NM MAINT-1 Release Notes

Edition: 3
Edition Validity Date: 18/09/2023

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Important Notifications

- **These Release Notes concern the minor release NM MAINT-1, which in the old (and now unsupported numbering scheme) would have been called NM-27.1.**
- **Please note that no specific NM B2B version will be deployed to hold the NM B2B changes of the MAINT-1 release, as all these changes are backward compatible: MAINT-1 changes will be deployed within the NM-27.0 version.**
- **The start date of the NM-MAINT1 B2B PREOPS, initially planned for 04/09/2023, is postponed to 07/09/2023 – please see chapter 4.**
- **The CHMI for NM-MAINT-1 will be delivered as a standard CHMI patch. It will be deployed during the evening of migration (10/10/2023) – please see section 4.2.4.**
- **REMINDER: Following recurrent questions, it is reminded here that the NM-26.0 B2B version will be decommissioned with the NM MAINT-2 release in April/May 2024, in accordance with the usual NM B2B lifecycle rules.**
- **It is expected that the AD OPS and IFPS User Manual will be published in the week 11/09–18/09/2023.**
- **More information about the CHMI updates in this maintenance release – please see section 4.2.4.**

DOCUMENT CHARACTERISTICS

Document Title	Document Subtitle (optional)	Edition Number	Edition Validity Date
NM MAINT-1 RELEASE NOTES	Use pop-up to enter value.	3	18/09/2023

Abstract

This document describes the new and modified functions delivered by NM as part of the MAINT-1 software release.

This document is available at:

https://www.eurocontrol.int/publication/network-manager-release-notes-nm-27

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STATUS AND ACCESSIBILITY

Status		Accessible via	
Working Draft	☐	Intranet	☐
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TLP STATUS

Intended for		Detail
Red	☐	Highly sensitive, non-disclosable information
Amber	☐	Sensitive information with limited disclosure
Green	☐	Normal business information
White	☒	Public information

Edition History

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

Edition No.	Edition Validity Date	Reason
1	18/07/2023	Initial edition of the MAINT-1 (maintenance) Release Notes
2	04/09/2023	PREOPS postponed from 04/09 to 07/09 – please see chapter 4. The CHMI for NM-MAINT-1 will be delivered as a standard CHMI patch. It will be deployed during the evening of migration (10/10/2023) – please see section 4.2.4. Improved screenshot in 5.10.1. Clarification in 5.9.2: CR_053706 – Airspaces of type ERAS and CRAS should ~~cannot~~ be usable ~~used~~ as reference locations in traffic volumes
3	**18/09/2023**	**Error corrected: OPT started on 07/09/2023, not on 04/09/2023.** **More information about the CHMI updates provided in this maintenance release – please see section 4.2.4.** **In CR_053506 (NMP Flight / OPP: finalise incomplete development from NM-27.0 – see 5.11.3), the item "Highlight the proposal which generated Best Rerouting Indicator" is removed: will not be deployed with NM MAINT-1.** **REMINDER: Following recurrent questions, it is reminded here that the NM-26.0 B2B version will be decommissioned with the NM MAINT-2 release in April/May 2024, in accordance with the usual NM B2B lifecycle rules.** **It is expected that the AD OPS and IFPS User Manual will be published in the week 11/09–18/09/2023 – see section 4.2.2.**

Table of Contents

1 Introduction

NM releases include many changes arising from different sources and coordinated via various fora. They allow the development and deployment of new functionalities, which implement the NM business plans.

The NM Release Notes are designed as a rolling document using successive editions, to provide NM service users with an early view of changes, being refined as the release software is developed. This rolling view is aimed at helping NM users to anticipate and assess the impact and opportunities on their operational procedures and/or systems.

With that purpose, this document describes all changes of the NM system delivered by NM as part of the **MAINT-1** software *maintenance* release, changes limited to those changes deemed to potentially affect operations of external NM service users.

This is a minor release, now called *maintenance* release, following the NM-27.0 major release. A maintenance release provides corrections and tuning updates, and possibly some functional improvements of the NM HMI and NM B2B (as long as the latter changes are made backward compatible).

The publication of the release notes for a maintenance release takes place a few months before deployment.

Users who wish to automatically receive by email the new editions of the NM Release Notes (and other communications related to the NM software releases) are invited to register at:

http://www.eurocontrol.int/network-operations/self-registration-form

(Choose "Subscribe to receive e-mail notifications when the NM Release Notes are updated" in the field “Purpose of the request”).

Questions or comments related to this document should be sent to:

nm.releases@eurocontrol.int

Please note that, in case of service interruption/ degradation, the affected users must notify NM (phone call, email) upon identification of the degraded mode.

2 User's Guide of the NM Release Notes

2.1 Versioning

The NM Release Note versions are called "editions".

The NM Release Note editions are published independently of each other, with changes from the previous edition emphasised in **bold green**.

2.2 Document Structure

Chapter 3, named Network Development Programmes, reminds the reader about the programmes currently under development, which may bring changes to the NM systems in every NM release.

The context being set, the document provides all available schedule information and notifications regarding the NM release deployment in chapter 4, and the release contents in chapter 5.

Useful references are provided in chapter 6, and abbreviations used across this document in chapter 7.

2.3 Description of Changes

The definition of a "Change" in this document is any feature that is changed or added as part of a release, and susceptible to impact the operations of the external NM service user.

Changes are described in a structured table, using the fields described below.

When the change is embodied as an FB (Functional Block), its description is often refined via CRs (Change Requests), for example because the impacted users or applications are not the same – in that case, the pattern below is used to describe CRs of the FB.

FB/CR…: Number and name of the change	
Objective	Operational objectives of the change
Description	Description of the main features of the change
Users potentially impacted and/or interested	Specifies the categories of NM users potentially (directly) impacted by the change, and/or potentially interested in the change
NM applications and services changed	Lists the NM applications and services that are changed by the change
Impact category on external users	Specifies whether the change has a direct impact on external users, and if that is the case, the impact category
Impact description	Description of the impact on the external users, according to the impact category provided above
Impact on NM Service Specifications	Specifies whether the change has an impact on the NM Service Specifications or not, or if an assessment is to be or being performed
Operational deployment plan	Specifies the way the change will be deployed
Users' testing	Specifies how external users will be able to test the change
Related documentation	List of links to the documents updated or to be updated following the deployment of the change, or simply in relation with the change

3 Network Development Programmes

This chapter provides a short description of the NM programmes that the NM developments are implementing.

The majority of these programmes are strategic developments, aiming to achieve the strategic objectives of the NSP (Network Strategy Plan), and are fully aligned with the ATM functionalities defined in the CP1 (Common Projects One) implementing regulation and the corresponding SESAR Deployment Programme.

Airport-Network Integration Strategic Project

The project addresses the full integration of airports and its operations as a component of the ATM network. The project contributes directly to the NSP Strategic Objective 4 (SO4) "Optimise Network Operations" and 5 (SO5) "Develop European connectivity and airport services".

The project aims at minimising airport disruptions and delays, in particular during adverse conditions, and at setting up the collaborative processes and tools improving airport and TMA integration with ATM operations, thereby positively affecting the overall network, as well as local performance.

The project includes the following main areas:

- Improve flight plan/airport slot consistency
- Improve the airport related operational partnership, starting with the integration of AOPs into the Network Operations Plan (including Target Times)
- Implement the Advanced ATC Tower, Airport CDM and AOP/NOP integration concepts

Airspace Management and Advanced FUA Strategic Project

The project addresses the coordinated airspace management improvements required to achieve the flight efficiency – and indirectly the capacity – RP3 and RP4 targets, both at network and local/FAB level. The project contributes directly to the NSP Strategic Objective 3 (SO3) "Optimise Network Design".

The project focuses on the implementation of improved ASM/ATFCM processes and on the Advanced Flexible Use of Airspace concept, combining operational procedures and technical systems support.

The project aims 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

The project includes the following main areas:

- ASM solutions to improve network performance
- Dynamic Airspace Configuration and CDM process
- Rolling process ASM/ATFCM process
- ASM operations in FRA environments
- ASM performance monitoring

Cooperative Traffic Management Strategic Project (CTM)

The project addresses 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 project contributes directly to the NSP Strategic Objective 4 (SO4) "Optimise Network Operations".

The project aims at optimising traffic delivery through a transparent cooperative approach involving all operational stakeholders in the ATM network: ATC, Airport, AU and NM operations. It is the interface between local and network operations and aims at improving tactical coordination processes, reducing the gap between planning and execution phases, and enabling the application of flight and flow-specific targeted ATFCM measures, including Target Time measures.

The project includes the following main areas:

- Flight Plan Predictability
- Short Term ATFCM Measures (STAM), including Scenario Management
- Target Times Operations
- Support to (extended) Arrival Sequencing
- Initial User Driven Prioritisation

European ATM Information Management System Strategic Project (EAIMS)

The project addresses the provision of a reference source of aeronautical and airspace data for use in ATM systems and operations, including flight operations and airport operations. The project contributes directly to the NSP Strategic Objective 2 (SO2) "Deploy and integrate interoperable and secure information management systems".

The project aims at providing a shared ATM Network Information Reference that allows planning of all stakeholders to be based on the same data and assumptions, that is the reference for any measure with network impact, and that supports any network-wide activity.

The project includes the following main areas:

- Airspace model evolutions of CACD for compliance with EAD
- Semi-automatic download of EAD data into CACD and associated processes and procedures
- Semi-automatic download of other context information to CACD (such as BADA)
- Improvements of airspace data management CDM processes

Flight Plan and Flight Data Evolution Strategic Project (FPFDE)

The project addresses the processes and systems required to elaborate and to share the 4D trajectory information for planning purposes, enabling improved quality ATM planning across the European ATM Network. The project contributes directly to the NSP Strategic Objective 5 – Facilitate business trajectories and cooperative traffic management (SO5).

The project aims at ensuring and coordinating a gradual implementation in a harmonised way of the ICAO Flight and Flow Information for a Collaborative Environment (FF-ICE), key enabler for the ICAO concept of Trajectory-Based Operations, while supporting all stakeholders in the transition.

The project includes the following main areas:

- FF-ICE/Release 1 Services, in support of pre-departure operations
- FF-ICE/Release 2 Services, in support of post-departure operations
- OAT f light plan integration
- VFR f light planning support

- Integration of ADS-C (EPP) data

Free Route Airspace Strategic Project (FRA)

The project addresses the required NM system changes and undertakes airspace design, simulation and validation activities required for FRA implementation, as well as monitoring and reporting on implementation progress. The project contributes directly to the NSP Strategic Objective 3 (SO3) "Optimise Network Design".

The project aims to support the implementation of the FRA concept, as described in the European Route Network Improvement Plan (ERNIP) Part 1 across the NM area.

The project includes the following main areas:
- Network performance and implementation scenarios
- Operations Support (modelling, design, simulations, trials, etc.)
- ATM systems and architecture in support of FRA
- Concept, procedures and change

NM OPS Service Platform Strategic Project (n-CONECT)

The project addresses the provision of a platform supporting improved NM service interfaces, being the main focus put on the convergence to a single, redesigned HMI for all users, fit for purpose and flexible enough to meet the needs of the different user roles (both internal to NMOC and external). The project contributes directly to the NSP Strategic Objective 2 (SO2) "Deploy and integrate interoperable and secure information management systems".

The project aims at setting up a new NM operational collaboration platform and related processes.

The project includes the following main areas:
- Platform development
- Service management
- Single HMI for internal and external users
- NM B2B Services migration and evolutions

Performance Strategic Project

The NM 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 data warehouse 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 NM to fulfil its commitment on M&R, support other stakeholders with their M&R responsibilities and prepare NM for the next SES reference period.

Operations Improvements

Domain Improvements

Each release delivers new functionalities and enhancements to current capabilities into operations in line with NM strategic programmes and stakeholder requirements. These cover flight, flow and airspace domains and are facilitated by advances in NM B2B and other data exchanges.

TCF (Transponder Code Function)

In accordance with the NM mandate for the 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 19 states and the number of users is expected to increase in the coming years.

4 Schedule

The following dates are tentative; they are meant to provide the user with an idea of the main events that take place all along the release development, up to deployment.
These dates are mostly stabilised around 3 months before migration, but can still slightly fluctuate, in which case notifications would be provided via a new edition of these NM Release Notes (see 4.1).

4.1 Important Notifications for Release Schedule

<None>

4.2 Deployment

Deployment Steps	2023 J	F	M	A	M	J	J	A	S	O	N	D
Release webinar (*)												
Network Operations Handbook publication									~15			
OPT Instruction Guide publication												
Start of PREOPS									07			
Start of OPT									07			
End of OPT										06		
Start of migration										10		
End of migration										17		

(*) No release webinar is foreseen for a maintenance release

4.2.1 Release Webinar

No release webinar is foreseen for a maintenance release.

4.2.2 Network Operations Handbook

The various documents forming the Network Operations Handbook will be made available around one month before the NM Release migration at:

- The NM Network Operations library: https://www.eurocontrol.int/library?f%5B0%5D=activity%3A774
- The NOP Portal (“Network Operations Handbook” portlet) is another way to access it:
  - Public NOP Portal
  - Protected NOP Portal

It is expected that the AD OPS and IFPS User Manual will be published in the week 11/09 – 18/09.

4.2.3 Operational Testing

The Operational Testing (OPT) enables users to assess the potential impact of the release against their systems or procedures before the release migration.
The OPT period starts between one to two months before the operational release migration and lasts around one month. **For MAINT-1, the OPS dates are from 07/09/2023 to 06/10/2023.**
Users are able to:

- Download and test the upgraded CHMI
- Test the upgraded NOP Portal
- Test some functionalities (operational scenario

provided) No registration is required.
Questions related to OPT must be sent to **nm.opt@eurocontrol.int**. Users may also apply for OPT testing via this address.
The NM MAINT-1 OPT Instructions document ~~will be~~ **is** available at ~~around end of August 2023~~: https://www.eurocontrol.int/publication/operational-testing-instructions

4.2.4 Migration Details

The migration of NM systems from NM-27.0 to MAINT-1 will start on the 10/10/2023 and last till 17/10/2023.

In the schedule tables below, indicated times are all UTC.

Software / Service	Unavailable from	Unavailable till	Remark	Impact during migration
CHMI software	CHMI software and documentation availability: • The CHMI for NM-MAINT-1 will be delivered as a standard CHMI patch. It will be deployed during the evening of migration (10/10/2023).			
ATFCM CHMI activation except AMC CIAM	**10/10/2023 21:00**	**11/10/2023 00:00**	Expected downtime 1h30 + 1h30 provision in case of rollback	No access to NM services via CHMI
AMC CIAM activation	**17/10/2023 16:30**	**17/10/2023 20:00**	-	No access to NM services for CHMI AMC positions (using CIAM)
NOP Portal NM Portal (NMP)	**10/10/2023 21:00**	**11/10/2023 00:00**	Expected downtime 1h30 + 1h30 provision in case of rollback	No access to NOP Portal (Public and Protected)
IFPUV	**16/10/2023 22:00**	**17/10/2023 00:00**	Expected downtime 1h00 + 1h00 provision in case of rollback	No Flight Plan validation service via any channel, including CHMI, NMP, NOP Portal and NM B2B
FAAS Services	**16/10/2023 22:00**	**17/10/2023 00:00**	Expected downtime 1h00 + 1h00 provision in case of rollback	No access to FAAS services
CSST	**11/10/2023 07:00**	**11/10/2023 09:00**	-	No access to CSST

System	Unavailable from	Unavailable till	Remark	Impact during migration
ATFCM				
ETFMS, PREDICT	**10/10/2023 21:00**	**11/10/2023 00:00**	Expected downtime 1h30 + 1h30 provision in case of rollback	No Flow management services available via any channel, including CHMI, NMP, NOP Portal and NM B2B
DWH (Data warehouse)	**11/10/2023 00:00**	**11/10/2023 06:00**	-	No Query-Replay in CHMI, some NMIR reports unavailable
Flight Planning				
IFPS	**16/10/2023 22:00**	**17/10/2023 00:00**	Expected downtime 1h00 + 1h00 provision in case of rollback	No Flight Plan filing services via any channel, including CHMI, NMP, NOP Portal and NM B2B
Airspace and Capacity				
ENV/CACD	**17/10/2023 16:30**	**17/10/2023 20:00**	-	No access to ENV CHMI, CIAM, MAP
	No EUUP nor on-line updates will be done in CACD during CACD migration			

Upgrading CHMI

The CHMI version number used for NM-MAINT-1 (after deployment) will be 27.1.0.3.12 or higher.

For non NM-managed PC (Internet PC), users will be asked to download the patch for NM-MAINT-1 (still referenced as NM-27.1) after signing in an existing CHMI installation.
Once the download is complete, CHMI will need to be restarted to apply the patch for NM-MAINT-1 (NM-27.1)
For new CHMI installations, it will be first be needed to install the CHMI for NM 27.0, followed by the same process as above.
Once CHMI is correctly installed no administrator rights are needed to activate the CHMI patch.
Please be aware that for a successful installation of CHMI full write access to the CHMI installation folder is needed for regular users.

For NM managed PC (OPTION 2 PC):
- **The patch shall be pushed by NM/WSM team, people using Option 2 PCs will not have to download the patch manually.**
- **The patch will be deployed on 10/10/2023 at 21h30 GMT (during the maintenance window). At 22h00 UTC, all ANSP will be restarted as part of the classic maintenance window. Therefore, at the first CHMI login, the version will be correct.**

NM B2B services

As the NM B2B services use the NM backend systems, NM B2B services will be disrupted during the migration of these systems.

PREOPS: Migration from 07/09/2023 09:00 onwards. Migrated NM B2B versions will be NM-26.0 and NM-27.0 (containing backward compatible MAINT-1 changes).

OPS: Migration from 10/10/2023 21:00 to 11/10/2023 00:00. Migrated NM B2B versions will be NM-26.0 and NM-27.0 (containing backward compatible MAINT-1 changes).

In the tables above, “Expected downtime x hours + y hours provision in case of rollback” means that the system or service should be unavailable maximum x hours in normal circumstances, and maximum (x + y) hours in case a rollback to the previous version would be required.

5 Contents

5.1 Important Notifications for Release Contents

<None>

5.2 Naming Conventions

Naming conventions have been introduced to make the document easier to read:

- **AIXM: Means AIXM 5.1.1**

5.3 Supported Browsers and Operating Systems

For its web applications, NM recommends the following browsers:

- Mozilla Firefox
- Google Chrome

For these recommended browser brands, NM undertakes to investigate and attempt to resolve problems that can be reproduced on the latest stable version of that brand – for any other browser brand or version, issues will be analysed and resolution attempted on a best effort basis.

For all its client applications (web applications and CHMI), NM recommends the following operating system (OS): Microsoft Windows 10 64-bit.

For this recommended OS, NM undertakes to investigate and attempt to resolve problems – for any other OS or OS version, issues will be analysed and resolution attempted on a best effort basis.

5.4 NM Service Specifications

NMD has created specifications that define the following services provided by the Network Manager:

- Airspace data
- Flight planning
- Flow and capacity management
- Central Code Allocation Management (CCAMS)

These NM Service Specifications cover at a high-level the functionality, performance and interfaces with the environment as well as the definition of the degraded modes of the service delivery.

They support the agreements between the NM as service provider and other organisations and aviation undertakings as users of the services listed above.

The NM Service Specifications will be in due time available upon request to nm.sqs@eurocontrol.int.

5.5 Declaration of Suitability for Use (DSU)

The DSU is a formal document published by the NM that provides evidence that a defined constituent meets the applicable baseline.

The NM system in operations is represented by two constituents:

- The NM Business Systems
- The NM Client Layer

The applicable baseline consists of:

- The regulatory baseline, which defines the mandatory requirements specified in relevant EC regulations
- The Means of Compliance (MoC) baseline, which consists of voluntary standards and specifications that the NM uses to ensure compliance with the regulatory baseline

The DSUs contain traceability to the requirements and referenced documents that were used for conformity assessment.
NM will create in due time the DSUs for the two constituents of the NM system in operations for all releases and will make them available upon request to nm.sqs@eurocontrol.int.

5.6 NM B2B Focus

This section provides general information related to NM B2B.

5.6.1 Contacts

Most NM B2B resources can be found from links in central NM B2B web page: https://www.eurocontrol.int/service/network-manager-business-business-b2b-web-services, including the NM B2B access request form.

5.6.2 NM B2B Documentation

NM B2B Documents	
NM B2B Technical Resources	Folder of various technical documents related to the NM B2B, most importantly the NM B2B Reference Manuals and Release Notes, for the currently supported NM B2B versions
NM B2B Write Access Criteria	Contains the criteria specified for each NM B2B WRITE Service to be fulfilled and followed during the operational validation, prior to enabling an NM B2B client to use that NM B2B WRITE service in NM operations

Draft NM B2B Reference Manuals are published around 4 months before operational deployment.

5.6.3 External Testing and Validation of NM B2B – PREOPS

NM offers a pre-operational (PREOPS) platform that NM B2B users can use for testing purposes. The software to be released in the new NM release is deployed on the PREOPS platform around two months before its deployment in operations, so that users can start working on the new API prior to operational deployment. PREOPS services remain available after the operational release.

The PREOPS platform is not the operational platform. The quality of the PREOPS services may be lower than the quality of the operational services. In particular, availability is not guaranteed 24/7, as support is only available during office hours. Additionally, the quality of the data on the PREOPS platform depends on the specific service groups (please see the NM B2B Reference Manuals for further details).

5.6.4 NO NM-MAINT-1 B2B Version

Please note that no specific NM B2B version will be deployed to hold the NM B2B changes of the MAINT-1 release, as all these changes are backward compatible: NM MAINT-1 B2B changes will be deployed within the already deployed NM-27.0 B2B version.

Changes will be duly documented as part of the NM-27.0 B2B documentation.

5.6.5 Decommissioning of NM B2B Services

The NM-26.0 B2B will be decommissioned with the NM MAINT-2 release in April/May 2024, in accordance with the usual NM B2B lifecycle rules.

5.7 Airport-Network Integration Strategic Project

5.7.1 CR_053309 – Accept P-DPI for Advanced ATC TWR Airports

Description
This change is an enabler for Advanced ATC TWR airports to provide Predicted-DPI messages to NM through the ECRA tool. The aim is to achieve improved network predictability by updating the traffic demand as early as possible by taking into account the reactionary delay in the turnaroundTTOT calculation.
The NM systems will be updated such that they will accept P-DPI messages from Advanced ATC TWR airports, which is not possible in the current release. The actual deployment is intended to begin in Q4 2023. The geographical scope as well as the timeline are not yet defined.

Users potentially impacted and/or interested
- Regional airports
- FMPs
- NMOC
- AOs

NM applications and services changed
- NM CACD
- NM ETFMS

Impact category on external users
- Impact on procedures
- Impact on Human-Machine Interfaces
- Impact on users' systems

Impact description
There will be NO impact immediately following the MAINT-1 release migration. The only immediate impact will be that the NM systems will become fit to accept P-DPI from Advanced ATC TWR airports.
The impact for external stakeholders will not materialize until this is actually deployed in operations, i.e. when certain regional airports will actually start sending P-DPI messages through the ECRA tool. These regional airports will be marked in NM systems (NM HMIs and NM B2B Flight data) as Advanced ATC TWR airports. When that happens, the impact on external stakeholders and NMOC will be exactly the same as for those flights for which P-DPI messages are already provided today. The turnaroundTTOT value in P-DPI messages will improve the traffic demand as a result of integrating the reactionary delay for flights departing from these airports. FMPs and NMOC will have better traffic counts.

Impact on NM service specifications
None

Operational deployment plan
Deployed in operation along with the release migration.

User testing
Will be part of the release OPT (Operational Testing).
NM B2B will be available on the PREOPS platform.

Related documentation
Advanced ATC TWR Implementation Guide

5.8 Cooperative Traffic Management Strategic Project (CTM)

5.8.1 CR_053430 – Draft MCPs to be deleted using the NM B2B

Description:
With NM-27.0, the CR_052020 (Delete draft MCP regulations) was implemented in NMP Flow application.
The integration of the same functionality in the NM B2B Services is the result of a harmonization process inside NM applications/services.
Therefore, the FMPs using their own application built on the NM B2B services will be able to delete the draft MCPs. This functionality will give the possibility to use the same regulation identification after the draft deletion.

Users potentially impacted and/or interested:
- FMP

NM applications and services changed:
- NM B2B

Impact category on external users:
- Impact on users' systems

Impact description:
The FMP interested in this functionality has to upgrade their own application to integrate the deletion of the draft MCP.

Impact on NM service specifications:
None

Operational deployment plan:
Deployed in operation along with the release migration.

User testing:
Will be part of the release OPT (Operational Testing).
NM B2B will be available on the PREOPS platform.

Related documentation
- NM B2B Technical Resources
- NM Reference Manual - Flow
- Regulation Proposal via NM B2B Detailed Use Case

5.9 European ATM Information Management System Strategic Project (EAIMS)

5.9.1 CR_053513 – FRA and other DCT restrictions shall be checked when there are no AD DCT restrictions

Description
This change will prevent flight planning to escape from DCT and FRA restrictions when an aerodrome has no DCT limitation defined.

Users potentially impacted and/or interested
- ANSP
- AO & CFSP
- NMOC

NM applications and services changed
- IFPS
- ETFMS
- CACD: Restriction checking

Impact category on external users
- Impact on users' procedures

Impact description
In case there is no DCT limitation (Restriction) defined the system does not validate the flight plan against any DCT or FRA Restriction. This change is ensuring this validation.

Impact on NM service specifications
None

Operational deployment plan
Deployed in operations after the release migration and following successful Pre-Ops testing and verification.

User testing
Will be part of the release OPT (Operational Testing) in conjunction with the Operational Deployment Plan.

Related documentation
None

5.9.2 CR_053706 – Airspaces of type ERAS and CRAS should ~~cannot~~ be usable ~~used~~ as reference locations in traffic volumes

Description
The objective of this change is to facilitate ETFMS users to use airspace of type RAS as a reference location in a traffic volume.

Users potentially impacted and/or interested
- FMP
- NMOC

NM applications and services changed
- CACD
- ETFMS

Impact category on external users

- Impact on users' procedures

Impact description

Internal or external ETFMS users will be able to select a RAS as reference location for a traffic volume and thereby improve the traffic capture performance.

Impact on NM service specifications

None

Operational deployment plan

Deployed in operations after the release migration and following successful Pre-Ops testing and verification.

User testing

Will be part of the release OPT (Operational Testing) in conjunction with the Operational Deployment Plan.

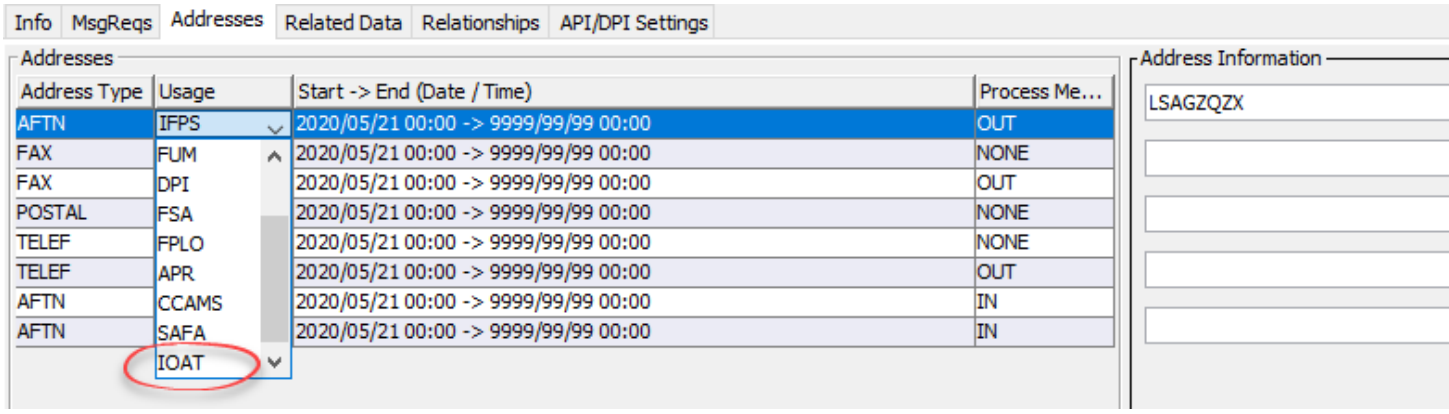
Related documentation

Airspace Data Operations Manual

5.10 Flight Plan and Flight Data Evolution Strategic Project (FPFDE)

5.10.1 CR_053008 – Filtering of iOAT flight plan distribution

Description
The overall objective is to initiate the implementation of improved Operational Air Traffic (iOAT) flight plan in NM systems.
This CR focuses on the IFPS distribution of IOAT flight plans. NM shall allow (or not) iOAT flight plans to be distributed to certain units. This will be done by adding in a new attribute ("iOAT") in the address usage which when selected will allow the address (of the unit) to receive iOAT flight plans.



Users potentially impacted and/or interested
- Airspace Users (Civ/Mil)
- ANSP (Civ/Mil)

NM applications and services changed
- FPL (IFPS Distribution)
- CACD (Address Usage attribute in Unit entity)

Impact category on external users
- Impact on users' systems
- Impact on users' procedures

Impact description
Users of iOAT flight plan will need to adapt their systems and procedures to use the new features.

Impact on NM service specifications
None

Operational deployment plan
Deployed in operations after the release migration and following successful Pre-Ops testing and verification, in conjunction with external users.

User testing
Will be part of the release OPT (Operational Testing) in conjunction with the Operational Deployment Plan.

Related documentation
- EUROCONTROL Guidelines for a harmonized and improved OAT FPL implementation iOAT flight plan implementation – Phase I Extended Release Notes
- IFPS User's Manual

5.10.2 CR_053431 – Missing ANU addresses in Flight Plan/FF-ICE Publish/Subscribe

Description
All ANSPs that receive flight plan messages from IFPS via AFTN will be able to receive flight plan messages for the same flights via the NM Publish/Subscribe service.

Users potentially impacted and/or interested
- ANSP

NM applications and services changed
- NM B2B

Impact category on external users
No impact.

Impact description
No impact expected on existing users that receive flight plans using the NM Publish/Subscribe service.

Impact on NM service specifications
None

Operational deployment plan
Deployed in operation along with the release migration.

User testing
NM B2B testing will be available on the PREOPS platform.

Related documentation
NM B2B Technical Resources

5.10.3 CR_053507 – Missing data items from the Flight Plan/FF-ICE Publish/Subscribe

Description
Various improvements related to the data publication via Publish/Subscribe will be provided through the NM publication service (FFICE_PUBLICATION or FLIGHT_PLAN topics):
- The equivalent of the Items 15c,15a and 15b;
- The arrival time, arrival aerodrome, and departure time received in ARR/DEP messages.

Users potentially impacted and/or interested
- Airspace User (Civil)
- AO or CFSP
- ANSP

NM applications and services changed
- NM B2B
- FPL (IFPS)

Impact category on external users
No Impact

Impact description
Users of FF-ICE flight plan (eFPL) will need to adapt their systems to use the new features.

Impact on NM service specifications
None

Operational deployment plan

Deployed in operation along with the release migration.

User testing
NM B2B will be available on the PREOPS platform.

Related documentation
NM B2B Technical Resources

5.10.4 CR_053508 – Identified PTR causing level-off not shown in agreed trajectory

Description
The Agreed Trajectory provided by NM will indicate the portions where the vertical evolution of the flight is constraint by a PTR, e.g., the PTR makes the filed/desired trajectory deviate from its evolution that is based on the aircraft performance and requested cruising levels. The indication will consist of referencing the PTR's identifier and marking the corresponding points with the trajectory point property 'CONSTRAINT_POINT':

- The point where a level-off portion of the trajectory starts due to a PTR (a level-off portion is a level flight portion that is performed at a level that is not a requested cruising level);
- The point at the end of the level-off portion that is due to a PTR where the climb/descent is resumed.

Note: the PTRs are made available to the users via NM B2B services (other than FFICE services).

Users potentially impacted and/or interested
- Airspace User (Civil)
- AO or CFSP
- ANSP

NM applications and services changed
- FPL (IFPS)
- NM B2B

Impact category on external users
No Impact

Impact description
Users of FF-ICE flight plan (eFPL) may need to adapt their systems to use the new information.

Impact on NM service specifications
None

Operational deployment plan
Deployed in operation along with the release migration.

User testing
NM B2B will be available on the PREOPS platform.

Related documentation
NM B2B Technical Resources

5.11 NM OPS Service Platform Strategic Project (n-CONECT)

5.11.1 CR_053206 – RTECOORATC column in NMP Flight & Flow

Description
NMP Flow users will be able to visualise flights for which the keyword RTECOORATC has been used in field 18 of their FPLs. This is to confirm that appropriate coordination has been undertaken with the relevant FMPs/ANSPs.

Users potentially impacted and/or interested
- ANSP/FMP
- AO

NM applications and services changed
One new column added in the flight lists of NMP Flight & Flow applications.
As well, this FPL information is provided in NM B2B via the new field `Flight.atcCoordinatedRoute`.

Impact category on external users
- NMP Flight & Flow
- NM B2B

Impact description
Additional information available for FMPs.

Impact on NM service specifications
None

Operational deployment plan
Deployed in operation along with the release migration.

User testing
Will be part of the release OPT (Operational Testing) in conjunction with the Operational Deployment Plan.
NM B2B will be available on the PREOPS platform.

Related documentation
NM B2B Technical Resources

5.11.2 NCO_20812 – NMP Flow: Correction & Tuning following testers and users feedback

Description
Changes for Correction & Tuning of the NMP Flow application following feedback received after the deployment of NM-27.0 software.

Users potentially impacted and/or interested
- FMP
- TWR
- Airport Operator

NM applications and services changed
NMP Flow

Impact category on external users
No impact.

Impact description
No operational impact for external users.

Impact on NM service specifications
None

Operational deployment plan
Deployed in operations after the release migration and following successful testing and verification.

User testing
Will be part of the release OPT (Operational Testing) in conjunction with the Operational Deployment Plan.

Related documentation
Relevant parts will be included in the Learning Zone training

5.11.3 CR_053506 – NMP Flight / OPP: finalise incomplete development from NM-27.0

Description
The purpose of this change is the finalisation of NMP Flight developments planned but not completed in the NM 27.0 (FB1186 - Flight Efficiency).
With this change, NMP Flight/Flight Management will:

- Sort proposals per total cost
- Show a limited number of interesting alternatives, based on the latest GRRT executions
- ~~Highlight the proposal which generated Best Rerouting Indicator~~
- Show the time in which the proposal was generated (GRRT executed)
- Introduce Opportunity Feedback Remove button (remove previously submitted feedback)
- Make Opportunity Feedback Comment optional (currently it is mandatory)
- Reorganise information visible in the Flight management/ Rerouting opportunity section

Users potentially impacted and/or interested

- Airspace User (Civil)
- AO or CFSP
- ANSP/FMP
- NMOC

NM applications and services changed

- NMP Flight
- NM B2B

Impact category on external users

- Impact on Human-Machine interfaces
- Impact on users' systems

Impact description

- NMP Flight Opportunities presentation will be enhanced.
- Additional information will be available via NM B2B

Impact on NM service specifications
None

Operational deployment plan
Deployed in operation along with the release migration.

User testing
Will be part of the release OPT (Operational Testing).
NM B2B will be available on the PREOPS platform.

Related documentation

- Network Operations Library
- Network Operations Flight Efficiency User's Manual
- NM B2B Technical Resources

6 Documentation

Operational Manuals/Guides	
ATFCM User's Manual	Operational description of the NM ATFCM related actions, information and message exchange
ATFCM Operations Manual	Intended to provide Flow Management Positions (FMPs) and EUROCONTROL's Network Manager (NM) with common understanding of their roles in delivering the most effective Air Traffic Flow and Capacity Management (ATFCM) services to Air Traffic Control (ATC) and Aircraft Operators (AOs)
Yo-Yo and sharp-turn angle flight plans identification - Guidelines	This document describes the NM System tool for the detection of the Yo-Yo and sharp-turn angle flight plans (Turn) by aircraft operators (AOs) and flow management positions (FMPs) using the NM System. It also describes the conditions for rejection of critical Yo-Yo and TURN profiles by IFPS.
CHMI ATFCM Reference Guide	This reference guide is intended for the users of the ATFCM Collaboration Human Machine Interface (CHMI) application
API Implementation Guide	Provides an overview and description of the available API services
DPI Implementation Guide	Provides an overview and description of the available DPI services
IFPS User's Manual	The manual is intended to contain all the necessary procedures and information in order for users to be able to construct, transmit or when necessary to correct, flight plan and associated update messages. Procedures for the distribution of such messages after processing by the IFPS are also described.
Flight Plan Guide and IFPS Errors Guide	The Flight Plan Guide allows users to search for the correct format to be used for the different fields of the ICAO Flight Plan via an on-line database. The IFPS Errors Guide is an electronic version of the error definitions published in the NM IFPS User's Manual.
Flight Progress Messages Document	Contains a description of messages from and to systems external to the NM which have been identified as Flight Progress Messages. It contains both messages from/to the Integrated initial Flight Plan Processing System (IFPS) to/from the Enhanced Tactical Flow Management System (ETFMS) and the Centralised SSR Code Assignment and Management System (CCAMS).
FUA – AMC/CADF Operations Manual	Provides guidance to the Airspace Management Cell (AMC) and the EUROCONTROL/NM Centralised Airspace Data Function (CADF) personnel to help them perform their daily tasks and to prepare and release the consolidated European Airspace Use Plan (EAUP) and European Updated Airspace Use Plan(s) (EUUP(s) daily.
Network Operations Flight Efficiency User's Manual	The purpose of this document is to frame the support of the flight efficiency initiative within the NMOC such as support to flight plan originator to improve their flight planning, support to major airspace design project etc. This document contains also all procedures applicable for Flight Efficiency support. Correct and accurate application of the procedures contained in this document is essential to the achievement of consistent support to the flight plan originators.
CHMI ASM Function Reference Guide	User guide for the ASM users of the CHMI

NOP Portal User's Manual	Reference source for using the NOP Portal
CCAMS User's Manual	Frames the support of the CCAMS operations and explains all procedures applicable for CCAMS operations
NMIR User's Guide	This document contains information for new users, the list of NMIR dashboards, their contents in term of available reports and the mapping between the migrated previous NMIR reports and the NMIR dashboards (Annex 1). The process to access the NMIR is also detailed.

NM B2B Documents	
NM B2B Technical Resources	Folder of various technical documents related to the NM B2B, most importantly the NM B2B Reference Manuals and Release Notes, for the currently supported NM B2B versions.
NM B2B Write Access Criteria	Contains the criteria specified for each NM B2B WRITE Service to be fulfilled and followed during the operational validation, prior to enabling and agreeing that an NM B2B client to use that NM B2B WRITE service in NM operations.

Other Documents	
Network Operations Library	A collection of EUROCONTROL/NM documents related to Network operations and operations planning

7 ABBREVIATIONS

AB	AirBlock
ACA	AUP/UUP Compilation(/Composition) Application
ACC	Approach Control Centre or Area Control Centre
ACC3	Air Cargo or Mail Carrier operating into the Union from a Third Country Airport
A-CDM	Airport-Collaborative Decision Making
ACH	ATC f light plan Change
ACK	IFPS Acknowledgement Message
AD	Airspace Data
ADES	Aerodrome of Destination
ADEXP	ATS Data Exchange Presentation
A-DPI	Airport-Departure Planning Information
ADS	Automatic Dependent Surveillance
ADS	NM Airspace Data Section
ADS	Airspace Data Service
ADS-B	Automatic Dependent Surveillance - Broadcast
AFP	ATC Flight Plan
AFTN	Aeronautical Fixed Telecommunication Network
AFUA	Advanced Flexible Use of Airspace
AIP	Aeronautical Information Publication
AIRAC	Aeronautical Information, Regulation and Control
AIS	Aeronautical Information Services
AIXM	Aeronautical Information Exchange Model
AMA	AMC Manageable Area
AMAN	Arrival Manager
AMC	Airspace Management Cell
ANI	Advanced Network Integrated (ANI) airports
ANSP	Air Navigation Service Provider
AO	Aircraft Operator
AoI	Area of Interest
AOP	Airport Operations Plan
AoR	Area of Responsibility
AOWIR	Aircraft Operator What-if Reroute
API	Arrival Planning Information
APL	ATC Flight Plan
APOC	Airport Operations Centre
APP	Approach Control
APR	Aircraft (Operator) Position Report
ARO	Air Traffic Services Reporting Office
ARR	Arrival Message
ASM	Airspace Management
ASMSG	Airspace Management Sub-Group
ATC	Air Traffic Control

ATFCM	Air Traffic Flow and Capacity Management
ATFM	Air Traffic Flow Management
ATM	Air Traffic Management
ATS	Air Traffic Services
AU	Airspace User
AUA	ATC Unit Airspace
AUAD	AUA Delegation
AUAG	ATC Units Airspaces Group
AUP	Airspace Use Plan
B2B	Business-to-Business
B2C	Business-to-Consumer
BADA	Base of Aircraft Data
C&T	Corrections and Tuning
CAA	Civil Aviation Authority
CACD	Central Airspace and Capacity Database (new name of ENV)
CADF	ECAC Centralized Airspace Data Function
CAP	Collaborative Advance Planning (DSNA tool)
CASA	Computer Assisted Slot Allocation
CASTAR	Computer Aided Synchronization Tool for Airspace Repositories
CCAMS	Centralised SSR Code Allocation and Management
CDM	Collaborative Decision Making
C-DPI	Cancel-Departure Planning Information
CDR	Conditional Route
CE	Change and Enhancement - or Central Europe
Cf C	Closed for Cruising
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
CITO	Collaboration Interface for Tower
CNL	Cancellation Message
CNS	Communications, Navigation, Surveillance
COM	Communication
COM	Committee of Management
CP1	Common Project One
CPA	Collaboration Portal Application
CPR	Correlated Position Report
CR	Change Request
CS	Combined Sector
CSST	Call-Sign Similarities Tool
CTFM	Current Tactical Flight Model
CTM	Cooperative Traffic Management

CTO	Calculated Time Over
CTOT	Calculated Take-Off Time
CTA	Control Area
CTR	Control Zone

DAC	Dynamic Airspace Configuration
DCB	Demand and Capacity Balancing
DCT	Direct
DEP	Departure message
DES	De-Suspension Message
DLA	Delay or Delay Message
DLE	Delay or holding on route
DPI	Departure Planning Information
DSNA	Direction des Services de Navigation Aérienne
DSU	Division Support Unit
DWH	Data Warehouse system
EAD	European AIS Database
EAIMS	European ATM Information Management Service
EASA	European Union Aviation Safety Agency
EAUP	European Airspace Use Plan
EC	European Commission
ECAC	European Civil Aviation Conference
EDDP	Leipzig Halle Airport
EET	Estimated Elapsed Time
EFD	ETFMS Flight Data
eFPL	FF-ICE f light plan
EHMI	ETFMS HMI
EIBT	Estimated In-Block Time
ENV	NM Environment System (former name of CACD)
ENVCOOR	National Environment Coordinator
EOBT	Estimated Off Block Time
ERNIP	European Route Network Improvement Plan
ERR	Error Message
ES	Elementary Sector
ESP	Elementary Sector Part
eSS	Enhanced Slot Swapping
ETFMS	Enhanced Tactical Flow Management System
EU	European Union
EUROCONTROL	European Organization for the Safety of Air Navigation
EUUP	European Update airspace Use Plan
FAAS	Flight Assessment and Alert System
FAB	Functional Airspace Block
FAM	Flight Activation Monitoring
FB	Functional Block
FCM	Flight Confirmation Message

FEI	Flight Efficiency Initiative
FF-ICE	Flight and Flow Information for a Collaborative Environment
FIXM	Flight Information Exchange Model
FL	Flight Level
FLS	Flight Suspension Message
FMP	Flow Management Position
FPFDE	Flight Plan and Flight Data Evolution
FPL	Flight Plan message (ICAO format)
FPP	Flight Plan Processing
FRA	Free Route Airspace
FSA	First System Activation message
FSPD	Flight Specific Performance Data
FTFM	Filed Tactical Flight Model
FUA	Flexible Use of Airspace
GAT	General Air Traffic
GRRT	Group Re-Routing Tool
GUFI	Globally Unique Flight Identifier
HMI	Human-Machine Interface
I2	Incident Type 2
IAF	Initial Approach Fix
IAP	Instrument Approach Procedure
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ID	Identifier
iDAP	integrated Digital ATFCM Platform
IDLA	Individual Delay (message)
IFPS	Integrated Initial Flight Plan Processing System
IFPUV	IFPS Unit f or Validation
IFPZ	IFPS Zone
IFR	Instrument Flight Rules
iOAT	improved OAT
IR	Implementing Rule
KPI	Key Performance Indicator
M&R	Monitoring and Reporting
MCDM	Measure Collaborative Decision Making
MIN	Minimum
MoC	Memorandum of Cooperation
MSG	Message
MTTT	Minimum Turn-Round Time
MV	Monitoring Value
N/A	Not Applicable
NAM	Non AMC manageable Area
NATS	National Air Traf fic Services (UK)
NAV	Navigation

NCAP	Network Collaborative Advance Planning (DSNA tool)
NCO	n-CONECT
n-CONECT	network-COmmoN Enhanced Collaborative ATM
NIA	Network Impact Assessment
NID	Network Impact Display
NM	Nautical Mile
NM	Network Manager
NMD	Network Management Directorate
NMIR	NM Interactive Reporting
NMOC	Network Manager Operations Centre
NMP	NM Portal
NMVP	Network Manager Validation Platform
NOP	Network Operations Plan
NOP	Network Operations Portal
NOTAM	Notice to Airmen
NPP	Network Performance Plan
NPZ	No Planning Zone
NRC	National RAD Coordinator
NSP	Network Strategy Plan
OAI	Target Time-Over Arrival Planning Information
OAR	ATFM Rerouting
OAT	Operational Air Traf fic
ODSG	Operations and Development Sub-Group
OPP	Opportunity
OPS	Operations
OPT	Operational Testing
ORGN	Originator
OS	Operating System
OTMV	Occupancy Traffic Monitoring Values
P/S	NM B2B Publish/Subscribe
PC	Provisional Council
PCP	Pilot Common Project
PDI	Predicted Departure Planning Information
P-DPI	Predicted DPI
PFD	Predicted Flight Data
PMS	Point Merge System
PREDICT	Variant of TACT used for Pre-Tactical Work
PSFD	Publish/Subscribe Flight Data (NM B2B)
PTR	Profile Tuning Restriction
R	Restricted Area
R	Right
R&D	Research and Development
R/R	NM B2B Request/Reply
RAD	Route Availability Document

REA	Ready Message
RFI	Ready For Improvement Message
RFR	Re-route after reroute cancellation
RJT	Rerouteing Rejection message
RL	Reference Location
RP3	Reference Period 3
RP4	Reference Period 4
RQS	Requested Supplementary Information Message
RRM	Rerouting Proposal Creation
RRN	Rerouting Notification Message
RRP	Rerouting Proposal Message
RSA	Restricted Airspace
RSI	CASA Revoke slot proposal
RTFM	Regulated Tactical Flight Model (by ATFM Measures)
RWY	Runway
SAFA	Safety Assessment of Foreign Aircraft (Programme)
SAM	Slot Allocation Message
SB	Study Block
SCC	Single CDR Category
SCR	Single Constrained Route
SES	Single European Sky
SESAR	Single European Sky ATM Research
SIBT	Scheduled In-Block Time
SID	Standard Instrument Departure
SIP	Slot Improvement Proposal Message
SITA	Société Internationale de Télécommunications Aéronautiques
SLC	Slot Cancellation message
SMM	Slot Missed Message
SO	Strategic Objective
SOBT	Scheduled Off-Block Time
SPA	Slot Improvement Proposal Acceptance Message
SRC	Safety Regulation Commission
SRJ	Slot Proposal Rejection message
SRM	Slot Revision Message
SSP	CASA STAM Proposal
SSR	Secondary Surveillance Radar
STA	Sharp Turn Angle
STAM	Short-Term ATFCM Measures
STAR	Standard Terminal Arrival
SWIM	System-Wide Information Management
SWM	SIP Wanted Message
TACT	Tactical System (predecessor of ETFMS)
TAI	Target Take-Of f Arrival Planning Information
TB	Technical Block

TBD	To Be Determined, To Be Defined
TCF	Transponder Code Function
TLP	Traffic Light Protocol
TMA	Terminal Control Area
TOBT	Target Off Block Time
TP	Terminal Procedure
TP	Transport Protocol
TP	Trajectory Prediction
TSAT	Target Start-up Approval Time
TTL	Technical Team Leader
TTL	Time Table List
TTOT	Target Take Off Time
TV	Traffic Volume
TWR	Aerodrome Control Tower
UCD	Update MCDM Data
URL	Uniform Resource Locator
UTC	Coordinated Universal Time
UUP	Updated Airspace Use Plan
VFR	Visual Flight Rules
WG	Working Group
WKTRC	Wake Turbulence Category
WTC	Wake Turbulence Category
XCD	eXtended Conditions
YY	YoYo (as in YoYo flight)

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