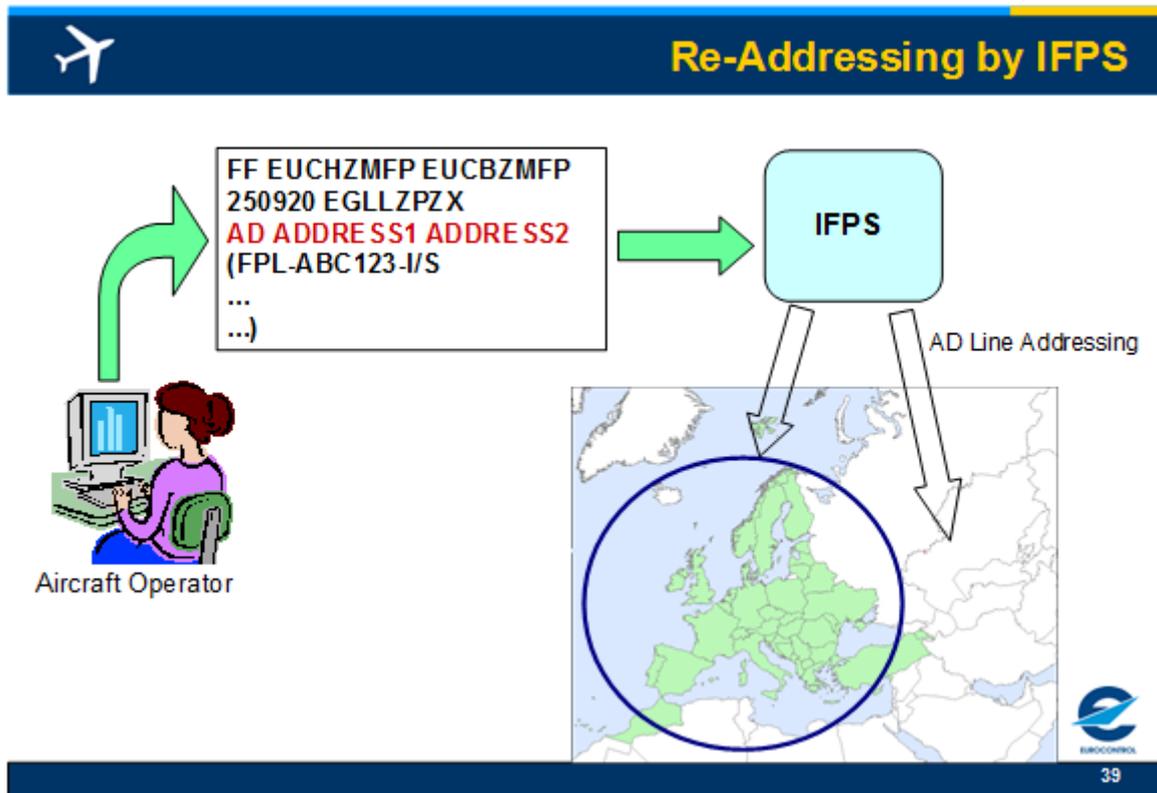


Figure 3: IFPS Re-Addressing Function (AD Line addressing)

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 UWVW0340 UATT0359
UACC0454 UAAA0538 ZWUQ0633 ZLHW0732 ZPKM0851 ZGZU0957 VHHK1043
SEL/ADHJ REG/BHOT)
    
```

- (2) 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.
- (3) It should however be noted that:
 - 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. If these messages are not needed or cannot be received this must be indicated via the Registration Form.*

6.4 Test Flight Plans Identification

- (1) Test flight plans should be clearly identifiable so that IFPS Operators and recipient addressees can quickly identify them as such and identify their source.
- (2) 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

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

6.5 Test Purpose Indication

- (1) It is highly recommended that an indication is made in Field 18 of the feature being tested e.g. RMK/PBN TEST or RMK/ 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.

6.6 Manual Message Processing

- (1) The IFPS test system will not be manned to the same level as the operational system. SAT Testers will give priority to the treatment of test messages, identified by the call sign.
- (2) SAT Testers 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.
- (3) 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.

6.7 IFPS Output

- (1) 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.
- (2) Participants shall consider all messages that carry the IFPS test address (EUCHZMFT) as originator as having a non-operational status.

6.8 Support during OPT Sessions

- (1) Test participants may contact the SAT Testers (Test Team) during a test session for assistance when needed. As the Test Team may be very busy participants are encouraged to resolve their issues and only contact the Test Team as a last resort, for example, when several corrections and re-submissions fail to provide the desired result. If you find an issue you cannot resolve the please contact the SAT team via nm.opt@eurocontrol.int

6.9 Contacts during the OPT

- (1) **Technical issues during the OPT:**
During the OPT, if you have technical issues, please contact the NM Customer Service Desk and System Operation (CSO).
Important: Please mention that your issue concerns the OPT environment.
 - a) Telephone: +32 2 745 19 97
 - b) Fax: +32 2 729 90 23
 - c) eMail: NM.cso.help-desk@eurocontrol.int
- (2) For Airspace structure and airspace availability B2B services tests:
 - a) System Acceptance Test B2B tester: Peter Ralston
 - b) E-mail: peter.ralston@eurocontrol.int
 - c) Telephone: +32 2 729 51 81
- (3) Any other testing issues related queries and requests:
 - a) System Acceptance Test Manager: Gerard Mulholland
 - b) E-Mail: nm.opt@eurocontrol.int,
 - c) Telephone: +32 2 729 97 85

6.10 Important notifications related to NM 23.0

- **NM 23.0 - Browsers compatibility**
- In NM 23.0 the following browsers are recommended:
 - Internet Explorer 11
 - Edge
 - FireFox
 - Chrome

The NM web-based HMIs will have been fully tested on Internet Explorer 11, Edge and FireFox.

Users should use a stable version of the browser that includes the latest security updates.

We no longer recommend a browser version (because there is no single version which is good for the lifetime of the release) but say that users should use a version with latest security updates. And regarding support 'For these recommended browser brands , NM undertakes to investigate and attempt to resolve problems that can be reproduced on the latest stable version of that brand. (Anything else is on a “best efforts” basis.)

- **NM 23.0 - Operating Systems compatibility**
- For NM release 23.0, the recommended operating system is Windows 10; Windows 7 will also be supported.

- **NM 23.0 - NM B2B web service:**

NM 23.0 - NM B2B: Unavailability of version NM20.5

It is reminded to the NM B2B users that a NM B2B version remains available during two years after its deployment (“NOP/B2B Reference Manuals - Essentials” documentation, available on the NM B2B OneSky Team website).

As a consequence, NM20.5 will no more be available (OPS and PREOPS) after NM 23.0 migration.

7 Documentation

Network Operations handbook

Network Operations library	http://www.eurocontrol.int/lists/publications/network-operations-library
ATFCM Users Manual	http://www.eurocontrol.int/sites/default/files/content/documents/nm/network-operations/HANDBOOK/atfcm-users-manual-next.pdf
ATFCM Operations Manual	https://www.eurocontrol.int/sites/default/files/content/documents/nm/network-operations/HANDBOOK/ATFCM-Operations-Manual-next.pdf
NM B2B documentation	https://ost.eurocontrol.int/sites/B2BWS/default.aspx Registration required - contact NM.servicerequests@eurocontrol.int
CCAMS User Manual	http://www.eurocontrol.int/sites/default/files/content/documents/nm/network-operations/HANDBOOK/ccams-user-manual-next.pdf
IFPS Users Manual	http://www.eurocontrol.int/sites/default/files/content/documents/nm/network-operations/HANDBOOK/ifps-users-manual-next.pdf
Flight Plan Guide and IFPS errors guide	https://contentzone.eurocontrol.int/fpl/default.aspx

8 Suggested Scenarios

- (1) The following scenarios are not exhaustive and are designed to give you a starting point from which to test the new functionality contained in the upcoming release.
- (2) The scenarios may be updated before the OPT commences.

8.1 FB917: DCB Measure proposal via B2B

Functionality	Description	Test
FB917: DCB Measure proposal via B2B		
CR_039807: Valid ICAO SID/STAR Identifiers cannot be recognized as such in NM CACD	<p>It will no more be possible for NM to enter new TP (Terminal Procedure) synonyms having an ICAO non-compliant identifiers (e.g. AMVAR11) into CACD.</p> <p>TP Identifier according to ICAO is AAA(AA) + N + A or AAA(AA) + N (A = letter, N = figure)</p> <p>Tps are published with a name: beacon + number only. According to ICAO Annex 11 appendix 3 (SERA too), the route indicator (final letter) is only mentioned where required.</p>	<p>ANSPs having ICAO non-compliant TP identifiers agreed at ODSG and RNDSG to adapt their publications. As soon as the TP identifiers are ICAO compliant, NM will update TP identifiers to ICAO-compliant format and TP synonyms will gradually disappear</p>
CR_044628: M-CDM fine tuning for rerouting STAM	<p>This CR will support FMP-AO coordination on proposed STAM: it will align the M-CDM mechanism to a simplified STAM workflow.</p>	<p>If externals decide to use the functionalities, they will need to modify their systems and possibly their HMIs. As the services support the coordination in existing procedures between FMP and NMOC, there is no need to change procedures with NMOC. There is a possible impact on FMP internal procedures.</p> <p>No impact if not used</p>

8.2 FB891: API improvements

FB891: API improvements		
<p>CR_044609: Extends the flight arrival information included into NM B2B services</p>	<p>NM will provide additional information via NM B2B webservice, in particular:</p> <ul style="list-style-type: none"> - The minimum/maximum acceptable TTA (Target Time of Arrival). - The currently selected STAR (to know the stack where the flight is going to). - The Estimated Time Over the metering fix (to initialize the arrival sequence) 	<p>No impact.</p> <p><i>FB891 will have no impact to the general population (those not participating NM Arrival Planning via B2B).</i></p> <p>Impact to clients' systems</p> <p>FB891 will have an impact on users that are specifically developing their end system towards extended arrival management or AOP-NOP integration.</p> <ul style="list-style-type: none"> • The users may now choose to include the new arrival planning information fields into their local algorithms. • Network Cherry Pick measure via NM B2B may now be proposed with a defined rate that can update the TV capacity monitoring value. Network Cherry Pick measure slot times no longer artificially blocked by exempted flights when applying Arrival Planning Information. <p>FB891 will have an impact on clients' systems that were previously unable to process SAM/SRM messages containing PTID with numeric characters (these points will no longer be presented in SAM/SRM messages).</p>
<p>CR_044640: Improves the selection of the TTO fix included in SAM / SRM messages</p>	<p>NM will remove terminal and heliports from SAM/SRM messages</p>	
<p>CR_044611: Improved Cherry pick feature:</p>	<ul style="list-style-type: none"> • Extends the fields available to the network cherry pick measure proposal requests <p>NM will provide the optional Regulation Rate and Update</p>	

	<p>Capacity fields via NM B2B webservices.</p> <p>Improves the treatment of arrival planning information in a network cherry pick measure.</p>	
--	--	--

8.3 FB943: Airspace

FB943: Airspace		
<p>Objective of the FB is to replace the CIREN application (CHMI for ENV Coordinators)</p>	<p>This FB will provide a replacement for the CIREN application with a browser-based functionally equivalent and a new map component.</p> <p>This FB provides a new application (named "Airspace") functionally equivalent to CIREN but with a new User Interface (UI), more modern and more user friendly. This application does not require client side installation, just a browser access via internet or PENS.</p>	<p>Initially all current CIREN users are invited to use the new Airspace application while the CHMI CIREN will be available until NM23.5. After this period all CIREN users shall use operationally the new application.</p> <p>Other users who are accessing Airspace read-only data such as CIFLO or CIAO users will have access as from NM23.5 to Airspace data through an embedded instance of the new Airspace application into the CIFLO, CITO and CIAO.</p> <p>CIREN will be phased out in NM24.0.</p> <p>Note: CIFLO, CITO and CIAO users will continue to use their application and the embedding of the FB943 into CIFLO, CITO, and CIAO is expected from NM23.5 onwards.</p>

8.4 FB971: NM airspace data model evolution

FB971: NM airspace data model evolution		
<p>CR_039807: Valid ICAO SID/STAR Identifiers cannot be recognized as such in NM CACD</p>	<p>It will no more be possible for NM to enter new TP (Terminal Procedure) synonyms having an ICAO non-compliant identifiers (e.g. AMVAR11) into CACD. TP Identifier according to ICAO is AAA(AA) + N + A or AAA(AA) + N (A = letter, N = figure)</p> <p>TPs are published with a name: beacon + number only. According to ICAO Annex 11 appendix 3 (SERA too), the route indicator (final letter) is only mentioned where required.</p>	<p>ANSPs having ICAO non-compliant TP identifiers agreed at ODSG and RNDSG to adapt their publications. As soon as the TP identifiers are ICAO compliant, NM will update TP identifiers to ICAO-compliant format and TP synonyms will gradually disappear</p>
<p>CR_042415: Review of NM Point models towards AIXM 5.1 – part 3</p>	<p>NM will align the CACD data model towards AIXM, more particularly the Collocated points: VOR and DME are 2 separate physical devices, which usually have slightly different geographical locations, but they can be a part of a “merged” NAVAID of type VOR/DME.</p> <p>CACD supports collocated NAVAIDs, meaning that VOR/DME and its parts, VOR and DME, may have slightly different geo-positions.</p> <p>Before the change, the coordinates of the reference points (RFP) were calculated using the distance and radial measurements from the VOR/DME position.</p>	<p>After the change, the distance will be measured from the precise DME location, whilst the radial will be taken from the precise VOR location.</p>

<p>CR_043842: Timesheet to allow sunsets and sunrises</p>	<p>In CACD, timesheets associated to AD will allow definition of the time intervals based on sunsets (SS) and sunrises (SR) plus/minus a number of minutes, as defined in AIXM model, for example from SS+10 to SR-20.</p>	<p>The exact time values of Sun Set and Sun Rise will be calculated by CACD, using the coordinates of the Aerodrome Reference Point (ARP) and the Aerodrome elevation. Both relative time (eg S S+10) and explicit values will be propagated to the client systems</p>
--	--	--

8.5 FB972 (ASM - Advanced FUA process improvement)

<p>FB972 (ASM - Advanced FUA process improvement)</p>		
<p>CR_036912: CDR expansion to consider RELATED/CROSSING/OFFLOAD routes vertical limits</p>	<p>CDR expansion</p>	<p>will trigger NEARBY routes as they are specified, and not limit the update to the vertical limits of the allocated RSA.</p>
<p>CR_042424: Restriction Grouping</p>	<p>The fine tuning of the selection of traffic to be validated by FUA Restrictions requires a combination of multiple Restrictions</p>	<p>This improvement is a pre-requisite to manage complex FUA restrictions.</p>
<p>CR_042633: Complex FUA restrictions</p>	<p>Complex FUA restrictions will be composed by basic restrictions identified by sub-codes.</p>	<p>The single complex FUA restriction and all sub-restrictions associated will be activated simultaneously whatever restriction and/or sub-restriction selected</p>

<p>CR_041209: FUA KPIs Updated Reports</p>	<p>FUA KPIs Updated Reports will improve data visualization and reporting capabilities for the measurement of FUA application achievements</p>	<p>linked to performance monitoring obligations</p>
---	--	---

8.6 FB973: Performance Work Programme

<p>FB973: Performance Work Programme</p>		
<p>Objective of the FB is to correct the ATFM delay calculation where the current delay calculation method doesn't respect the philosophy adopted by the NDOP delay calculation Task Force and agreed by NDOP/NMB.</p>	<p>The en-route ATFM delay is the delay calculated by NM as defined in Commission Regulation (EU) No 255/2010 of 25 March 2010. It is expressed as the difference between "the take-off time requested by the aircraft operator" and the calculated take-off time allocated by ETFMS (CTOT).</p>	<p>The NDOP Delay Calculation Task Force identified situations where updates to "the take-off time requested by the aircraft operator" are not considered in the (current) delay calculation.</p>
<p>CR_044410: ATFM delay resulting from a TTOTs after the STW (due to OBT update) shall be re-calculated taking into account the latest OBT update from the T-DPIs. (Plus other ATFM delay calculation improvements that are needed).</p>	<p>NM shall monitor the impact of the improvement on the ATFM delay and consequently on KPIs and statistics</p>	<p>New calculation of ATFM delay will be reflected in the various reports produced by NM and available in NMIR. Users using them may have to update their procedures or systems to take care of this change</p>

8.7 FB980: Predictability: Yo-Yo flight plans identification

FB980: Predictability: Yo-Yo flight plans identification		
<p>NM is committed to support reduction of flight plans with Yo-Yo profile.</p>	<p>A Yo-Yo flight can be defined as following a vertical profile that is planned to (after reaching initial top of climb and before reaching final top of descent during the cruising phase) descent certain amount of FLs and then climb certain amount of FLs is Yo-yo flight.</p> <p>Purpose of this FB is to carry out predictability enhancements defined in Flight Plan Predictability Action Plan approved by NDOP, with goal to increase level of predictability in tactical operations.</p>	<p>NM System will detect filed flight plans containing Yo-Yo profile. Information on flight plans with Yo-Yo profile will be available to AOs concerned and FMPs through CHMI/NOP Portal flight list.</p> <p>For additional information on FB980, please contact nm.flightefficiencysupport@ops.cfm.eurocontrol.int</p> <p>NM system will be used for live YoYo detection based on predefined detector parameters. Flight plans and change messages submitted will be checked on YoYo presence. This kind of detection, upon FPL or CHG message submission, will enable enough time for reaction on YoYo profiles.</p> <p>If YoYo is detected, information will be distributed through CHMI/NOP flight list “YY” column to AOs and FMPs concerned.</p> <p>When detected, this information will be used by AOs and FMP in CDM process in order to agree on actions:</p> <ul style="list-style-type: none"> to refile flight plan without YoYo profile or to adhere to the flight plan with YoYo profile

8.8 FB977: Rerouting Evolutions

FB977: Rerouting Evolutions		
<p>In NM release 23.0, the NM will focus on aligning the interfaces of AOWIR and IFPUV and enhance the interface of both to ease the use of these rerouting tools.</p> <p>CR_044707: Permit identification of the flow impact (CTOT) before filing the flight plan (IFPUV).</p> <p>The IFPUV system will provide the CTOT to the AO before filing the flight plan.</p>	<p>The change enhances the HMI in both IFPUV / NOP and IFPUV / CHMI. A new column on the route list will present the expected CTOT of the proposed route</p>	<p>It is important to remark that the CTOT presented does not trigger a booking of the slot. Therefore it represents an approximate value.</p>
<p>CR_044706: Avoid ATFM measures function in AOWIR in IFPUV proposed routes.</p> <p>Currently aircraft operators have to follow a cumbersome procedure when they need to avoid ATFM measures (e.g. regulations or scenarios). The new function improves usability and simplifies the steps. It allows aircraft operators to avoid regulated areas with the objective to decrease delay.</p>	<p>The NM systems will provide a list of measures affecting the initial route. The aircraft operator will be able to select the measure from the list.</p>	<p>The reference location of this measure will populate the “Avoid airspace”/“Avoid point” field so the NM systems produce only the routes avoiding the specified airspace/point.</p>

<p>CR_043722: Present last validity value for route proposals in IFPS and IFPUV.</p> <p>By displaying the last validity in the NOP/CHMI interfaces, NM will inform aircraft operators with the maximum time to which the OBTT of the flight may be shifted without triggering IFPS errors</p>	<p>A new column “Last validity” will contain two potential values:</p>	<p>“+” if the route is valid for more than 4 hours and “<” if the validity period of the route in IFPS is less than 4 hours</p>
<p>CR_044708: AOWIR overload is no longer an error.</p> <p>NM systems will no more forbid AOs to file the flight plans through the overloaded areas.</p>	<p>The alternate routes generated in the NOP Portal / CHMI AOWIR and the IFPUV will be presented even if traffic volumes along the routes are overloaded.</p>	<p>Note that overloaded traffic volumes may eventually become regulated.</p>

8.9 FB999 - Flight Planning Domain Improvements

<p>FB999 - Flight Planning Domain Improvements</p>		
<p>NM have received complaints that the occurrences of FPLs containing IFPSROUTEMOD is too high</p>	<p>The following has been agreed by the ODSG.</p> <p>The only time that the IFP/IFPSROUTEMOD indicator is included in a FPL</p>	<p>IFPS manually changes the route when FPL contains IFPSRA.</p> <p>2. IFPS manually changes the route when FPL contains a special status indicator (e.g. MEDEVAC) and no contact possible with the flight plan originator.</p>

8.10FB1000: Airspace Data Domain improvements

FB1000: Airspace Data Domain improvements		
<p>Early access to ENV Test Airspace data and PRE VAL Airspace Data</p>	<p>In NM22.5 IFPUV doesn't allow to receive FPLs more than 120 hours in advance. This limits the processing of FPLs against Test tape (AIRAC + 1) Data.</p> <p>Users (AOs, ANSPs and CFSPs in particular) would like to check FPLs earlier (more than 5 days before the AIRAC).</p> <p>To allow this, NM23.0 will provide IFPUV Users access to:</p> <ul style="list-style-type: none"> - Test AIRAC data (AIRAC +1) - 14 days before the AIRAC - Ad-Hoc test AIRAC Data (for specific airspace projects) 	<p>Access will be provided via IFPUV on the CHMI or the NOP Portal. Access via NM B2B will be provided.</p>

8.11FB1001: ATFCM Domain improvements

FB1001: ATFCM Domain improvements		
<p>CR_044350: FAM reduction The Flight Activation Monitoring mechanism parameter for suspension</p> <p>The change is aligned with ICAO: any changes to the EOBT of more than 15 minutes for any IFR flight within the IFPZ shall be communicated to the IFPS. (ICAO Doc 7030, 2.3.2.1).</p> <p>This implementation is the second step of the parameter reduction. Further</p>	<p>Flights departing from FAM-enabled areas,</p> <p>Or flights departing from non FAM-enabled areas and less than three hours of Estimated Elapsed Time (EET) with a destination/crossing a FAM-enabled areas,</p> <p>will be reduced by 5 minutes; from 25 minutes to 20 minutes.</p> <p>The stepped reduction of the parameter was decided at ODSG/41 to support flight</p>	<p>Possible impact on flights departing from FAM-enabled areas or of flights departing from non-FAM-enabled areas and less than three hours of Estimated Elapsed Time (EET) with a destination/crossing a FAM-enabled areas that are not reported as airborne. Such flights will be shifted in their CTFM by 5-minute</p>

<p>information can be found at: http://www.eurocontrol.int/sites/default/files/publication/files/fam-reduction-leaflet-2018.pdf</p>	<p>planning and predictability in the European ATM Network.</p>	<p>steps three times (currently four) and will be eventually suspended after another 5 minutes if not reported as airborne (FSA, CPR message received by the NM). FMPs, airports and AOs should be advised of the change and ensure that adequate operational actions are taken.</p>
---	---	--

8.12FB1012: FF-ICE filing Function - file eFPL

<p>FB1012: FF-ICE filing Function - file eFPL</p>		
<p>FF-ICE/1 enhances the flight plan data exchanges facilitating a CDM process between AOs/CFSPs, the Network Manager and ANSPs in the pre-departure phase of the flight. The aim is to improve the consistency and the accuracy of 4D flight trajectories maintained by the different stakeholders.</p>	<p>The FB builds on existing NM systems functionality and evolves them towards the latest ICAO flight plan provisions (FF-ICE flight plan) and the associated latest flight information exchange format version (FIXM v4.1.0) in order to provide filing of FF-ICE flight plans in FIXM format</p>	<p>External users choosing to use the FIXM services will have to adapt their systems to provide FPLs in FIXM format.</p>

CR_043914: TACT activation versus Expecting FSA & AOWIR service		
<p>CR_043914 brings an improvement to eliminate one of the statuses present in ETFMS, the TACT Activation triggered by T-DPI-s messages. The T-DPI-s marks the departure sequencing at the local CDM platform.</p>	<p>The TACT Activation status in ETFMS is linked to the creation of the CTFM. Normally, this is expected to happen when the flight is off-blocks, but no confirmation from ATC (e.g. FSA, DEP, CPR) has been received yet. The passing to TACT Activation status forbids the use of AOWIR by the AO and the ETFMS counts the flight as expected to receive the first FSA in the next few minutes. However, when a valid T-DPI-s is processed by ETFMS, an early TACT Activation may occur. This blocks the AOWIR functionality for AOs from that moment, which may take place up to 40 minutes before TOBT</p>	<p>in order to prevent counting such flights as about to receive a FSA, currently, A-CDM departures are removed from the expecting FSA count, which is displayed in CHMI, NOP Portal and via B2B</p> <p>T-DPI-s messages will not trigger the early TACT Activation in ETFMS. This will result in:</p> <p>AOWIR will remain available after sequencing; providing AOs with an extended use of the feature for A-CDM departures.</p> <p>The expecting FSA count will re-include departures from A-CDM, providing FMPs with accurate counts on flights that are expected to be airborne shortly.</p> <p>TACT Activation for A-CDM departures will take place later than today, at reception of A-DPI. This status is reflected in the CHMI and NOP Portal with 't' in the status column/field 'Type of Flight Data'; 'TA' via B2B and the generation of EFD and FUM messages with status 'TA' and 'CDMSTATUS PRESEQUENCED'.</p>

8.13FB1019: e-HelpDesk improvements

FB1019: e-HelpDesk improvements		
<p>CR_045011: E-helpdesk access for TWR and FMP. By providing the e-HelpDesk service to the FMP and TWR users, the new users will have the possibility to use an electronic exchange to accommodate their requests. The electronic exchange permits NMOC to visualize and sort the most urgent requests. TWR and FMP will have the possibility to request Slot extension, Slot improvement and Exclusion from regulation. NM will provide the necessary training, documentation and practical guidelines for the new users.</p>	<p>By enabling the e-HelpDesk services to TWR / FMP, these external users will be able to access NOP Portal via token, to request Slot extension, Slot improvement and Exclusion of flight from regulation.</p>	<p>Adequate web training, documentation and information campaign will be done as part of release.</p>
<p>CR_045012: Prioritization of FMP / TWR / AO requests. By extending the access to new users, it is necessary to associate a business prioritisation logic. This logic permits to respond based on the urgency of the requests. The prioritization rules consider amongst others, the type of request (e.g. extension versus improvement), the proximity to the CTOT to the time stamp of the requests and the originator of the request.</p>	<p>An external request can be queued based on the defined priorities. If AO and TWR are making the same type of request for the same flight, the TWR request will overwrite the request from AO.</p>	<p>Priority of the users is defined on the following order: TWR, FMP, AO.</p>
<p>CR_045014: Extend Duplicate request rule. NM noted a large quantity of multiple requests for the same flight. From the release NM 23.0, NM will strengthen this rule to ensure that the relevant request is replied, CDM improved and avoid unnecessary workload on requester and NMOC side.</p>	<p>External user is not supposed to send multiple e-HelpDesk requests of a same type for the same flight.</p>	<p>New system behaviour will automatically reject that kind of requests.</p>

<p>CR_044319: Automatic processing of requests based on average delay.</p> <p>By implementing this change, NM will enable the possibility to automatically process the requests based on the local average delay of a regulation. The selection criteria for automatic processing will be based on the delay of a flight versus the local average delay of surrounding flights in the most penalising regulation. NMOC staff will have the possibility to fine tune the local average delay by specifying a weighting factor</p>	<p>If the request is automatically processed, external users will be provided with appropriate message including information about local average delay and explanation for performing the automatic processing of the request.</p>	<p>The local average value will be equally presented in a new column in the e-helpdesk list.</p>
--	--	--

9 Registration Request (OPT)

A) State:

B) ATS Unit:

C) Contact Person Name :

Telephone :

Fax :

E-mail:

D) Token number (like p0abc) (if applicable):

E) Indicate the session(s)/dates during which you wish to participate.

Test Session/dates	State the Functionality to be tested

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

G) 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:

H) 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

I) Indicate the address from which you will send messages to the ETFMS Test system (if applicable):

J) Indicate if you require B2b access to OPT chain Yes

K) CHMI application: No registration is required see detailed instructions in **section 0**

B2B: No registration is required. NM 23.0 B2B Pre-ops platform will be available as from 02/03/2019 14:00 UTC to be confirmed

DOCUMENT FINAL PAGE