NETWORK MANAGER RELEASE NOTES

PLANNED FOR IMPLEMENTATION IN 2015-2016

EUROCONTROL

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Document Changes Record

Ed.	Status	Date	Reason for change
1.0	Published	26/09/2014	-
1.1	Published	15/10/2014	Information on FB603 (ATFCM Domain improvements) and FB615 (Interoperability with local ATC Planning tools). Updates on FB672 (Extended FPLs and enhanced processing of PTRs) and on several other FBs. Updated NM19.0 schedule.
1.2	Published	31/10/2014	FB679: Flight Planning Domain improvements NM19.0 OPT dates NM19.0 and NM19.5 browser compatibility
1.3	Published	15/01/2015	NM19.0 migration plan with dates Updates to several FBs description
1.4	Published	19/02/2015	Slides and recording of “NM19.0 presentation to Externals” Precisions on OS compatibility (§2.2.2) OPT start date modified B2B PRE-OPS availability date modified Change in SAFA service migration schedule (§4.1.3) “CHMI installation guide” available (§4.1.3)
1.5	Published	06/03/2015	Precisions on OS compatibility (§2.2.2) Updates to some FBs content (FB615, FB669, FB681)
2.0	Published	14/04/2015	Content of NM19.5
2.1	Published	04/06/2015	NM19.5: Additional information on several FBs, information on the Presentation to externals and on the OPT session
2.2	Published	22/07/2015	NM19.5 migration plan, browsers compatibility and additional information on several FBs/CRs.
2.3	Published	03/09/2015	NM19.0: Change in FB679 (Flight Planning Domain improvements) - CR_035746. NM19.5: Removal from NM19.5 of TB245 (FPL distribution via B2B Publish/Subscribe) and CR_038034 (Deploy CSST in the NOP). Addition to NM19.5 of CR_039943 (Creation of new type of monitorable traffic volume). Instructions to download and install the CHMI (§4.2.3). Additional information on NM B2B deployment plan (NM19.0.1 unavailability - §2.1.5) and NM B2B services decommission (§2.1.4). Instructions for the NM19.5 OPT (§4.2.2).
2.4	Published	30/09/2015	NM19.5: Additional information on several FBs and CRs. NM19.5.1: Information on the NOP Increment NM19.5.1.
2.5	Published	12/10/2015	NM19.5 migration (§4.2.3): The “FPL management and FPL filing via the NOP Portal” feature (FB559) will be available operationally as from the 27/10/2015 20:00 UTC. NM19.5.1: Additional features will be delivered with the NOP Increment.
2.6	Published	02/12/2015	NM19.5.1: Additional information on the Release migration and on FB727.

1. INTRODUCTION

This document describes the **new** or **modified** functions that are delivered by the Network Manager as part of the Network Manager software Releases and that impact external users.

The objective of this document is to provide users of the Network Manager Services with advance notice of modifications in order to anticipate any **impact** upon their operational procedures and/or systems.

The Network Manager Releases include many changes arising from different sources and coordinated through the Operations Coordination Group and its sub-groups. It allows the implementation of new functionalities to cope with Network Manager Directorate Business plans.

The Network Manager Release Notes document is organized as a rolling document describing the functions currently under development for future releases. Other functions considered for possible development but without reaching yet a maturity status allowing their presentation are not included in this paper.

To receive automatically by eMail the new versions of the Release Notes, please register at:

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nm.releases@eurocontrol.int

2. RELEASES CONTENT

The table below provides the FBs or CRs that have an impact on External users. The FB or CRs that have an impact only on internal-NM users are not listed.

Programme	Functional Block		NM 19.0	NM 19.5	NM 19.5.1
NM-02 - Airspace Management and AFUA		**§3.1**			
	FB608	ASM interoperability level 3 - Prototype	**5.2.1**		
	FB667	New AUP/UUP Template	**5.2.1**		
	FB678	AFUA Ops Improvements		**5.3.1**	
NM-05 - NOP Information Services		**§3.3**			
	TB244	NM B2B Publish-Subscribe Queuing and Push-Pull Communication	**5.2.2**		
	~~TB245~~	~~FPL distribution via B2B Publish/Subscribe~~		~~**5.3.2**~~	
	CR_039160	Publish e-AMI via B2B Publish/Subscribe		**5.3.2**	
	FB727	Network Events Tool Phase 5a			**5.4.1**
NM-08 - Operations Improvements		**§3.4**			
	FB595	NM Airspace Data Publication C&T	**5.2.3**		
	FB603	ATFCM Domain Improvements	**5.2.3**		
	FB665	Support to Flight Efficiency	**5.2.3**		
	FB677	Improve CHMI Services	**5.2.3**		
	FB679	Flight Planning Domain improvements [corrected with I2_100164]	**5.2.3**		
	FB559	FPL management and FPL filing via the NOP Portal		**5.3.3**	
	CR_040226	FPL management via the NOP Portal - Structured FPL filing to include Field 19 data			**5.4.2**
	FB695	Airspace Data Domain improvements		**5.3.3**	
	FB710	Flights Pushed into a closed area		**5.3.3**	
	CR_038034	Deploy CSST in the NOP		~~**5.3.3**~~	**5.4.2**
NM-09 - Performance Programme		**§3.5**			
	FB669	Performance Work Programme	**5.2.4**		
	FB709	Performance Work Programme		**5.3.4**	
NM-10 - Flight Plan and Flight Data Evolutions		**§3.6**			
	FB672	Extended FPLs and enhanced processing of PTRs	**5.2.5**		
	CR_039943	Creation of new type of monitorable traffic volume		**5.3.5**	
NM-11 - Airport Programme		**§3.7**			
	FB681	Airport Programme	**5.2.6**		
	FB699	Airport Operations Improvements		**5.3.6**	
	FB707	File DLA on behalf of AO based upon DPI data fields		**5.3.6**	
RD-02 - Airspace Users Operations R&D		**§3.8**			
	FB671	OAT FPL Prototype - 2	**5.2.7**		
RD-03 - DCB R&D		**§3.9**			
	FB615	Interoperability with local ATC Planning tools	**5.2.8**		
STANDALONE CRs or I2s					
	I2_098549	Modification in the “STAY” field of the EFD message	**5.2.9**		
	I2_100164	Multiple segments not checked (Correction on NM19.0 FB679-CR_035746)	**5.2.3**		
	CR_037910	Create an interface to submit AIREPs via the NOP Portal		**5.3.7**	

v1.1: FB603 (ATFCM Domain improvements) added as new CRs impact external users.

v1.2: FB692 (Network Events Tool Phase 3) will not impact external users; it will thus not be described in the Release Notes

v2.1: FB698 (ATFCM Domain improvements) has no impact on external users; it has thus been removed from the Release Notes.

v2.3: TB245 and CR_038034 have been removed from NM19.5 due to performance issues.

2.1. IMPORTANT NOTIFICATIONS RELATED TO RELEASE MIGRATION

2.1.1. Browser compatibility

2.1.1.1. NM19.0

The following browsers are supported in NM19.0:

- FireFox 20, FireFox 21, FireFox 31 ESR (Extended Support Release)
- Internet Explorer 9, Internet Explorer 10, Internet Explorer 11

2.1.1.2. NM19.5

The following browsers are supported in NM19.5:

- Firefox 31 ESR (Extended Support Release) and Firefox 38 ESR. Firefox 38 ESR is the recommended version by NM.
- Internet Explorer 10 and Internet Explorer 11. Internet Explorer 11 is the recommended version by NM.

2.1.2. Operating System compatibility

2.1.2.1. NM19.0

Windows versions other than Windows 7 are not supported for CHMI.

2.1.2.2. NM19.5

Windows versions other than Windows 7 are not supported for CHMI.

2.1.3. NM19.0 - Validity of URLs with "CFMU"

As from NM19.0 migration (March 2015), URLs containing "CFMU" will no more work.

For example, the web site address of the Public NOP Portal containing "CFMU" (https://www.public.**cfmu**.eurocontrol.int/PUBPORTAL/gateway/spec/index.html) will no more work after NM19.0 migration. The new address (operational since March 2014 – NM18.0) is https://www.public.**nm**.eurocontrol.int/PUBPORTAL/gateway/spec/index.html.

To get the new URL, replace "cfmu" by "nm" in the old URL.

Impacts are:

- Any URL of the NM website.
- The NOP Portal (Public or Protected). This includes in particular the access via the NOP Portal to CSST, NMIR (former CIR), RAD, NMVP.
  - New PROTECTED NOP Portal URL: https://www.nm.eurocontrol.int/PORTAL/gateway/spec/index.html
  - New PUBLIC NOP Portal URL: https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html
- All URLs of the NOP B2B (OPS and PRE-OPS)

2.1.4. NM19.5 - B2B - Decommission of queryADRAIXMFileList service request

This paragraph concerns only NM B2B web services.

As announced in the NM18.5 B2B Release Notes (NM 18.5.0 - NOP/B2B Reference Manuals - ReleaseNotes, para. 1.2.2.1), the service request AirspaceStructure.queryADRAIXMFileList will be decommissioned with NM19.5.

This service request has been replaced by two new service requests based on a new implementation of the Airspace data publication. The new implementation takes into account the daily updates of the Airspace data. The new service requests to be used instead are the following:

- AirspaceStructure.queryCompleteAIXMDatasets()
- AirspaceStructure.queryIncrementalAIXMDatasets()

2.1.5. NM19.5 - B2B - Unavailability of NM B2B 19.0.1 PRE-OPS

This paragraph concerns only NM B2B web services.

NM19.0.1 B2B PRE-OPS platform will no more be available after the 24/09/2015.

It will be replaced by the NM19.5 PRE-OPS that will be available as from this date.

NM B2B migration plan has been updated accordingly (§4.2.3)

3. EVOLUTION PROGRAMMES

You will find below a short description of each Programme that the Network Manager developments are serving.

3.1. PROGRAMME NM-02: AIRSPACE MANAGEMENT AND ADVANCED FUA

ASM and AFUA are major components of the Network Strategy Plan (NSP) 2015/2019. The project contributes directly to the NSP Strategic Objective 3 (SO3) “Implement a de-fragmented and flexible airspace enabling Free Routes”, together with the “Free Route Airspace” network strategic project.

The Project will aim at:

- Introducing performance driven operations based on the management of Airspace Configurations in fixed route network and FRA environments.
- Providing processes that support the use of more dynamic and flexible elements.
- Describing a seamless, CDM based process with an advanced real time management of Airspace Configurations as well as a continuous sharing of information among all ATM partners enabled by advanced technology.

The main Lines of Improvement of the Project are:

- Airspace Configuration Definition and Operational Deployment.
- A Collaborative Decision Making Process (ASM/ATFCM/ATC integration).
- The Rolling Process.
- ASM solutions to improve network performance.
- ASM operations in FRA environments.
- ASM system support and data management.
- ASM post ops and performance planning.

3.2. PROGRAMME NM-03 - COOPERATIVE TRAFFIC MANAGEMENT

Cooperative Traffic Management is the collaborative process of determining and implementing optimal solutions for network operations through continuous information sharing of individual and local preferences, by cooperation between actors in the planning and execution phases of ATM.

The purpose of CTM Strategic Project is to support capacity, flight efficiency and cost-efficiency performance improvements required in the context of the SES RP2 performance targets. The CTM Strategic Project addresses the interface between ATFCM and Tactical Capacity Management and intends to reduce the gap between planning and execution phases.

The CTM Strategic Project aims to optimize the delivery of traffic through a cooperative approach between Network, ATC, Flight operations and Airports, and the introduction of time based processes that facilitate a smoother and more predictable sequencing of flights into ATC sectors and Airports. This involves the development and implementation of activities in 5 broadly defined areas of work, namely:

- Short Term ATFCM Measures (STAM)
- Improved Predictability and Flight Plan Adherence
- Target Times Operations for ATFCM purposes
- Support to Arrival Sequencing
- Initial UDPP – Slot swapping

3.3. PROGRAMME NM-05: NOP INFORMATION SERVICES

The NOP aims at building a consolidated interactive view of the network situation that incorporates the existing information and user requests on traffic demand and capacity plans, identifying bottlenecks and presenting the ATFCM and ASM measures foreseen to counterbalance them.

The NOP will result from the integration of interdependent data including flight intentions, status of airspace, capacity, airport data and meteorological forecasts. NOP will also be updated taking into account the actual traffic situation and real time flow and capacity management.

3.4. PROGRAMME NM-08: OPERATIONS IMPROVEMENTS

This Programme includes any Correction and Tuning done to the NM operational systems or services.

• Domains improvements

Each Release delivers Corrections and Tuning for the NM Domains:

- ATFCM Domain.
- Flight Planning Domain.
- Airspace Data Domain.

• Call-Sign Similarities (CSST)

Air-Ground communication safety events are one of the biggest ATM safety priorities, forming 23% of all ATC safety reports. Today, 21% of all NM flights involve callsign similarity. Reliable mitigation for the risk imposed by similar callsigns (like 527F 527D or 361M 369M) can be achieved.

The NM has established a Call Sign Management Cell (CSMC) to develop a centralized Service. One key element in providing the Service is the publication of agreed Call Sign Similarity Rules. These Rules are at the heart of the Call Sign Similarity Tool (CSS Tool). Development of the CSS Tool and its specifications by EUROCONTROL is closely coordinated with a Call Sign Similarity User Group (CSSUG), which includes representations from AOs, ANSPs and other aviation organizations (e.g. ICAO and IATA).

• Transponder Code Function (CCAMS)

In accordance with the Network Manager mandate for the Transponder Code Function (TCF), CCAMS is operated on behalf of states as one of the possible technological solutions supporting the unambiguous and continuous identification of aircraft.

The final goal is to have the use of the downlinked aircraft identification (e.g. through Mode S) operational in the whole area with CCAMS as a back-up technology. Therefore CCAMS is implemented currently in 12 states and the number of users is expected to increase in the coming years.

3.5. PROGRAMME NM-09: PERFORMANCE PROGRAMME

The ATFM, Network Manager and Performance IRs stress the need for monitoring and reporting (M&R) of performance. The aim of this Programme is to provide the data and reporting (including datawarehouse and NMIR) that address the M&R needs.

The Programme includes a wide variety of activities such as: the adaptation of algorithms or databases, creation of new data sets, modification of interfaces graphical identity, and new reports following users' requests. The changes allow the NM to fulfil its commitment on M&R and to support other stakeholders with their M&R responsibilities.

3.6. PROGRAMME NM-10: FLIGHT PLAN AND FLIGHT DATA EVOLUTIONS

• NM-FOS Prototype validation

The NM-FOS addresses the systems and operations evolution towards interoperability/flight data sharing amongst all partners involved in the flight. The fundamental idea is that a single logical entity, the FO (Flight Object) is kept up to date by all parties sharing information about a flight. As such, all systems have the most up to date, accurate and consistent view of the flight data and plans. This single logical FO is physically distributed over a network of 'FO Servers (FOS)', each FOS being associated with an FDPS. Each FOS holds physical copies of the FOs of interest to its clients. The network of FOSs, not the clients, is responsible for ensuring that the different physical copies of the FO are kept consistent.

In the pre-departure phase, the FO enables Communicating and Synchronising flight data and agreed trajectories, including strategic and planning constraints. When the flight is airborne, up to date FO improves not only the Network view available to controllers, but also facilitates the ATC participation to the implementation of ATFCM measures. In other words the FO is the opportunity for a better integration of ATFCM and the ATC. The FOS is an enabler not only for the Time Based Operations but also for further evolution to Trajectory Based Operations.

The prototype developed for the forthcoming validation exercise (early 2015) will address the following areas of improvement:

- Communication of planning constraints and derived measures;
- Network 4D trajectory enriched with IOP ATSU calculations and constraints;
- Network flight data predictability improvement.

3.7. PROGRAMME NM-11: AIRPORT PROGRAMME

The programme aims at facilitating the better integration of airports and its operations with the ATM network. This includes the following areas:

- Connection of A-CDM airports to the NM systems.
- Provision of pre-tactical and tactical information to the main NM stakeholders (Airport Operators, Airspace Users and ANSPs) through the NOP portal and future web services.
- Provision of web service based tools for post-operational performance assessment to airports.
- Contribution to events management processes and information provision as to enhance the operational picture through the before-mentioned means.
- Development of new services related to deliverables becoming mature from SESAR research activities (AOP/NOP integration, APOC etc.)

3.8. PROGRAMME RD-02: AIRSPACE USERS OPERATIONS R&D

• OAT FPL management (part of SESAR WP7.6.2)

As an initial step towards the Shared/Reference Mission Trajectory, a common and improved OAT flight plan shall be defined at European level as well as its network level integration in the short term planning phase. Some exercises will be conducted on the NMVP platform in order to validate the concept.

3.9. PROGRAMME RD-03: DCB R&D

• STAM

The responsibilities and supporting procedures between NM and the ANSP for the execution of Tactical ATFCM are currently under review to cope with the evolutions of the roles and responsibilities in ATFCM. The Programme will also improve the support to the NM stakeholders (helpdesk, AOLO, etc.) and the access to the NM services in particular for the FMPs (CIFLO, Web services, etc.)

In order to close the gap between ATC and ATFCM, Short-Term ATFCM Measures (STAM) shall be developed requiring dynamic coordination between more than one ACC, the AOs and NM. The objective of STAMs is to prevent sector overloading, whilst reducing delays, by using air traffic flow management techniques, close and during real time operations.

Even if some STAMs measures already exist, they are often limited to solving specific local problems and they do not consider the Network. No standardized tool or procedures exist today to manage STAMs and the role of NM within STAMs processes must be clarified.

The awareness on flight progress shall be improved by getting additional sources of flight data from the Aircraft Operators and the service providers, and by sharing the consolidate information with the partners.

• Flight Plan interoperability

This Programme will enhance the flight plan data exchange between AOs/CFSPs and the Network Manager during the pre-filing phase, in order to improve the accuracy and consistency between 4D flight trajectories maintained by the different stakeholders.

It will re-enforce the validity and consistency of the flight trajectory with the airspace availabilities and constraints, at least until the end of the pre-flight phase.

The Programme will prepare for the further transmission by NM of acquired 4D trajectory information to ATC/ANSP. It will also pave the way to the implementation of the SESAR trajectory concept.

4. DEPLOYMENT

Deployment Plan

	2015												2016											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Release 19.0																								
Presentation of NM19.0 to externals	16																							
OPT		■																						
Start of migration			10																					
Release 19.5																								
Presentation of NM19.5 to externals									16															
OPT									■	■														
Start of migration										20														
NOP Increment NM19.5.1																								
Migration												08												

4.1. RELEASE 19.0 MIGRATION

The migration of NM systems from NM18.5 to NM19.0 took place from the 10th of March 2015 to the 17th of March 2015.

4.1.1. Presentation of NM19.0 to externals

An audio conference took place on the 16th of January 2015. The aim was to present each FB of the NM19.0 that impact external users.

Recording and slides may be retrieved at:

http://www.eurocontrol.int/sites/default/files/publication/files/20150116%20Presentation%20of%20NM19%200%20to%20Externals.pdf

4.1.2. NM19.0 OPT session

The NM19.0 OPT (Operational Testing) took place from the 16th of February 2015 to the 6th of March 2015.

4.2. RELEASE 19.5 MIGRATION

The migration of NM systems from NM19.0 to NM19.5 is planned to start on the 20th of October 2015 and last around one week.

4.2.1. Presentation of NM19.5 to externals

An audio conference took place on the 16th of September 2015 to present FBs of the Release that would impact external users.

Slides and recording are available at:

http://www.eurocontrol.int/sites/default/files/content/documents/nm/network-operations/release-deployment/20150916-presentation-of-nm-19.5-to-externals.pdf

4.2.2. NM19.5 OPT session

The NM19.5 OPT session took place from the 14th of September 2015 to the 9th of October 2015.

The overall objectives of the OPT (Operational Testing) session were to:

- Demonstrate the new software functionality;
- Enable the new functionality to be tested against client systems;
- Enable knowledge to be gained of new procedures;
- Enable familiarisation of client staff and NM staff with the new functionality.

During the OPT session, users were able to test the new CHMI, the new NOP Portal and some other features (mentioned in the “Users’ validation” field of each Functional Block).

Any question related to OPT shall be sent to nm.opt@eurocontrol.int.

4.2.3. Release NM19.5 migration plan

NM19.5 migration took place from the 20/10/2015 to the 27/10/2015.

4.3. NOP INCREMENT NM19.5.1 MIGRATION

NM19.5.1 is not a NM Release but a NM NOP Increment. Changes brought by a NOP Increment do not impact the Back-End systems (ETFMS, IFPS, etc.) neither the CHMI.

A NOP Increment may impact:

- The NOP Portal (public or protected).
- The NOP B2B services.

No new version of the CHMI will be delivered with NM19.5.1.

There is no OPT (Operational Testing) organised for a NOP Increment.

The migration of the NOP Portal to NM19.5.1 will occur on the 8th of December 2015 from 22:00 UTC to 23:00 UTC. The NOP Portal (Public and Protected) will be unavailable during the migration.

5. NETWORK MANAGER EVOLUTIONS

5.1. INTRODUCTION

Each Functional Block is described in a table with the following fields. All descriptions are focused from an external NM point of view.

FBxxx: Number and name of the Functional Block	
(optional) Internal NM "Internal NM" means that the Functional Block has no direct impact for externals NM users (on procedures, interfaces or systems). The Functional Block may have an indirect impact by improving the quality of the service delivered by NM.	
Users impacted	The categories of NM Users which are impacted by the new features of the Functional Block: U1. Flow Manager (FMP) U2. Airspace Manager (AMC) U3. Airspace User (Civil) U4. Airspace User (Military) U5. ENV data provider U6. Management (eg crisis management, performance management) U7. Post-ops analyst U8. AO or CFSP U9. CAA, EASA U10. Non-CDM Airport U13. CDM-Airport U11. ARO U12. Internal NM U14. Air Navigation Service Provider (ANSP) U0. Other (specify):
Application impacted	The NM application(s) or service(s) that will be impacted by the Functional Block: A1. CHMI A2. CIFLO, CIAO A3. CIAM A4. CACD A5. Flow management systems (Predict, ETFMS) A6. FPL (IFPS) A7. Datawarehouse (NMIR) A8. CCAMS A9. CSST A10. NOP Portal A11. NOP B2B A12. ASM Tools A13. NMVP A14. n-CONECT A0. Others (specify):
Objective	Operational objectives of the Functional Block.

Description	Description of the main features delivered to external NM users. Some FBs (mostly the ones belonging to "NM-08 - Operations Improvements") may content the CR (Change Request) number of the new features (like CR_xxxxxx). Please refer to this CR number when requesting information to NMD.
Impact for external users	Technical or operational impact the Functional Block may have on the external users. I0. No impact. I1. Impact on procedures. I2. Impact on Man-Machine interface. I3. Impact on clients' systems.
Impact description	Description of the impact for the external users.
Service reference	Hyperlink toward the NM activity(ies), service(s) and product(s) that will be impacted by this Functional Block. The global catalogue is available at the following address: http://www.eurocontrol.int/nm-services-catalogue
Safety assessment	Output of the initial safety assessment carried out by NMD for the Functional Block: S4. Safety assessment to be performed or on-going S5. FB is not Safety related S6. FB is Safety related S7. Bug fixing (I2)
Operational deployment plan	The way the Functional Block will be deployed: D1. FB will be deployed in Operation along with the release / NOP Increment migration. FBs deployed as D1 normally do not include new or changed ATFCM procedures. D2. FB will be subject to a Pilot Phase (Operational Trial) followed by a Go/NoGo decision for ops deployment after Release Migration. New ATFCM procedures or changed ATFCM procedures are normally only issued as a result of D2 deployment. These are issued via Ops Instructions after the consultation process agreed with ODSG. D3. FB will be subject to R&D ops validation (e.g. SESAR). D4. The analysis part of the FB will be done in the Release and the development will be candidate for the next Release.
Users' validation	Depending on the Operational deployment plan: • If D1: Is an OPT planned for this FB? • If D2 or D3: provide additional information on the activities that will take place (pilot phase, ops validation phase, etc.)
Documentation publication	The documentations that will be updated following the deployment of the Functional Block.
Training sessions	Training sessions, i.e. the training dates, and the related links for access.

5.2. RELEASE NM19.0

5.2.1. NM-02 - Airspace Management and AFUA

FB608: ASM interoperability level 3 - Prototype	
Users impacted	U2. Airspace Manager (AMC) U3. Airspace User (Civil) U4. Airspace User (Military) U7. Post-ops analyst U8. AO or CFSP U12. Internal NM U14. Air Navigation Service Provider (ANSP)
Application impacted	A3. CIAM A4. CACD A10. NOP Portal A11. NOP B2B A12. ASM Tools A13. NMVP
Objective	This is a prototyping activity aiming at validation of provision of information on real time airspace status (Level III) to all interested users at network level.
Description	The FB608 is to support SESAR EXE-7.5.4.-VP710 exercise validating the technical and operational feasibility as well as identifying the benefits of sharing real time airspace data (ASM Level III) to all interested users at network level on top of planning ASM data. The FB is also to validate Airspace Situation access to eAUP/eUUP on the NOP via various means (e.g. B2B).
Impact for external users	I3. Impact on clients' systems.
Impact description	Impact on external clients **participating to the exercise** procedures and systems due to access to more up to date data and more sophisticated NM B2B services.
Service reference	ID A121 - Network Operations Monitoring ID A221 - Airspace Management (ASM) Processes ID P3410 - NM B2B ID P3411 - Data distribution ID P348 - Network Operations Portal ID P349 - CHMI (Collaboration Human Machine Interface) Applications ID S212 - Airspace Real-Time Simulation ID S315 - Load and capacity management ID S325 - Flight Plan Processing and Distribution ID S334 - Airspace Data Management
Safety assessment	S6. FB is Safety related
Operational deployment plan	D3. FB will be subject to R&D ops validation (e.g. SESAR).
Users' validation	This FB is to support shadow mode exercise to be run on **NMVP only**. Decision on operational deployment will be taken after review and analysis of the VP710 exercises results.
Documentation publication	As far as the FB608 is going to be developed for R&D purpose no operational handbook and/or Users manuals are planned to be updated at this stage.
Training sessions	No training planned.

FB667: New AUP/UUP Template	
Users impacted	U1. Flow Manager (FMP) U2. Airspace Manager (AMC) U3. Airspace User (Civil) U4. Airspace User (Military) U5. ENV data provider U7. Post-ops analyst U8. AO or CFSP U12. Internal NM U14. Air Navigation Service Provider (ANSP) U0. Other (specify): Military ATM/Authorities
Application impacted	A1. CHMI A3. CIAM A4. CACD A5. Flow management systems (Predict, ETFMS) A6. FPL (IFPS) A7. Datawarehouse (NMIR) A10. NOP Portal A11. NOP B2B A12. ASM Tools A13. NMVP
Objective	The current AUP content provides the possibility to process automatically information used for civil/military airspace coordination and provides notifications to AOs and CFSPs. This information doesn't reflect the latest developments or the requirement of the airspace users to have a single source of information where it would be possible to get all information required for FPL purposes. The AUP has been identified as the most suitable means of notification due to the possibility of processing the information automatically via B2B service. NETOPS/07 endorsed the new AUP/UUP template, which now aims to provide to the users a full set of airspace information useful for flight plan purposes. The changes introduced will require an adaptation of the NM systems before the template becomes operational. There will be an impact on external systems, thus it is necessary to define a plan to ensure harmonised implementation where release NM19.0 is the first step.
Description	The changes introduced in the new AUP/UUP template will focus initially on the following: • FUA/EU restrictions. • FBZ activation. The new AUP/UUP template is described in the ERNIP part 3 ASM Handbook.
Impact for external users	I1. Impact on procedures. I2. Impact on Man-Machine interface. I3. Impact on clients' systems.
Impact description	New procedures are described in ASM Handbook and are mainly affecting AMC activities. NM tools will be adapted (CIAM, NOP portal and possibly CHMI). There will be an impact of Local ASM tools and airspace users system

	processing via B2B the AUP/UUP information.
Service reference	ID A221 - Airspace Management (ASM) Processes ID P3410 - NM B2B ID P3411 - Data distribution ID S334 - Airspace Data Management
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	This FB should be part of the OPT exercise
Documentation publication	The FB will have an impact on the following manuals. Network Operations Handbook: • ATFCM Users Manual • IFPS Users Manual • IFPS Users Manual (annex) Generated errors • Provision of Environment Data • FUA - AMC/CADF Operations Manual User Manuals: • CHMI ASM Function Reference Guide • Flight Progress Messages Document • NOP Portal Users Guide • Re-Routing Opportunities - Information for Airspace Users (CHMI Version) • Re-Routing Opportunities - Information for Airspace Users (NOP Version)
Training sessions	Not expected

5.2.2. NM-05 - NOP Information Services

As the enhancements to the NET tool do not impact external users, the FB692 has been removed from the NM Release Notes.

TB244: NM B2B Publish-Subscribe Queuing and Push-Pull Communication	
Users impacted	U3. Airspace User (Civil) U4. Airspace User (Military) U8. AO or CFSP U10. Non-CDM Airport U13. CDM-Airport U0. Other (specify): Any NM B2B users
Application impacted	A11. NOP B2B
Objective	Provide to the NM B2B Users a "publish-subscribe" mechanism
Description	The current NM B2B architecture is based on the query/reply pattern: Users send a query to NM via B2B and NM replies synchronously. With NM19.0, NM will develop the Publish/Subscribe pattern in support to event-based message exchange: users subscribe to a set of information/events and NM produces and pushes the resulting messages to the subscriber. NM19.0 will mainly cover the technical developments of Publish/Subscribe (it is a TB i.e. Technical Block) and provide only little information (e.g. AIMs,

	regulation updates) on the PRE-OPS platform.
Impact for external users	I3. Impact on clients' systems.
Impact description	Users wanted to make use of the Publish/Subscribe feature will have to adapt their systems. Former Query/Reply mechanism will still be available.
Service reference	ID P3410 - NM B2B
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	The TB will not be part of the NM19.0 OPT.
Documentation publication	NM B2B Documentation.
Training sessions	No training is planned.

5.2.3. NM-08 - Operations Improvements

FB595: NM Airspace Data Publication C&T	
Users impacted	U1. Flow Manager (FMP) U5. ENV data provider U7. Post-ops analyst U13. CDM-Airport U12. Internal NM U14. Air Navigation Service Provider (ANSP)
Application impacted	A1. CHMI A4. CACD A5. Flow management systems (Predict, ETFMS) A6. FPL (IFPS)
Objective	Further align the Airspace Data model with publications, and allow exploitation of this by ETFMS and IFPS.
Description	CR_033060: Manage AIP Homonym Points on single Air Route. CR_033622: Allow collocated Points and Aerodromes. CR_030316: Allow use of L (Left), R (Right) and C (Centre) in Runway identifiers. Allow multiple active Runways.
Impact for external users	I1. Impact on procedures. I3. Impact on clients' systems.
Impact description	Allows more accurate RWY activation, increase in accuracy in profiles and load predictability. Increase in quality of Airspace Data.
Service reference	ID S315 - Load and capacity management ID S334 - Airspace Data Management
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	The inclusion of this FB into the NM19.0 OPT is under assessment.
Documentation publication	ATFCM Users Manual ATFCM Operating Procedures for FMP

	Provision of Environment Data
Training sessions	None

FB603: ATFCM Domain Improvements - CR_038030 and CR_038031

Internal NM

Users impacted	U12. Internal NM
Application impacted	A5. Flow management systems (Predict, ETFMS)
Objective	**CR_038030 – Network Impact Display for Manual Actions** **CR_038031 – Network Impact Display for CWIR** As part of NMPP (Network Strategy Plan also known as Network Performance Plan), NM has an annual target of reducing the en-route ATFM delays by 10%. To achieve this target, different methods of NMOC delay reduction actions were analyzed in several papers and among these, the possibility to evaluate the effect and subsequent alternatives to the flow measures to be applied is essential to propose alternatives that fit the local and Network necessities. The NMOC TACTICAL goal and FMP tactical manager is to be able to identify the Network Effect of Regulations and manual actions on flights. Today, ETFMS provides the necessary tools to evaluate the impact at Network Level (on-load & off-load areas) when a manual action, CWIR or a Group Rerouting is initiated. The impact includes analysis of IFPS errors and impact on entry (hourly) counts. There are also tools to evaluate the ATFM regulations that are connected and/or influencing each other. There is not possibility to evaluate the on-load and off-load areas when manual actions are applied on Occupancy FMPs.
Description	For manual actions on flights and NM What-If rerouting, an extended warning feature will be implemented in the NM Operation Room. The new feature will use information based on peak and sustained capacity values. The feature only involves ETFMS/PREDICTS systems.
Impact for external users	I0. No impact.
Impact description	These CRs will improve the quality of the Network Impact feature of NM operations. Selected FMPs will be contacted to define the NMOC operational procedure. The procedure will be trialed during a period to be confirmed in 2015.
Service reference	ID S315 - Load and capacity management
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	CR_038030 and CR_038031 will not be part of NM19.0 OPT.
Documentation publication	Done via the NM Release Notes
Training sessions	None

FB603: ATFCM Domain Improvements - CR_036504

Users impacted	U3. Airspace User (Civil)

Application impacted	A1. CHMI A2. CIFLO, CIAO A5. Flow management systems (Predict, ETFMS)
Objective	**CR_036504 - Add a comment to the suspension message (FLS) for Cancel DPI** In case of suspension due to a Cancel DPI (FLS Comment – "Suspended by Departure Airport"), the flight will be de-suspended at reception of a DLA/CHG updating the EOBT or a new DPI message updating the TOBT. An A-DPI message will also de-suspend the flight, regardless if a previous DPI message is not sent. The AO is expected to send a DLA/CHG or communicate the updated TOBT with the A-CDM platform. The message will be followed by a SAM (indicating the CTOT) or a DES which indicates the departure requirements. If the flight has already departed, the first received ATC message (DEP/FSA) or the first received CPR will automatically de-suspend the flight.' There is an operational need to prompt the AOs on the actions to be taken. As a result the airspace users awareness will be increased and the help desk queries will be reduced.
Description	In case of suspension due to a Cancel DPI, the comment of the suspension message (FLS) will change from ''Suspended by Departure Airport '' to "Suspended by Departure Airport. Please send DLA/CHG or update TOBT of the flight"
Impact for external users	I1. Impact on procedures. I3. Impact on clients' systems.
Impact description	In case of suspension due to a Cancel DPI, the comment of the suspension message (FLS) will be improved to clarify on the actions to be taken.
Service reference	ID S315 - Load and capacity management
Safety assessment	S5. FB is not Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	CR_036504 will not be part of NM19.0 OPT.
Documentation publication	The following manuals will be updated: - ATFCM Users Manual. - ATFCM Operations Manual.
Training sessions	FMPs and AOs training material will be updated.

FB603: ATFCM Domain Improvements - CR_038008	
Users impact	U1. Flow Manager (FMP) U12. Internal NM
Application impacted	A1. CHMI A2. CIFLO, CIAO A5. Flow management systems (Predict, ETFMS) A10. NOP Portal
Objective	**CR_038008 – Network Multiple Runway Activation** NM19.0 will provide B2B capabilities to external stakeholders (FMP, TWRs). As part of those capabilities, the runway information can be provided via this new channel. It will be possible to send, receive and correctly process

	multiple runway activation information. It is therefore needed to extend B2C (CIFLO/NOP/ETFMS/PREDICT) capabilities to internal NMOC staff and external stakeholders to align with the new service provided via B2B. It is expected to receive more updates on tactical changes which will lead in a more accurate calculation of the flight profiles. The FMP and Tower position will be able to update multiple activations values for airports that operate with multiple runways via CIFLO/NOP.
Description	The change permits to tactically activate two runways for the same period (ex.33 L/R) It is also possible to update the associated parameters Taxi, TIS, TRS, ARR RWY and ARR Taxi values. The feature involves ETFMS/PREDICT/CIFLO/NOP Portal systems. First data will be available with AIRAC 1504 (02/04/2015).
Impact for external users	I2. Impact on Man-Machine interface.
Impact description	These CRs will improve the quality of the tactical data. Profile predictions are updated. Please note that the AIM mechanism remains unchanged.
Service reference	ID S315 - Load and capacity management
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	CR_038008 will be part of NM19.0 OPT.
Documentation publication	Done via the NM Release Notes
Training sessions	Part of the Release training information.

FB665: Support to Flight Efficiency	
Users impacted	U3. Airspace User (Civil)
Application impacted	A5. Flow management systems (Predict, ETFMS) A7. Datawarehouse (NMIR)
Objective	Improve Flight Efficiency performance and monitoring
Description	CR_037133: Enhance the RRP comment to cover Flight efficiency proposals. New comment for Flight Efficiency will be "FLIGHTEFFICIENCY". CR_037135: Post-ops & Quality control improvement. Monitoring of the performance.
Impact for external users	I1. Impact on procedures. I2. Impact on Man-Machine interface. I3. Impact on clients' systems.
Impact description	Client systems will have to identify the new RRP title. External will have to be aware of the RRP being sent for Flight Efficiency purposes. This has already been done in the past.
Service reference	ID A211 - European Route Network Improvement Plan (ERNIP) ID P349 - CHMI (Collaboration Human Machine Interface) Applications
Safety assessment	S6. FB is Safety related
Operational	D1. FB will be deployed in Operation along with the release migration.

deployment plan	
Users' validation	The FB will not be part of the NM19.0 OPT sessions
Documentation publication	Flight Efficiency user's manual Re-Routing Opportunities - Information for Airspace Users (CHMI Version) Re-Routing Opportunities - Information for Airspace Users (NOP Version)
Training sessions	None

FB677: Improve CHMI Services	
Users impacted	U1. Flow Manager (FMP) U7. Post-ops analyst U12. Internal NM
Application impacted	A1. CHMI A2. CIFLO, CIAO A10. NOP Portal
Objective	Improve CHMI features
Description	The two features already exist in CIFLO for current ATFCM. The implementation of similar services in Archive will allow the use of these features for post-ops analysis. **CR_031123: Availability of the intruders in the archive flight lists.** ~~The Monitoring of flight profile are becoming of primary importance for the analysis of traffic complexity that need to be investigated in post-ops in the context of STAM.~~ ~~"Intruders" or deviating flights are flights which were planned in a sector and which appear in a different sector with radar updates (not complying with flight plan). Deviating flights are detected and indicated in the load flight list. The objective of this CR is to implement the same in the archive flight list.~~ The operational and technical analysis of CR_031123 was done during NM18.5; the feature will now be developed to be operational with NM19.5. The Back-End (datawarehouse) implementation was started in NM19.0 and user interface will be done in NM19.5 (cf. FB709). **CR_031146: Access to Flow Counts (Entry and Occupancy) in CIFLO Archive menu** A prototype for giving access to Occupancy Counts via CIFLO (CR_031145) has been provided with NM18.5. CR_031146 is adding flow counts. Occupancy Counts and Flow Occupancy Counts in CIFLO/Archive will be completed with Occupancy Counts flight lists (CR_038906) in a later release.
Impact for external users	I1. Impact on procedures. I2. Impact on Man-Machine interface.
Impact description	The features will modify the interface of CHMI so it may have an impact on some post-ops procedures on the users' side. The impact will nevertheless be reduced as the features already exist for current traffic ("ATFCM" menu in CHMI).
Service reference	ID P349 - CHMI (Collaboration Human Machine Interface) Applications ID S315 - Load and capacity management
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	This FB will be part of NM19.0 OPT session.

Documentation publication	ATFCM USER Reference Guide CHMI ATFCM Reference Guide
Training sessions	The new feature will be added to the CHMI training and refresher course.

FB679: Flight Planning Improvements	
Users impacted	U8. AO or CFSP U10. Non-CDM Airport U13. CDM-Airport U11. ARO U12. Internal NM U14. Air Navigation Service Provider (ANSP)
Application impacted	A6. FPL (IFPS)
Objective	Improve Flight Planning features
Description	• CR_037412: Send copy of ACK message to AO when route changed after MFS/FNM. AO's have asked that they receive the ACK message from IFPS when the route is changed for their Eastbound NAT flights *Change description:* A copy of the ACK message **shall** be sent to the address found in the Copy_ANU attribute associated to the AO when an ATC Change message (ACH), resulting from a Message From Shanwick (MFS), or Flight Notification Message (FNM) indicates that the route has changed from the last filed flight plan in IFPS. • CR_036823: Align IFPS with ICAO Item 15 format for flights changing to VFR (Y flights). After complaints from some ANSPs about wrong syntax of messages distributed by IFPS, and after ICAO have clarified what syntax should be supported, IFPS will be changed. *Change description:* IFPS shall accept a change rule to VFR following a VFR level indicator in the item 15c of ICAO message. IFPS shall automatically output a rule change to VFR when a VFR level has been indicated in an item 15c speed level group when the VFR rule change is missing. • CR_034737: Relax checking of syntax validation outside the IFPS Area. IFPS receives flight plans with parts of the route outside the area of its responsibility (IFPZ), and the NM has no mandate to enforce strict ICAO naming conventions used in areas outside of NM. IFPS today invalidates flight plans even though the point names are outside of the IFPZ. *Change description:* The strict ICAO syntax validations for point names outside the IFPS zone will be replaced with a semantic check based on the complete route. • CR_035746: IFPS profile calculation to check that an RFL change shall be verified that a route is defined for the RFL specified. IFPS currently accepts route segments in which the RFL could not be ever used. The NM has received complaints from ATC that this leads to problems in their control centres. *Change description:* Single or multiple [added after correction I2_100164 in Release Notes v2.3]

	route segments, shorter than 40nm that commence with an RFL change shall be verified that an ATS Route is defined for the RFL specified.
Impact for external users	I3. Impact on clients' systems.
Impact description	ANSP flight plan data processing systems that receive IFPS messages may need to be upgraded to process correctly the change to format for flights changing to VFR (Y flights).
Service reference	ID S323 - Flight Plan pre-validation ID S325 - Flight Plan Processing and Distribution
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. This FB will be deployed in Operation along with the release migration.
Users' validation	This FB will be part of the OPT.
Documentation publication	Network Operations HANDBOOK - IFPS User's Manual
Training sessions	None

5.2.4. NM-09 Performance Programme

FB669: Performance Work Programme	
Users impacted	U7. Post-ops analyst
Application impacted	A7. Datawarehouse (NMIR)
Objective	Align the way of the STAT AUA traffic is computed with the PRU methodology.
Description	In the scope of an alignment with PRU business rules, the way the traffic is counted in the STAT_AUA entities must be aligned. Currently, in some very specific cases, if a flight enters twice in the same airspace on two days, it is counted for each day. The way of the traffic is computed will be modified to avoid these duplicate.
Impact for external users	I0. No impact.
Impact description	None
Service reference	ID A121 - Network Operations Monitoring
Safety assessment	S5. FB is not Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	This FB will not be part of the NM19.0 OPT
Documentation publication	None
Training sessions	None

5.2.5. NM-10 Flight Plan and Flight Data Evolutions

FB672: Extended FPLs and enhanced processing of PTRs	
Users impacted	U1. Flow Manager (FMP) U3. Airspace User (Civil)

	U5. ENV data provider U8. AO or CFSP U11. ARO U12. Internal NM
Application impacted	A1. CHMI A5. Flow management systems (Predict, ETFMS) A6. FPL (IFPS) A11. NOP B2B
Objective	Improve alignment of the AO/CFSP calculated flight trajectory with the IFPS calculated flight trajectory
Description	• Extended Flight Plan (EFPL): It will become possible to validate EFPLs on the IFPUV via B2B, on the PRE-OPS platform (not on the operational platform). The originator of an EFPL will be able to optionally request that the IFPUV reply includes the resultant flight trajectory calculated by the IFPUV using the EFPL data as well as the PTRs applicable to the flight within the IFPUV. The same additional IFPUV Reply information (flight trajectory and PTRs) may also be requested for ICAO FPLs transmitted to the IFPUV via B2B on the PRE-OPS platform. Please note that, in order to submit EFPL to IFPUV via B2B, a NM B2B certificate is mandatory. More information on the way to get access to NM B2B services may be requested at NM.servicerequests@eurocontrol.int. • Enhanced processing of the PTRs: The PTRs available via B2B on the OPS platform, called “LoA PTRs”, are the only PTRs to be used for flight planning purposes. As such the IFPS shall use for flights’ 4D trajectory calculation only those PTRs that are made available via B2B (marked “B2B” in the CACD system). The other PTRs (called “Counts PTRs”) are not for flight planning but rather for flow management purposes; as such they will only be used by the ETFMS.
Impact for external users	I3. Impact on clients’ systems.
Impact description	AO/CFSP would have to update their systems to be able to transmit EFPLs to NM. • Extended Flight Plan (EFPL) will be available only on the NM B2B PRE-OPS platform. • Enhanced processing of the PTRs will be available both on NM B2B OPS and PRE-OPS platforms.
Service reference	ID P3410 - NM B2B ID S323 - Flight Plan pre-validation ID S325 - Flight Plan Processing and Distribution
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users’ validation	Functionalities included in this FB are planned to be available during the OPT session.
Documentation publication	IFPS Users Manual NOP-B2B Reference Manuals
Training sessions	None

5.2.6. NM-11 Airport Programme

FB681: Airport Programme	
Users impacted	U1. Flow Manager (FMP) U3. Airspace User (Civil) U7. Post-ops analyst U8. AO or CFSP U13. CDM-Airport U12. Internal NM U14. Air Navigation Service Provider (ANSP)
Application impacted	A1. CHMI A2. CIFLO, CIAO A4. CACD A5. Flow management systems (Predict, ETFMS) A7. Datawarehouse (NMIR) A10. NOP Portal A11. NOP B2B
Objective	Improved information exchange between NM, AOs and Airports.
Description	**CR_037415 – Improve TOBT and TSAT usage (part 3)** It includes: - validation of the TOBT & TSAT fields - include TOBT & TSAT in EFD message - Show IFPS discrepancy based upon TOBT field (and not on TTOT-TT) The CR will: - Ensure that AOs are presented with more reliable information. - Provide all available info to ANSPs and AOs via data feeds - Ensure consistency between Airport alerts and NM alerts **CR_035327 – Improve acceptance of C-DPI** NM will accept a C-DPI message after DLA message (bug-fix), accept C-DPI before E-DPI and add a reason for the C-DPI. The reason for suspension by the airport will be made clearer to externals for those airports that will provide the information. **CR_033578 – send FUM updates when all data fields change** A FUM will also be sent when the flight is diverted for the first and second time (bug-fix). **CR_035610 – Remove “d” from A/TTOT column in flight list window** Only show the IFPS discrepancy when it is caused by a DPI message. Less discrepancy will be shown and it will be easier for AOs to understand when to take action.
Impact for external users	**CR_037415 – Improve TOBT and TSAT usage (part 3)** I0. No impact. **CR_035327 – Improve acceptance of C-DPI** I0. No impact. **CR_033578 – send FUM updates when all data fields change** I0. No impact. **CR_035610 – Remove “d” from A/TTOT column in flight list window** I0. No impact.
Impact	The CRs will improve the quality and consistency of the messages sent by

description	NM. They will thus have a beneficial impact on stakeholders.
Service reference	ID A121 - Network Operations Monitoring ID P3411 - Data distribution ID P348 - Network Operations Portal ID P349 - CHMI (Collaboration Human Machine Interface) Applications ID S315 - Load and capacity management
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	This FB is not planned to be part of the OPT.
Documentation publication	Network Operations Handbook: • ATFCM Users Manual (to be confirmed) User Manuals: • CHMI ATFCM Reference Guide • DPI Implementation Guide • Flight Progress Messages Document • NOP Portal Users Guide
Training sessions	No specific training session for externals is required.

5.2.7. RD-02 - Airspace Users Operations R&D

FB671: OAT FPL Prototype - 2	
Users impacted	U0. Other (specify): Participants to SESAR exercise
Application impacted	A13. NMVP
Objective	Prepare the NMVP platform for the SESAR exercise VP716.
Description	There are three major objectives that the validation exercise aims to address: • Harmonisation of the military OAT flight plans used in the ECAC member states. • Enable the use of TSAs to be represented in OAT Flight Plans and verify at the network level that only appropriately planned traffic is accepted into these airspaces. • MIL AIS data harmonised by Military Users in accordance with civil conventions.
Impact for external users	I0. No impact.
Impact description	-
Service reference	Not related to an existing service.
Safety assessment	S5. FB is not Safety related
Operational deployment plan	D3. FB will be subject to R&D ops validation (e.g. SESAR).
Users' validation	SESAR exercise VP716 – Q1 2015.
Documentation publication	Documentation related to SESAR activities.
Training sessions	None.

5.2.8. RD-03 - DCB R&D

FB615 - Interoperability with local ATC Planning tools – CR_038206, CR_038213, CR_038214	
Users impacted	U0. Other (specify): VP700 exercise participants
Application impacted	A5. Flow management systems (Predict, ETFMS) A11. NOP B2B
Objective	FB615 will implement the necessary web services to support the following UC (Use Case) from the dDCB Concept of operation: • UC001: Initiator FMP defines and monitors hotspot • UC002: Initiator FMP elaborates STAM proposal and initiate collaboration • UC003: FMP,AO, Tower and NM collaborate to the STAM decision process • UC004: Initiator FMP monitors implementation of STAM by implementer
Description	FB140 (NM17.5) and FB625 (NM18.0) provided user interface to manage STAM measures, assess their impact and support the CDM process. FB615 will provide B2B capabilities to STAM: • CR_038206: Export via B2B STAM-related airspace data • CR_038213: Flights for STAM via B2B • CR_038214: Measures editor The features will be available only for VP700 exercise participants, on a case by case basis. They are not planned to be available yet for usual B2B users. CR_038211 and CR_038215 will be implemented with NM19.0.1 in June 2015.
Impact for external users	I3. Impact on clients' systems.
Impact description	VP700 participants will have to adapt their local tools to be able to use the B2B features developed in FB615.
Service reference	ID P3410 - NM B2B
Safety assessment	S6. FB is Safety related
Operational deployment plan	D3. FB will be subject to SESAR Validation.
Users' validation	A SESAR Validation VP700 will take place second quarter 2015
Documentation publication	NM B2B Services documents will be updated
Training sessions	No training is planned

FB615 - Interoperability with local ATC Planning tools - CR_038207, CR_038208, CR_038209, CR_038210, CR_038212, CR_038218	
Users impacted	U1. Flow Manager (FMP) U2. Airspace Manager (AMC) U8. AO or CFSP U10. Non-CDM Airport U13. CDM-Airport U14. Air Navigation Service Provider (ANSP)

	U0. Other (specify): Any NM B2B users
Application impacted	A5. Flow management systems (Predict, ETFMS) A11. NOP B2B
Objective	Provide additional data via B2B and give the possibility for some users to update some of them
Description	The FB will provide access via B2B to the following data, with the possibility for the users to update some of them via B2B. Features will be available on PRE-OPS platform; availability on OPS platform will be confirmed in next editions of the Release Notes. Access to the features below will depend on the NM B2B profile of the user. • CR_038207: Sector configuration updates • CR_038208: Capacity updates • CR_038209: Traffic Volume activation updates • CR_038210: OTMV updates • CR_038212: Entry counts (with flows), Occupancy counts (with flows) • CR_038218: Runway configuration updates via B2B
Impact for external users	I3. Impact on clients' systems.
Impact description	The FB will deliver additional features via B2B. Users may decide to use them or not.
Service reference	ID P3410 - NM B2B
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	The FB is planned to be available on the B2B PRE-OPS platform few weeks before the Release migration. It may be part of the NM19.0 OPT.
Documentation publication	NM B2B Services documents will be updated
Training sessions	No training is planned

5.2.9. STANDALONE CRs or I2s

I2_098549: Modification in the "STAY" field of the EFD message	
Users impacted	U8. AO or CFSP U13. CDM-Airport U14. Air Navigation Service Provider (ANSP)
Application impacted	A5. Flow management systems (Predict, ETFMS)
Objective	Correct the STAY field content of EFD messages.
Description	A problem in the STAY field of the EFD messages has been identified. The STAY field may be included in an EFD message if the flight is planned to enter a holding. The currently implementation in the EFD message is not in accordance with the official ADEXP syntax. Current implementation is STAY0x (x being a figure from 0 to 9), for example STAY04. This will be corrected with NM19.0 and the official syntax will be used: The official syntax of the STAY field is STAYx (x being a figure from 0 to 9,

	see ADEXP standard document version 3.1), for example STAY4 or STAY5. ADEXP standard document version 3.1 is available at: https://www.eurocontrol.int/articles/ats-data-exchange-presentation-adexp-specification
Impact for external users	I3. Impact on clients' systems.
Impact description	Users receiving EFDs message may have to adapt their software so that the "STAY" field will be correctly parsed by their systems.
Service reference	ID P3411 - Data distribution
Safety assessment	S7. Bug fixing (I2)
Operational deployment plan	D1. I2 will be deployed in Operation along with the release migration.
Users' validation	None
Documentation publication	The available documentation (Flight Progress Message Document) is correct and does not have to be updated.
Training sessions	Not applicable

5.3. RELEASE NM19.5

5.3.1. NM-02 - Airspace Management and AFUA

FB678: AFUA Ops Improvements	
Users impacted	U2. Airspace Manager (AMC) U4. Airspace User (Military) U5. ENV data provider U12. Internal NM
Application impacted	A3. CIAM A4. CACD A12. ASM Tools
Objective	Improve quality and dynamic process of ASM airspace data management
Description	The FB will improve the cross-check of areas activation to provide a warning in CIAM in case of simultaneously (time overlapping) allocation of two or more RSAs insisting on same airspace volumes
Impact for external users	I1. Impact on procedures. I2. Impact on Man-Machine interface. I3. Impact on clients' systems.
Impact description	Local ASM tools shall detect overlapping (time/space) areas requests before issuing AUP/UUP.
Service reference	ID A121 - Network Operations Monitoring ID A221 - Airspace Management (ASM) Processes ID P3410 - NM B2B ID P3411 - Data distribution ID S334 - Airspace Data Management
Safety assessment	S4. Safety assessment on-going
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	The FB will not be part of the Release OPT session.
Documentation publication	CHMI ASM Function Reference Guide
Training sessions	None

5.3.2. NM-05 - NOP Information Services

v2.3: TB245 has been removed from NM19.5 due to performance issues.

~~TB245: FPL distribution via B2B Publish/Subscribe~~	
Users impacted	~~U1. Flow Manager (FMP)~~ ~~U3. Airspace User (Civil)~~ ~~U4. Airspace User (Military)~~ ~~U8. AO or CFSP~~ ~~U10. Non-CDM Airport~~ ~~U13. CDM-Airport~~ ~~U11. ARO~~ ~~U14. Air Navigation Service Provider (ANSP)~~ ~~U0. Other (specify): Any B2B user~~
Application impacted	~~A11. NOP B2B~~
Objective	~~Provide flight plan data via B2B Publish / Subscribe~~

Description	~~With this TB, NM will publish flight plan data via B2B Publish/Subscribe using the NM B2B structured format used already for existing Request/Reply services.~~ ~~The feature will be available on the OPS platform.~~ ~~After NM19.5 migration, the access to this feature will be allowed on a case-by-case basis following a request to NM (eMail to NM.servicerequests@eurocontrol.int).~~
Impact for external users	~~I0. No impact.~~
Impact description	~~Current FPL distribution via AFTN as well as FPL access via NM B2B Request/Reply will continue after NM19.5: this TB is providing users with an additional (and convenient) way to getting FPL data.~~
Service reference	~~ID P3410 - NM B2B~~
Safety assessment	~~S6. FB is Safety related~~
Operational deployment plan	~~D1. FB will be deployed in Operation along with the release migration.~~
Users' validation	~~This TB will not be part of the NM19.5 OPT session.~~
Documentation publication	~~NM B2B Web Services documentation will be updated accordingly.~~
Training sessions	~~None~~

CR_039160: Publish e-AMI via B2B Publish/Subscribe	
Users impacted	U1. Flow Manager (FMP) U2. Airspace Manager (AMC) U3. Airspace User (Civil) U4. Airspace User (Military) U8. AO or CFSP U11. ARO U14. Air Navigation Service Provider (ANSP)
Application impacted	A11. NOP B2B
Objective	Publish e-AMI messages via B2B Publish/Subscribe
Description	The e-AMI is a machine readable version of the consolidated European AUP/UUP. It is currently made available in B2B in a request/reply mode. NM20.0 will provide it via B2B Publish/Subscribe on top of request/query mode. There will be no filtering: the customer application subscription concerns all the EAUP/EUUPs that are published by CADF. The feature will be available on B2B OPS and PREOPS.
Impact for external users	I0. No impact.
Impact description	The CR will provide an additional way of retrieving e-AMI message; current way of retrieving them will remain. It is up to the user to decide to use it or not.
Service reference	ID P3410 - NM B2B
Safety	S5. FB is not Safety related

assessment	
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	The CR will not be part of the NM19.5 OPT session.
Documentation publication	NM B2B webservices will be updated.
Training sessions	No training is planned

5.3.3. NM-08 - Operations Improvements

FB559: FPL management and FPL filing via the NOP Portal	
Users impacted	U3. Airspace User (Civil) U4. Airspace User (Military) U8. AO or CFSP U11. ARO U14. Air Navigation Service Provider (ANSP)
Application impacted	A6. FPL (IFPS) A10. NOP Portal
Objective	This FB will provide via the protected NOP Portal the possibility to authenticated users to manage Flight Plans
Description	Users having access to restricted NOP Portal will be able to: • See the history of filing events, and see flight plan details; • Submit FPLs to NM; • Manage the FPLs they submit; • Manage the FPLs they received delegation for. Users will be able in particular to manage the DLA (Delay), CNL (Cancel) or CHG (Change) to the FPLs. Please note that users need access to the Protected NOP Portal (with a token) to be able to use these new features. To get this access: NM.serviceequests@eurocontrol.int The feature will not be accessible via the Public NOP Portal. The following user roles will be able to perform the majority of actions on flights: AO, ARO, Handling Agents & TWR. Users with the role TWR will be able to submit DEP and ARR messages. Users will be able to file any type of flight plan that is currently accepted today by IFPS via SITA/AFTN. There will be no ORGN/ in the flight plan if a SITA/AFTN address is not provided (same as today for B2B and RPL filing).
Impact for external users	I1. Impact on procedures.
Impact description	Procedures may include the possibility to file a FPL or manage flights using the NOP Portal.
Service reference	ID P348 - Network Operations Portal ID S323 - Flight Plan pre-validation ID S325 - Flight Plan Processing and Distribution
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration. Nota: The "FPL management and FPL filing via the NOP Portal" feature (FB559) will be available as from the 27/10/2015 20:00 UTC. (IFPS migration

	must be achieved first before enabling FB559).
Users' validation	FB559 will be part of the NM19.5 OPT session.
Documentation publication	• IFPS User's Manual. • NOP on-line help
Training sessions	Non planned

FB695: Airspace Data Domain improvements	
Users impacted	U1. Flow Manager (FMP)
Application impacted	A4. CACD A6. FPL (IFPS)
Objective	Allow Clusters to be IFPS addressed individually (a cluster is a group of sectors belonging to the same AUA).
Description	CR_033046: Until NM19.5, clusters could not be addressed separately. With NM19.5, each cluster can have its own address. CR_033231: Point to Airspace relationship also works with Clusters
Impact for external users	I1. Impact on procedures.
Impact description	Users can define different addresses for each cluster
Service reference	ID S325 - Flight Plan Processing and Distribution
Safety assessment	S5. FB is not Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	This FB will not be part of the Release OPT.
Documentation publication	ADS OPS Manual will be updated
Training sessions	None

FB710: Flights Pushed into a closed area **CR_038806: Visibility of Flight Last Validity Time**	
Users impacted	U1. Flow Manager (FMP) U3. Airspace User (Civil) U8. AO or CFSP U11. ARO U12. Internal NM
Application impacted	A1. CHMI A2. CIFLO, CIAO A5. Flow management systems (Predict, ETFMS) A10. NOP Portal
Objective	Today there is not an indication of the time risk level of a delay on the EOBT/ETOT that could invalidate the flight plan. The delay value would invalidate the flight plan can be very useful to improve aircraft operators awareness and hence their operations. Giving visibility of the Last Valid take-off time associated with the flight

	improves CDM. An improved operational awareness for the airspace users is also achieved. The improvement in this area would help airspace users to: 1. Utilise more CDR routes 2. Anticipate a possible rejection due delay as the Last Validity (Time) would be visible and integrated in operational procedures to trigger ad-hoc actions and by issuing crew with a secondary plan 3. Reduces delays incurred by airspace closure 4. Improved flight efficiency and use of available airspace.
Description	ETFMS / CHMI / NOP Portal will be improved presenting the Last Valid take-off time information. The NEW field Last Validity (LV) will be presented in the following displays: • NOP Portal/CHMI Flight List • NOP/CHMI ARCID list • NOP/CHMI Flight Details • CHMI Suspended Flight List • NOP Measure Editor Flight List The Flight List will present a NEW column Last Validity (LV) after the "IOBT" column. The field will be populated with a time format value (hh:mm). The Flight Details display will present the NEW field Last Validity (LV) in the Time group. The field will be populated with a time format value (hh:mm). The Last Validity (LV) will present the following characters before the time value: • "+ if the validity presented is 4h – ETFMS does not scan validity further. • "<" if the validity time is exactly the one presented and is lower than 4h. • "?.." if the validity has not been computed for the flight. Note: Before NM 19.5 Release, the Validity Period presented on rerouting proposals was computed taking the TTOT as reference. Together with the Last Validity improvement, the Validity Period of the rerouting proposals has been aligned and computed taking OBT as reference. The ADEXP field "-TOTLIMIT -VALPERIOD <time period string>" is therefore replaced by the field "-OBTLIMIT -VALPERIOD <time period string>" in the RRP and RRN messages.
Impact for external users	I1. Impact on procedures. I2. Impact on Man-Machine interface.
Impact description	• Users may have to update their procedures to take benefit of the Last Validity information. • The CR will slightly modify the current user interfaces (NOP Portal and CHMI), by adding a new column (in the lists) or a new field (in the details)
Service reference	ID P348 - Network Operations Portal ID P349 - CHMI (Collaboration Human Machine Interface) Applications
Safety assessment	S5. FB is not Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.

Users' validation	The CR output is planned to be part of the NM19.5 OPT session.
Documentation publication	NM Release Notes NOP Portal Users Guide
Training sessions	Part of the Release training

FB710: Flights Pushed into a closed area **CR_037413: Regulated Flights not pushed into closed areas. New CTOT Limit information field**	
Users impacted	U1. Flow Manager (FMP) U3. Airspace User (Civil) U8. AO or CFSP U11. ARO U12. Internal NM
Application impacted	A1. CHMI A2. CIFLO, CIAO A5. Flow management systems (Predict, ETFMS) A10. NOP Portal
Objective	The first objective of the change is to improve ETFMS to be able to regulate flights without generating IFPS violations. The second objective is to improve the information displayed in external interfaces on the type of CTOT allocation limit put in place by ETFMS. Today CHMI / NOP Portal only present information on the (manual) forced state of a flight. The change will present all the reasons why a slot is limited by ETFMS.
Description	ETFMS will allocate the flights not being pushed into closed areas. The advantages of the change are: • The previous (cumbersome) procedure to solve regulated flights pushed into violations does not need to be followed anymore. • Delays and flight efficiency impact reduction. The regulated flights that are placed by ETFMS avoiding the violation period will be marked for external and internal stakeholders in order to improve visibility and operational awareness. ETFMS / CHMI / NOP Portal displays will clearly indicate whenever the slot given by ETFMS has been limited and the reason for the limitation. Following Displays will indicate that a CTOT Limit (CL) has been put in place: • ETFMS/NOP/CHMI flight list • NOP/CHMI ARCID list • NOP Measure Editor flight list • NOP/CHMI Flight Details The flight lists and the flight details displays will present the NEW column "CTOT Limit" (CL) where the current "M" column appears. The field will be populated with the following values: • "V" if the CTOT has been limited to avoid violations. • "X" if the CTOT has been limited to avoid violations and additional Zero rate / RVR constraints. • "f" if the flight has been manually forced. • "s" if the flight has been forced as part of a STAM measure. • " " (empty) if the CTOT has not been limited by particular reasons.

	Note that the NEW column “CTOT Limit” (CL) replaces and completes the information given by the previous column “Manually Forced” (‘M’ which presented Y/N as possible values). The Flight Details display will present the NEW field in Time Group – with the Static text CTOT Limit. The field will be populated with the values presented in the above paragraph (“V”, “X”, “f”, “s”, “ “).
Impact for external users	I2. Impact on Man-Machine interface. I3. Impact on clients’ systems.
Impact description	• Users may have to update their procedures to take benefit of the Last Validity information. • The CR will slightly modify the current user interfaces, by ~~adding a new column~~ integrating more information in a renamed column (M column to CL column in the lists) or a new field (in the details)
Service reference	ID P348 - Network Operations Portal ID P349 - CHMI (Collaboration Human Machine Interface) Applications
Safety assessment	S5. FB is not Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users’ validation	The CR output is planned to be part of the NM19.5 OPT session.
Documentation publication	NM Release Notes NOP Portal Users Guide
Training sessions	Part of the Release training

v2.3: CR_038034 has been removed from NM19.5 due to performance issues.

~~CR_038034: Deploy CSST in the NOP Portal~~	
Users impacted	~~U8. AO or CFSP~~
Application impacted	~~A9. CSST~~ ~~A10. NOP Portal~~
Objective	~~Bring CSST in line with NM methodology of making NM applications available in one location.~~
Description	~~CSST will be incorporated into the Protected NOP Portal.~~ ~~The current stand-alone link will not remain available and will be decommissioned with release NM19.5.~~ ~~Communication will be done via the usual pre-release mail to CSST users and a second mail on the migration date.~~
Impact for external users	~~I1. Impact on procedures.~~
Impact description	~~Access to CSST will be directly from the (restricted) NOP Portal. Users’ procedures mentionning the old URL will have to be updated. The current stand-alone link will not remain available and will be decommissioned with release NM19.5.~~ ~~User’s existing token is already (Protected) NOP Portal enabled so no change will be required to get acces to CSST via the NOP Portal.~~
Service reference	~~ID S321 - CSS Service - Call Sign Similarity Service~~
Safety assessment	~~S5. FB is not Safety related~~
Operational	~~D1. FB will be deployed in Operation along with the release migration.~~

deployment plan	
Users' validation	~~The FB will not be part of the NM19.5 OPT.~~
Documentation publication	~~CSST User Guide will be updated.~~
Training sessions	~~Not applicable~~

5.3.4. NM-09 - Performance Programme

FB709: Performance Work Programme	
Users impacted	U7. Post-ops analyst
Application impacted	A7. Datawarehouse (NMIR)
Objective	ATFM compliance changes are required to enable NM and accountable entities to perform the analysis and reporting to European Commission required by the ATFM regulation and ATFCM Manual.
Description	3 new NMIR reports will be available in the "ATFM Compliance - Weekly monitoring" document : • ATFM Exemption monitoring • Missing flight Plans • Multiple Flight Plans They will complete the document related to the ATFM Compliance.
Impact for external users	I0. No impact.
Impact description	No impact
Service reference	ID A121 - Network Operations Monitoring
Safety assessment	S5. FB is not Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	The FB will not be part of the NM19.5 OPT.
Documentation publication	No documentation.
Training sessions	No training.

FB709: Performance Work Programme - CR_031123	
Users impacted	U1. Flow Manager (FMP) U7. Post-ops analyst U12. Internal NM
Application impacted	A1. CHMI A2. CIFLO, CIAO A10. NOP Portal
Objective	Provide the intruders in the CHMI or NOP Portal archive flight lists.
Description	**CR_031123: Availability of the intruders in the archive flight lists. (included in CR_038011)** The Monitoring of flight profile are becoming of primary importance for the analysis of traffic complexity that need to be investigated in post-ops in the context of STAM.

	"Intruders" or deviating flights are flights which were planned in a sector and which appear in a different sector with radar updates (not complying with flight plan). Deviating flights are detected and indicated in the load flight list. The objective of this CR is to implement the same in the archive flight list. The column "Origin" (with the ATC sector in which the deviation that caused the intrusion was initiated) will also be added in the ATFCM flight list. The operational and technical analysis of CR_031123 was done during NM18.5; the Back-End (datawarehouse) implementation was started in NM19.0 (FB677) and the user interface (NOP Portal and CHMI) will be developed and operational with NM19.5.
Impact for external users	I1. Impact on procedures. I2. Impact on Man-Machine interface.
Impact description	The features will modify the interface of CHMI or NOP Portal so it may have an impact on some post-ops procedures on the users' side. The impact will nevertheless be reduced as the features already exist for current traffic ("ATFCM" menu in CHMI).
Service reference	ID P349 - CHMI (Collaboration Human Machine Interface) Applications ID S315 - Load and capacity management
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	This CR is planned to be part of the NM19.5 OPT session.
Documentation publication	CHMI ATFCM Reference Guide NOP Portal Users Guide
Training sessions	The new feature will be added to the CHMI training and refresher course.

FB709: Performance Work Programme - CR_039208	
Users impacted	U1. Flow Manager (FMP) U7. Post-ops analyst U12. Internal NM
Application impacted	A1. CHMI A2. CIFLO, CIAO
Objective	Add registration column in CHMI Flight Lists
Description	A column named "RM" will be added to the CHMI ATFCM, CHMI Predict and CHMI Archive flight lists. The column will contain the registration of the aircraft.
Impact for external users	I1. Impact on procedures. I2. Impact on Man-Machine interface.
Impact description	The features will modify the interface (flight lists) of CHMI so it may have an impact on some procedures on the users' side.
Service reference	ID P349 - CHMI (Collaboration Human Machine Interface) Applications ID S315 - Load and capacity management
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	This CR is planned to be part of the NM19.5 OPT session.
Documentation	CHMI ATFCM Reference Guide

publication	
Training sessions	The new feature will be added to the CHMI training and refresher course.

5.3.5. NM-10 - Flight Plan and Flight Data Evolutions

CR_039943: Creation of new type of monitorable traffic volume	
Users impacted	U12. Internal NM
Application impacted	A5. Flow management systems (ETFMS)
Objective	Objective is to address the users' need of reflecting controller workload for flights that are climbing outside the sector controlling the flight. This is thus addressing the use of the Count PTRs.
Description	The activation of TVs based on a sector in an included flow provides FMPs with an additional 'tool' to tune traffic counts without modifying flight profiles. This caters for coordinated removal of some of the counts PTRs. However, the implementation of the change does not remove count PTRs automatically. This is an additional capability within existing procedures.
Impact for external users	I0. No impact.
Impact description	No impact
Service reference	ID S334 - Airspace Data Management
Safety assessment	S5. not Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	None
Documentation publication	None
Training sessions	None

5.3.6. NM-11 - Airport Programme

FB699: Airport Programme	
Users impacted	U7. Post-ops analyst U10. Non-CDM Airport U13. CDM-Airports U12. Internal NM
Application impacted	A5. Flow management systems (Predict, ETFMS)
Objective	The FUM are currently being sent 3 hours before the ELDT at the earliest. Airports have requested an improvement in FUM distribution by being informed via a FUM message as soon as the flight is reported as airborne to the NMOC (through e.g. ICAO DEP message, APR, etc.) This change will result in: • Improved predictability for airports of the inbound flights; • Improved airport operations resulting from an earlier availability of the ELDT of airborne inbound flights; • Improved integration of airports within the network.

Description	(CR_037421) The initial FUM message will be sent by NMOC when the flight is ATC Activated (AA), even when the ELDT is more than 3 hours in the future. Subsequent FUM updates will be sent in accordance with existing rules. This requirement particularly concerns long-haul flights departing from outside the NM area, but will be applied to all flights.
Impact for external users	I2. Impact on Man-Machine interface. I3. Impact on clients' systems.
Impact description	Users need to adapt their systems and HMIs in order to be able to accept FUM messages more time in advance before the estimated landing time. While the change required is not significant, it does need to be verified by individual FUM receivers.
Service reference	ID P3411 - Data distribution
Safety assessment	S6. FB is Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	The inclusion of the FB699 into the NM19.5 OPT is under evaluation.
Documentation publication	• FUM Implementation Guide • Flight Progress Messages
Training sessions	None

FB707: File DLA on behalf of AO based upon DPI data fields	
Users impacted	U3. Airspace User (Civil) U7. Post-ops analyst U8. AO or CFSP U12. Internal NM
Application impacted	A1. CHMI A5. Flow management systems (Predict, ETFMS) A6. FPL (IFPS) A10. NOP Portal A11. NOP B2B
Objective	For A-CDM airports, AOs can request NMOC to file DLA messages on their behalf based on DPI messages (A-CDM data). The benefits are the following: • Reduce workload for the AOs by automating the filing of the DLA message to reflect the new EOBT. • Less workload for the AOs Ops centres at the CDM airport due to the reduction of error/warning messages. • No need for the Aircraft Operator to do a double input i.e. into the CDM system and filing a DLA message to IFPS. • The delay will be communicated more quickly to the other stakeholders, increasing the flight plan accuracy for en-route ACCs and airports of destination. **Note: This is an optional service for AOs.**
Description	If requested by an AO and available in the DPI message, ETFMS will file the DLA message to IFPS based on the TOBT. ETFMS will no longer show the Discrepancy flags on CHMI/NOP portal and no relevant alert will be raised from the Airport CDM platform to the AO.

	This may be requested per AO or per CDM Airport. The automatic DLA filing will be triggered when TOBT >= (EOBT + 5min/15min [option for AOs]). The AOs can request to be notified when a DLA message has been sent on its behalf and the NMOC (IFPS) can send a ~~Long-ACK~~ ORM in that case. Note that IFPS will process the DLA in the same way as when the DLA were received from the AO directly. The AO remains responsible for dealing with flights outside of the NMOC area. All requests related to this feature can be made at the following e-mail address: airport-cdm@eurocontrol.int NM will contact the AOs that have already shown an interest in the feature and will inform the AO community of the new available feature via appropriate fora (e.g. AOG).
Impact for external users	I1. Impact on procedures. I2. Impact on Man-Machine interface.
Impact description	The AO shall inform NMOC (via eMail to airport-cdm@eurocontrol.int) for which CDM Airport(s) it delegates the filing of DLA messages to the NMOC. The CDM Airport shall inform its AO customers when the new service becomes available in NMOC. Important note: The CDM Airport shall provide the TOBT in the DPI messages. As long as no TOBT is in the DPI messages, this service is not available for departure airports. ~~The FB will have minor impact on CHMI/Portal/B2B to support new ETFMS message kind (DLA).~~ [removed as redundant with next paragraph] At the interface level, an additional message will be shown in the OPLOG of ETFMS, which is accessible through CHMI, NOP Portal and NOP B2B. This change simplifies the procedures for AOs.
Service reference	ID S315 - Load and capacity management
Safety assessment	S5. FB is not Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the release migration.
Users' validation	No OPT is planned for this FB
Documentation publication	• ATFCM Users Manual • ATFCM Operations Manual • CHMI ATFCM Reference Guide • DPI Implementation Guide • NOP Portal User Guide
Training sessions	AOs need to inform and train their flight operations.

5.3.7. STANDALONE CRs or I2s

CR_037910: Create an interface to submit AIREPs via the NOP Portal	
Users impacted	U1. Flow Manager (FMP) U3. Airspace User (Civil) U6. Management (eg crisis management, performance management) U8. AO or CFSP U9. CAA, EASA

	U14. Air Navigation Service Provider (ANSP) U0. Other (specify): MET provider services, ICAO and VOLCEX participants
Application impacted	A10. NOP Portal A0. Others (specify): More specifically, this CR improves the EVITA Interface of the NOP Portal.
Objective	The final objective of this CR is to provide pilots' information from the air to the users, expediting the AIREP access to AOs who intend to fly through the airspace affected by the crisis.
Description	As a result of this CR and with initial usage for ICAO exercise VOLCEX (planned in April 2016), NM stakeholders will be able to submit to NM the AIREPs (pilots' air reports) received in the event of a Volcanic Ash occurrence. The AIREPs will then be shared with the agreed stakeholders. NM stakeholders will also be able to list and browse the already submitted AIREPs. Users that will be able to submit AIREPs via the NOP Portal are Airspace users and Air Navigation Service Providers.
Impact for external users	**For users participating to the VOLCEX exercise:** I1. Impact on procedures. I2. Impact on Man-Machine interface. **For users not participating to the VOLCEX exercise:** I0. No impact.
Impact description	Participants in VOLCEX will try this functionality and will receive from the exercise organizer in due time and by the usual communication means, more details on the interface and the associated usage procedures.
Service reference	The interface is developed in the context of NM activities in the Network crisis management domain (http://www.eurocontrol.int/nm-services/175) and is related to: ID A131 - EACCC - European Aviation Crisis Coordination Cell
Safety assessment	S5. FB is not Safety related
Operational deployment plan	D2. FB will be subject to a Pilot Phase (the VOLCEX exercise) followed by a Go/NoGo decision for ops deployment after Release Migration.
Users' validation	This CR will be validated during the VOLCEX exercise.
Documentation publication	Participants in VOLCEX will receive from the exercise organizer in due time and by the usual communication means more details on the related documentations.
Training sessions	Participants in VOLCEX will receive from the exercise organizer in due time and by the usual communication means more details on the training programme, i.e. the training documentation and support, and the related links for access.

5.4. NOP INCREMENT NM19.5.1

5.4.1. NM-05 - NOP Information Services

FB727 - Network Events Tool Phase 5a

Users impacted	U1. Flow Manager (FMP) U3. Airspace User (Civil) U4. Airspace User (Military) U10. Non-CDM Airport U13. CDM-Airport U12. Internal NM U14. Air Navigation Service Provider (ANSP) U0. Other (specify): Users of the Network Events Tool
Application impacted	A10. NOP Portal
Objective	Further development of the Network Events application, addressing usability improvements (e.g. Calendar view, locations description) as well as additional functionality (e.g. additional Search criteria).
Description	**CR_040009 - Calendar Main View** • The application will display the location of every event in Calendar/Day (List) view in all tabs (STRATEGIC, PRE-TACT, TACT, POST-OPS). • The location of every event in Calendar/Day (List) view will be presented in first position, before the event name. • The application will display only the ICAO code of the event location(s) in Calendar/List main view. • The application will provide filters for the four types of events in the Calendar/Day (List) view. • In the Calendar/Day (List) view the events that start on that day will be displayed visually different (in Italics) than those on-going on that day. **CR_040010 - Locations Improvements** • Addition of IATA 3 letter code to aerodrome locations in various views Network Events views (List view, Event view, Calendar view, etc.); this accommodates users who are more used to IATA codes. • The locations listed in the drop down list (field) will be sorted alphabetically by ICAO code, showing first the ECAC countries/entities, then the rest of the World. • The locations selection at event/activity/impact level will be supported by a sequence of selection boxes, to be activated according to the user needs. • The location will be displayed by string of components consisting of ICAO Code - IATA Code (if applicable) - ISO 3 letter code (if applicable) - ISO 2 letter code (if applicable) - Location Name(s) - (location type). • The application will allow query by implicit location(s). • The FAB Location will be displayed by the following string of components: Formal (5 letters) code - FAB name - (location type). **CR_040017 - Search Feature Refinements** • The SEARCH view will allow a user to search by event sub-type. • The tool will highlight visually the word/string/selected criteria in Search results (LIST on screen, VIEWER).

	• Search Reports will be generated / downloadable in RTF format in addition to csv. **CR_040019 - DDR2: Data Provision to DDR** The Network Events application will provide daily a copy of all events stored in the NET to DDR2 application. **CR_040013 - Viewer Enhancements** • The Viewer will allow the user to hide/unhide empty fields (which contain no information). • The Viewer will show the text "no input" in every field that is empty. • The Event Viewer will provide information about date and time when it is open and printed.
Impact for external users	I1. Impact on procedures. I2. Impact on Man-Machine interface.
Impact description	Interface of the tool will be modified to accommodate the new features. This may have an impact on users' procedures.
Service reference	ID P348 - Network Operations Portal
Safety assessment	S5. FB is not Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the NOP Increment migration.
Users' validation	There is no OPT session planned for NM19.5.1.
Documentation publication	NOP Portal Users guide will be updated.
Training sessions	No dedicated training.

5.4.2. NM-08 - Operations Improvements

CR_038034: Deploy CSST in the NOP Portal	
Users impacted	U8. AO or CFSP
Application impacted	A9. CSST A10. NOP Portal
Objective	Bring CSST in line with NM methodology of making NM applications available in one location.
Description	CSST will be incorporated into the Protected NOP Portal (https://www.nm.eurocontrol.int/PORTAL/gateway/spec/index.html). The current stand-alone link will not remain available and will be decommissioned with the NOP Increment NM19.5.1. Communication will be done via the usual pre-migration mail to CSST users and a second mail on the migration date.
Impact for external users	I1. Impact on procedures.
Impact description	Access to CSST will be directly from the (restricted) NOP Portal. Users' procedures referring to the old URL will have to be updated. The current stand-alone link will not remain available and will be decommissioned with the NOP Increment NM19.5.1. User's existing token is already (Protected) NOP Portal enabled so no change will be required to get acces to CSST via the NOP Portal.
Service reference	ID S321 - CSS Service - Call Sign Similarity Service

Safety assessment	S5. FB is not Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the NOP Increment migration.
Users' validation	There is no OPT session planned for NM19.5.1.
Documentation publication	CSST User Guide will be updated.
Training sessions	Not applicable

CR_040226: FPL management via the NOP Portal - Structured FPL filing to include Field 19 data	
Users impacted	U3. Airspace User (Civil) U4. Airspace User (Military) U8. AO or CFSP U11. ARO U14. Air Navigation Service Provider (ANSP) U0. Other: Any user of the "FPL management via the NOP Portal" feature
Application impacted	A10. NOP Portal
Objective	Enable the FPL Field 19 (Supplementary information) data in structured submission of FPL via the NOP Portal.
Description	The "FPL management via the NOP Portal" implementation in NM19.5 (FB559) included FPL submission of Field 19 data in the free-text submission, but not in the structured submission. With this CR, it will be possible to submit a structured flight plan message via the NOP Portal that includes Field 19 data.
Impact for external users	I1. Impact on procedures.
Impact description	Procedures may include the possibility to fill-in a FPL or manage flights using the NOP Portal. They may have to be adapted to take benefit of this new feature.
Service reference	ID P348 - Network Operations Portal ID S323 - Flight Plan pre-validation ID S325 - Flight Plan Processing and Distribution
Safety assessment	S5. FB is not Safety related
Operational deployment plan	D1. FB will be deployed in Operation along with the NOP Increment migration.
Users' validation	There is no OPT session with NOP Portal increment.
Documentation publication	• NOP on-line help
Training sessions	No dedicated training.

6. DOCUMENTATION

Network Operations handbook	
ATFCM Users Manual	http://www.eurocontrol.int/sites/default/files/content/documents/nm/network-operations/HANDBOOK/atfcm-users-manual-current.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-current.pdf
IFPS Users Manual	http://www.eurocontrol.int/sites/default/files/content/documents/nm/network-operations/HANDBOOK/ifps-users-manual-current.pdf Flight Plan guide: https://contentzone.eurocontrol.int/fpl/default.aspx
IFPS Users Manual (annex) Generated errors	http://www.eurocontrol.int/sites/default/files/content/documents/nm/network-operations/HANDBOOK/ifps-annex-generated-errors-current.pdf Web version: https://contentzone.eurocontrol.int/fpl/errorSearch.aspx

7. ABBREVIATIONS

AA	ATC Activated
ACC	Area Control Centre or Area Control
A-CDM	Airport-Collaborative Decision Making
ACH	ATC flight plan Change
ACK	IFPS Acknowledgement Message
ADEXP	ATS Data Exchange Presentation
A-DPI	Airport-Departure Planning Information
ADS	Airspace Data Service
AFTN	Aeronautical Fixed Telecommunication Network
AFUA	Advanced Flexible Use of Airspace
AIM	Air Traffic Flow Management Information Message
AIP	Aeronautical Information Publication
AIRAC	Aeronautical Information, Regulation and Control
AIREP	Air-Report (ICAO)
AIS	Aeronautical Information Services
AMC	Airspace Management Cell
ANSP	Air Navigation Service Provider
AO	Aircraft Operator
AOG	Airline Operations Group
AOLO	Aircraft Operators Liaison Officer
AOP	ATM Operations Plan
APOC	Airport Operations Centre
APR	Aircraft Position Report
ARCID	Aircraft Identification
ARO	Air Traffic Services Reporting Office
ARR	Arrival
ASM	Airspace Management
ATC	Air Traffic Control
ATFCM	Air Traffic Flow and Capacity Management
ATFM	Air Traffic Flow Management
ATM	Air Traffic Management
ATS	Air Traffic Services
ATSU	Air Traffic Services Unit
AUA	ATC Unit Airspace
AUP	Airspace Use Plan
B2B	Business-to-Business
B2C	Business-to-Consumer
BIS	Business Intelligence System
C&T	Correction and Tuning
CAA	Civil Aviation Authority
CACD	Central Airspace and Capacity Database (new name of ENV)
CADF	ECAC Centralized Airspace Data Function
CCAMS	Centralised SSR Code Allocation & Management
CDM	Collaborative Decision Making
C-DPI	Cancel-Departure Planning Information
CDR	Conditional Route
CFMU	Central Flow Management Unit
CFSP	Computerised flight plan service provider
CHG	Modification Message
CHMI	Collaboration Human Machine Interface
CIAM	Collaboration Interface for AMCs

CIAO	Collaboration Interface for AO
CIFLO	Collaboration Interface for Flow management position
CIR	CFMU Interactive Reporting (now NMIR)
CL	Cluster
CNL	Cancellation Message
CPA	Collaboration Portal Application
CPR	Correlated Position Report
CR	Change Request
CSMC	Call-Sign Management Cell
CSS	Call-Sign Similarities
CSST	Call-Sign Similarities Tool
CSSUG	Call-Sign Similarity User Group
CTM	Cooperative Traffic Management
CTOT	Calculated Take-Off Time
CUA	Common User Access
CWIR	NM manual What-if Reroute
DCB	Demand and Capacity Balancing
DDR	Demand Data Repository
DEP	Departure message
DES	De-Suspension Message
DLA	Delay or Delay Message
DPI	Departure Planning Information
DWH	Data Warehouse system
EACCC	European Aviation Crisis Coordination Cell
e-AMI	Electronic Airspace Management Information
EASA	European Aviation Safety Agency
EAUP	European Airspace Use Plan
ECAC	European Civil Aviation Conference
E-DPI	Early-Departure Planning Information
EFD	ETFMS Flight Data
EFPL	Extended Flight Plan
ELDT	Estimated Landing Time
ENV	NM Environment System (former name of CACD)
EOBT	Estimated Off Block Time
ERNIP	European Route Network Improvement Plan
ESR	Extended Support Release
ETFMS	Enhanced Tactical Flow Management System
ETOT	Estimated Take-off Time
EU	European Union
EUROCONTROL	European Organization for the Safety of Air Navigation
EUUP	European Update airspace Use Plan
EVITA	European Crisis Visualization Interactive Tool for ATFCM
FAAS	Flight Assessment and Alert System
FAB	Functional Airspace Block
FB	Functional Block
FBZ	FPL Buffer Zone
FDPS	Flight Data Processing System
FLS	Flight Suspension Message
FMP	Flow Management Position
FNM	Flight Notification Message
FO	Flight Object
FOS	Flight Object Server
FPL	Flight Plan message (ICAO format)

FRA	Free Route Airspace
FSA	First System Activation message
FUA	Flexible Use of Airspace
FUM	Flight Update Message
HMI	Human-Machine Interface
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ID	Identifier
IFPS	Integrated Initial Flight Plan Processing System
IFPUV	IFPS Unit for Validation
IFPZ	IFPS Zone
IOBT	Initial estimated Off Block Time
IOP	InterOPerability
IR	Implementing Rule
ISO	International Organization for Standardization
L	Left
LoA	Letter of Agreement
LV	Last Validity
M&R	Monitoring and Reporting
MET	Meteorological (information)
MFS	Message From Shanwick
MIL	Military
NAT	North Atlantic Traffic
n-CONECT	network-COmmoN Enhanced Collaborative ATM
NETOPS	Network Operations Team
NM	Network Manager
NMD	Network Manager Directorate
NMIR	NM Interactive Reporting (former CIR)
NMOC	Network Manager Operations Centre
NMPP	Network Manager Performance Plan
NMVP	Network Manager Validation Platform
NOP	Network Operations Plan
NSP	Network Strategy Plan
OAT	Operational Air Traffic
OBT	Off Block Time
ODSG	Operations and Development Sub-Group
OPLOG	Operational Log
OPS	Operations
OPT	Operational testing
ORGN	Originator
ORM	Operational Reply Message
OS	Operating System
OTMV	Occupancy Traffic Monitor Values
PC	Personal Computer
PC	Provisional Council
PTR	Profile Tuning Restriction
R	Right
R&D	Research and Development
RAD	Route Availability Document
RD	Research and Development
RFL	Requested Flight Level
RM	Registration Mark
RP2	Reporting Period 2

RPL	Repetitive Flight Plan
RRN	Rerouteing Notification Message
RRP	Rerouting Proposal Message
RSA	Restricted Airspace
RTF	Rich Text Format
RVR	Runway Visual Range
RWY	Runway
SAFA	Safety Assessment of Foreign Aircraft (Programme)
SAM	Slot Allocation Message
SES	Single European Sky
SESAR	Single European Sky ATM Research
SITA	Societe Internationale de Telecommunications Aeronautiques
SO	Strategic Objective
STAM	Short-Term ATFM Measures
TACT	Tactical System (predecessor of ETFMS)
TB	Technical Block
TCF	Transponder Code Function
TIS	Time to Insert the Sequence
TOBT	Target Off Block Time
TRS	Time to Remove from Sequence
TSA	Temporary Segregated Area
TSAT	Target Start-Up Approval Time
TTOT	Target Take Off Time
TV	Traffic Volumes
TWR	Aerodrome Control Tower or Aerodrome Control
UC	Use Case
UDPP	User Driven Prioritisation Process
URL	Uniform Resource Locator
UTC	Coordinated Universal Time
UUP	Updated Airspace Use Plan
VFR	Visual Flight Rules
Y/N	Yes/No