ATFCM USERS MANUAL

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Title	Amendment notes
1. INTRODUCTION	
2. ATFCM QUICK REFERENCE GUIDE	
3. AIR TRAFFIC FLOW AND CAPACITY MANAGEMENT	
4. COLLABORATIVE DECISION MAKING	
5. ROUTE PLANNING	
6. FLIGHT PLAN SUBMISSION AND UPDATE	
7. MANAGEMENT OF THE READINESS STATUS OF THE FLIGHT	
8. MANAGEMENT OF SLOT ALLOCATED FLIGHTS	
9. MANAGEMENT OF FLIGHT SUSPENSIONS	
10. OPERATIONS IN UNUSUAL CIRCUMSTANCES	
11. GENERAL INFORMATION ON ATFCM MESSAGES	
12. ABBREVIATIONS	
APPENDIX A. MESSAGE FIELDS – ABBREVIATIONS AND DEFINITIONS	
APPENDIX B. SLOT RELATED MESSAGES	Mention to *ATFM messaging AOWIR via NM B2B Use Cases* document.
APPENDIX C. PRIMARY FIELD COMPOSITION OFTACTICAL ATFCM MESSAGES EXCHANGE	

APPENDIX D. CORRELATION BETWEEN IATA DELAY CODES AND NM REGULATION CAUSES	
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1 INTRODUCTION

1.1 Purpose

The ATFCM Users Manual has been prepared with the main object of providing in one document an operational description of the NM ATFCM related actions, information and message exchange.

1.2 Applicability

This manual is aimed at all those likely to be involved in the ATFCM process including Aircraft Operators (**AOs**) and those manning Flow Management Positions (**FMPs**), Air Traffic Services Reporting Offices (**AROs**), aerodrome and en-route ATS Units operating within the NM Area of Operation.

1.3 Validity

The application of this manual is in line with the operational implementation of the NM software releases, with version numbering of the manual reflecting the relevant software release. Incremental numbering shall be used to indicate interim updates.

1.4 Amendments

This document is usually updated in line with major software releases.

1.5 How to Use this Document

In order to make this manual more easily interpreted, it has the following presentation styles:

- Free text – descriptive information for each subject
- Question and answer – covering the more common subjects for external users of the NM services. These are presented in a way that reflects the sequence of events.
- Question and answer – providing extra information that may be useful to support a topic. These may be quickly identified as they are presented with a light blue background colour.

Additionally there is a quick reference guide that covers the most frequently asked questions. The answer to each question is provided in two parts (where relevant) – the first for non-CDM aerodromes is on the left and has a blue background; the second is for CDM aerodromes and has a green background.

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2 ATFCM QUICK REFERENCE GUIDE

2.1 Operational Problems Helpdesks

Clients experiencing on-line problems should inform the relevant Units as indicated below depending on the nature of the problem.

2.1.1 Flight Plan Filing Problems

A problem with an FPL message including within 20 hours of EOBT.

Action Contact the relevant IFPS Unit Supervisor

FP1 - BRUSSELS

TELEPHONE	++32 (0) 2 745.19.50
FAX	++32 (0) 2 729.90.41

2.1.2 Operational ATFCM Problems

Action Contact the Central Flow HELPDESK

E-HELPDESK	ACCESS VIA THE NOP PORTAL
TELEPHONE	++32 (0) 2 745.19.01

The telephone Helpdesk is available to those that have no internet access or token.

Deputy Operations Manager (DOM)

TELEPHONE	++32 (0) 2 745.19.00
FAX	++32 (0) 2 729.90.27
MAIL	
AFTN	EUCHZMTA Type-B BRUEC7X

Aircraft Operators Liaison Officer (AOLO)

TELEPHONE	++32 (0) 2 745.19.92
MAIL	nm.aolo@eurocontrol.int

Airport Function (AF)

TELEPHONE	++32 (0) 2 745.19.03
MAIL	nm.airports@eurocontrol.int

2.1.3 Technical Problems (Transmission, Terminals)

Action Contact the CSO HELPDESK

TELEPHONE	++32 (0) 2 745.19.97
FAX	++32 (0) 2 729.90.23
EMAIL	nm.cso.help-desk@eurocontrol.int

2.1.4 Operational Post Event Problems

Action Contact the NM Incident Investigation Team

CCMS	https://www.nm.eurocontrol.int/cwars/jsp/startCCMS.jsp
EMAIL	nm.incident@eurocontrol.int

2.2 Frequently Asked Questions

<table>
<tr><th>NON-CDM AERODROMES (AO)</th><th>CDM AERODROMES (CDM platform / AO)</th></tr>
<tr><td colspan="2">FPL FILING</td></tr>
<tr><td colspan="2">NEW FPL</td></tr>
<tr><td colspan="2">When do I file an FPL?</td></tr>
<tr><td colspan="2">As per ICAO rule from ICAO doc 7030, flight plans for flights, which may be subject to ATFM, shall be submitted at least 3 hours before the EOBT. You will get either:
- ACK (FPL accepted) or,
- MAN (errors in FPL; after manual processing you will get either ACK or REJ) or,
- REJ (FPL rejected).</td></tr>
<tr><td colspan="2">How should a FPL message originator reply to the reception of a REJ?</td></tr>
<tr><td colspan="2">By amending the original message as appropriate and re-submitting it to the IFPS.</td></tr>
<tr><td colspan="2">FPL UPDATES</td></tr>
<tr><td colspan="2">How do I revise my FPL?</td></tr>
<tr><td colspan="2">Send a DLA / CHG.</td></tr>
<tr><td colspan="2">What if I sent to IFPS a second FPL with an update of the EOBT</td></tr>
<tr><td colspan="2">The update of the EOBT with a second FPL is not allowed in IFPS. When a FPL is associated to another FPL changing the EOBT, the FPL will be invalidated with the EFPM401 error saying “NOT ALLOWED TO USE A FPL TO UPDATE THE EOBT. DLA OR CHG IS REQUIRED”.</td></tr>
<tr><td colspan="2">When do I notify a delay?</td></tr>
<tr><td>As per ICAO rule from ICAO doc 7030, any changes to the EOBT of more than 15 minutes for any IFR flight within the IFPZ shall be communicated to the IFPS.</td><td>Following the CDM process and working practice, TOBTs are updated as soon as the responsible person for updating the CDM platform is aware of the delay. If your TOBT is 15 minutes or more after the last EOBT, send a DLA / CHG.
The airline can delegate to the NM the filing of DLA messages based on these TOBT values.</td></tr>
<tr><td colspan="2">SLOT ALLOCATION</td></tr>
</table>

NON-CDM AERODROMES (AO)	CDM AERODROMES (CDM platform / AO)

REGULATION

Why have I not received a slot 2 hours before EOBT?

The flight is not currently subject to a regulation.

When do I get a slot (CTOT)?

At the earliest, 2 hours before EOBT you will receive a SAM with a CTOT. However, if a regulation is applied after this time a slot will be issued immediately.

If I receive a slot, do I need to update my EOBT / TOBT?

The EOBT / TOBT of a flight shall be accurate; it must always provide the earliest EOBT / TOBT you may comply with. This is not related to the slot provided.

Note that if the regulation was lifted / improved, your flight could be re-calculated based on wrong ETO data because it was not updated accordingly.

What happens if I update my EOBT after I have received a slot?

If the new EOBT still enables the flight to depart according to its CTOT, the slot will not be recalculated.

If a recalculation is necessary (e.g. DLA / CHG was received with an EOBT that places the ETOT after the CTOT tolerance window), the next available slot will be issued in a SRM. To avoid a substantial delay it is therefore important to update the EOBT as soon as practicable.

What happens if I update my TOBT after I have received a slot?

If the new TOBT still enables the flight to depart according to its CTOT, the slot will not be recalculated.

If a recalculation is necessary (e.g. T-DPI-s was received with TTOT after the CTOT tolerance window), you will receive either SRM, SLC or FLS. To avoid a substantial delay it is therefore important to update the TOBT as soon as practicable. A T-DPI-s message can as well push the flight outside of the Regulation period, in such a case you will receive an SLC.

What happens if my slot changes?

You will receive a SRM with a new CTOT.

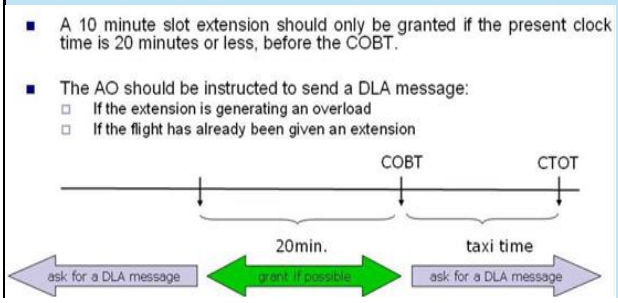
Why did I receive a SRM?

There are several reasons why a SRM would be sent such as:

- A better slot has been found for you.
- In response to a rate change in a regulation.
- In response to a DLA / CHG message with an ETOT>CTOT, etc.

For A-CDM, in addition to the reasons for non-CDM aerodromes:

- In response to a TOBT update which triggers a TTOT>CTOT tolerance window.

NON-CDM AERODROMES (AO)	CDM AERODROMES (CDM platform / AO)
What action do I take if I receive a SRM?	
Comply with the new CTOT stated in the message.	
What action do I take if I cannot comply with my slot?	
As soon as possible send a DLA / CHG stating your new EOBT or send a SMM, if your new EOBT is not known, to ensure that the slot can be reused and to minimise your risk of substantial delay.	Update your TOBT as soon as you are aware of the change. If the TOBT is deleted or invalid (in the past) a C-DPI will be triggered by the A-CDM platform and the flight will be suspended.
What do I do if I have missed my slot?	
If your new EOBT is known, send a DLA / CHG. You will receive either: SRM, SLC or FLS. If your new EOBT is not known, send a SMM. You will receive an FLS and will remain suspended until you send a DLA / CHG to provide your new EOBT.	If your new TOBT is known, update your TOBT. You will receive either: SRM, SLC or FLS. If your new TOBT is not known, remove your current TOBT and then a C-DPI will be triggered and the ETFMS will reply with an FLS. The flight will remain suspended until you update your TOBT.
What do I do if I get a SLC?	
You are no longer subject to ATFCM measures, e.g. regulation has been cancelled. If the SLC is issued after the last known EOBT, your OBT will be adjusted to the clock (when the SLC is received). Moreover, if the SLC is issued after EOBT+15 minutes you must update your EOBT by sending a DLA / CHG.	
What should I do if I need to make a last minute revision to CTOT?	
If an aircraft cannot meet the CTOT it may benefit from a CTOT extension of maximum 10 minutes. This may be requested via the FM Helpdesk by AOs during the 20 minutes prior to the COBT. Any request for a CTOT extension at or after the COBT shall be coordinated by the FMP / TWR with the NM tactical team. Only one CTOT extension per flight is allowed. FMP / TWR can coordinate with the NM Tactical team to send the next available CTOT.	No CTOT extensions on AO request are given via the FM Helpdesk for flights departing from A-CDM. For a CTOT extension request, If your flight has received start-up approval only the pilot can call the TWR (over the frequency) for a slot extension. If your flight has not received start-up approval an update of the TOBT is required. FMP / TWR can coordinate with the NM Tactical team to request a slot extension or the next available CTOT.
	

NON-CDM AERODROMES (AO)	CDM AERODROMES (CDM platform / AO)

RR / FL SCENARIO (DUE TO ATC ROUTEINGS)

What should I do if I receive a FLS within a scenario?

Consider rerouting your flight out of a RR or FL scenario. These scenarios can be avoided by filing an FPL at an alternative route (RR) or flight level (FL). The FLS usually contains rerouting alternatives.

REDUCING DELAY

REROUTEING OF A FLIGHT

What are my options?

Investigate alternative routes that avoid congested areas. Refer to the daily Initial Network Plan (INP) for suggestions and use the Flight Management interface / AOWIR if available. Consider filing an FPL at an alternative flight level. It is important that pilots are briefed that flight levels in the FPL have been filed so as to avoid an ATFCM regulation.

How can I reroute my flight?

- Send a new route via a CHG or CNL and RFP, or
- use Flight Management interface / AOWIR, if you have access to ATFCM CHMI / NOP Portal / NMP/ NMUI.
- Use the flight planning on NM B2B services to have the full AOWIR package (including Apply/Book) under the same service, without having to access the NOP.

How can I increase the possibility to get a better CTOT?

The airspace users are able to provide the earliest minimum take-off time that they can achieve, via the e-Helpdesk, and help the NM Tactical team to find the most suitable improvement.

READINESS STATUS OF A FLIGHT

What are my options?

The default status is RFI, i.e. if an improvement is available you would receive it via an SRM. Another status is SWM, where improvements are proposed by an SIP

Alternatively, you may request the ATC at the departure aerodrome to change your status by sending an REA, which allows the shortest parameters for improving the CTOT. Only ATC (TWR or FMP) can send an REA and it can only be sent up to 15 minutes before EOBT.

How do I change the status of my flight?

The default status is RFI. A SWM received for a flight departing from a CDM aerodrome will be rejected by the ETFMS.

A flight is flagged as ready (REA) to depart if a T-DPI-s is received and clock time reaches/has reached TOBT - 5.

NON-CDM AERODROMES (AO)	CDM AERODROMES (CDM platform / AO)
By sending: - an SWM, if you were in RFI status, or - an RFI, if you were in SWM status.	
How can I revert from the REA status? By sending a DLA / CHG message with a later EOBT. A CTOT recalculation could be triggered. By sending a DLA / CHG message with an EOBT inside the current CTOT tolerance window.	**How can I revert from the REA status?** A TTOT update after the CTOT tolerance window will be treated as a DLA. A CTOT recalculation could be triggered.
DISPROPORTIONATELY HEAVY DELAY **What can I do if I have disproportionately heavy delay?**	
If you have disproportionately heavy delay or if you have a critical ATFCM problem on the day of operations you may contact the FM Helpdesk for assistance (e-Helpdesk and Helpdesk calls). The flight must be in RFI or REA status. (However, it is normally not necessary to follow up a REA message with a query to the e-Helpdesk. Flights in REA or RFI status are improved automatically if capacity is available.) e-Helpdesk handles queries faster as it has priority over Helpdesk calls, therefore please use preferably the e-Helpdesk. Parallel improvement requests by the AOs to FMPs or other NMOC working positions should be avoided.	The same as for non-CDM aerodromes. However, a flight can only be improved until the value of the last TTOT received in the T-DPI-s.
SLOT SWAPPING **When can I swap flights?** If two flights that have received a CTOT, with the same operator or an agreement between operators, share the same most penalising regulation and at least one is thought unable to fulfil its slot but both would be able to fulfil the other's slot. Slot swapping is available via the e-Helpdesk. FMPs may request swaps between any flights during critical events at airports.	
UNUSUAL SITUATIONS **LOW VISIBILITY** **What will the NM do in the event of low visibility at my destination airport if a minimum RVR value is set?** - Suspend flights (FLS) with unknown RVR capability, or - delay flights with insufficient RVR capability until the end of the low visibility period, or	

NON-CDM AERODROMES (AO)	CDM AERODROMES (CDM platform / AO)

- slot flights with sufficient RVR capability within the low visibility period.

How do I specify my RVR?

In the FPL or by sending an FCM or CHG.

NON AVAILABILITY OF AERODROME OR AIRSPACE

What may I expect if an aerodrome or airspace becomes non-available?

The NM will assess the duration and nature of the non-availability and either:

- close the aerodrome / airspace in the CACD and consequently reject all relevant FPLs, or
- accept the FPLs and regulate them and either:
- suspend flights, or
- delay flights to arrive or depart when the aerodrome / airspace is available.

STRIKES

What may I expect in the event of a strike?

The NM procedures are similar to those for non-availability of aerodrome or airspace and are adapted to specific local conditions.

NM CONTINGENCY

What will the NM do if its system fails?

In the event of the system failure a contingency procedure will be started and instructions will be issued by the NM (follow the AIMs, NOP Portal / *Network Headline News*). To permit resumption of slot allocation following recovery, AOs should continue to send flight plans and flight plan update messages to IFPS throughout the whole period of operation of the contingency plan.

2.3 Frequently Asked Questions (NOP Portal / NMP / NMUI)

What should I do if I cannot access the protected NOP Portal with my token or NMP / NMUI with OKTA?

Contact nm.cso.help-desk@eurocontrol.int. Some information is available in the public NOP Portal.

What should I do if I notice content that I think is incorrect or not updated?

During working days and working hours, contact nop.office@eurocontrol.int. Outside of this time, contact nm.om@eurocontrol.int.

Where can I find information on which ATFCM measures are foreseen to be applied the following day?

The NMOC publishes on D-1 the Initial Network Plan (INP) via the NOP Portal / NMP and NMUI to give advance and additional information on relevant events that are foreseen to have a significant impact on flight operations and / or ATC on the following day.

Where can I find the latest information on the status of the Network?

The NOP Portal / NMP and NMUI contains a *Network Headline News* portlet aimed at:

− Informing Network users about significant events affecting the Network (e.g.: major capacity shortfall, strikes, volcanic ash, etc.).

− Informing Network users about actions taken as a result of the events affecting the Network and give appropriate advice to minimise the impact.

− Reducing unnecessary queries to the e-Helpdesk through information sharing.

The NOP Portal also contains an overview and a map of the Network situation under the portlet *ATFCM Network Situation*.

Where can I find information regarding upcoming events that are envisaged to have an ATFCM impact?

The NOP Portal portlet provides information on upcoming ATFCM events via the *Network Events* portlet, including a calendar view. It shows events such as:

− Military exercises

− Events (sport, political, art, etc.)

− CACD implementations

− System changes / updates / implementation

− Free Route Airspace

− Trials

− Pre-validation

− Airport based events

Where can I find the latest published scenarios and information on the axes?

The latest version of scenarios used is published under the *ATFCM Measures (Scenarios)* portlet in the NOP Portal. The portlet *Axis Management*, which can be found by default just over the scenarios portlet, provides the latest information on the different axes.

How will it be announced if there is a teleconference planned (e.g. for an ANSP strike)?

The NOP Portal portlet *Tele/WebEx conferences* provides information on teleconferences and how to access them. Recordings of previous teleconferences may be found on the NOP Portal as well. The teleconferences are announced via the Headline News and AIM, which can be found on the NOP Portal as well.

How can I identify the NM areas that may be impacted by adverse weather?

In the *Network Operations Weather Assessment* portlet of the NOP Portal.

Where can I do the monitoring and reporting?

In the post operations tab of the NOP Portal, under the *Network Operations Monitoring and Reporting* portlet.

Under which phase on the NOP Portal can the NMIR (NM Interactive Reporting) portlet be found?

In the Post Operations tab of the NOP Portal.

Where can EVITA (European Crisis Visualisation Interactive Tool for ATFCM) tool be accessed?

In the NOP Portal, under the *EVITA* portlet.

Where can I find the latest ATFCM procedure updates?

Updated procedures published as Operational Instructions are available on the NOP Portal under the *Network Operations Procedure Updates* portlet (https://www.nm.eurocontrol.int/STATIC/html/indexProcedureUpdates.html). These updated procedures take precedence over the procedures published in the ATFCM Operations manual and this manual.

2.4 Frequently Asked Questions (CCMS)

What is CCMS?

The Central Claim Management System (CCMS) is a web interface allowing authenticated users to report post-event operational problems involving the unexpected behaviour or inadequacy of NM procedures, data and / or systems. Such users can submit complaints regarding NM operational services to the NM by creating an operational incident in the CCMS: https://www.nm.eurocontrol.int/cwars/jsp/startCCMS.jsp

What are the benefits of CCMS?

The CCMS has been developed as a single integrated tool for NM operational problem reporting and incorporates fully transparent monitoring of the claims management process, from collection, investigation and reporting to operational claims. Reports are recorded in the CCMS directly by the users, or alternatively by a member of staff at the Network Manager Operations Centre. The CCMS allows the originator of the claim and all known authorised persons from the same organisation to trace and monitor the investigation.

Feedback to the users (the result of the operational investigation) is provided online in the CCMS or via other means of communication to be agreed with the users (claim originator).

What alternatives exist to CCMS?

Alternatively, if the CCMS cannot be used, claims can be submitted via the standard forms on the EUROCONTROL website and in the Network Operations HANDBOOK to the email address nm.incident@eurocontrol.int.

How does CCMS work?

The CCMS automates and supports the processing of claims and integrates them into a centralised workflow management tool. By filling in claim windows, users can at any time produce, expand, monitor and retrieve operational incident reports. The network operations staff, within whose domain the claim falls, analyse the claim, allowing full transparency with the partners concerned and maintaining an open dialogue during the claim life cycle.

How can I access CCMS?

Before requesting access to the CCMS, various conditions have to be met:

− You must have public Internet access.

− You must have access to the Network Operations systems (CHMI or NMIR).

− You must obtain approval of the access request from a safety reporting manager if applicable.

Access to CCMS should be requested using a NM Service request form, accessible via the customer support area of the EUROCONTROL Network Management website or via the Network Operations Library.

2.5 Frequently Asked Questions (A-CDM)

The updated list of A-CDM, Advanced ATC TWR and ANI airports can be found in the IN “Updated list of A-CDM, Advanced ATC TWR and ANI airports”, available in the Network Operations HANDBOOK section of the NOP Portal.

What is the difference between A-CDM and Advanced ATC TWR?

From an A-CDM, all types of DPI are used: Early (E-DPI), Target (T-DPI-t), Sequence (T-DPI-s), Cancel (C-DPI) and ATC (A-DPI); from an Advanced ATC TWR only E-DPIs, C-DPIs and A-DPIs may be used.

What is the difference between ANI and A-CDM?

The Advanced Network Integrated (ANI) is an additional category of airports, which is intended for Airports that have fully adopted the Airport CDM concept and require a higher level of Airport Operations integration with the ATM Network. Compared to CDM Airports, the interaction with NMOC is extended with provision of Predicted-DPI (P-DPI) and General-API (G-API) messages, in order to contribute to the Network Operations Plan (NOP).

ANI airports can also exchange Target Take-Off (TTA-API) and Target Time Over APIs (TTO-API), those messages are however optional.

In addition to the benefits of CDM Airports, the integration as an ANI airport provides stakeholders additional benefits by extending the timeframe of A-CDM further than three (3) hours before off-block and by providing enhanced demand picture calculations and traffic predictability.

Where can I find more information about airports and contacts?

The *Airport Corner*, accessible from the NOP Portal, contains information for each airport.

Where can I find information about DPIs triggering events and processes?

More information about DPIs can be found in the *DPI Implementation Guide*.

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3 AIR TRAFFIC FLOW AND CAPACITY MANAGEMENT (ATFCM)

3.1 Objectives

ATFCM is a service that is enhancing ATFM with the objective of managing the balance of demand and capacity by optimising the use of available resources and coordinating adequate responses, in order to enhance the quality of service and the performance of the ATM system.

3.2 Establishment of ATFCM Procedures

ATFCM procedures, roles and responsibilities in this document have been established in line with:

ATFCM procedures, roles and responsibilities in this document have been established in line with:

1. **ICAO** procedures as defined in the ICAO Doc. 4444, EUR SUPPs Doc 7030 and **ICAO** Doc. 7754, vol. II. These procedures are amended following the **ICAO** consultation process.

2. Procedures specific to the ATFCM operations according to the policy and strategy developed and approved by the responsible EUROCONTROL bodies.

3. **Commission Implementing Regulation** 2019/123 on ATM network functions (NM Regulation), Article 17 Working arrangements and processes for operations (applicable as of 1.1.2020).

4. **Commission Implementing Regulation** 2017/373 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight (Common Requirements), ANNEX III COMMON REQUIREMENTS FOR SERVICE PROVIDERS (Part-ATM/ANS.OR), SUBPART B — MANAGEMENT (ATM/ANS.OR.B), ATM/ANS.OR.B.035 Operations manuals (applicable as of 1.1.2020).

5. **Commission Regulation** (EU) 255 / 2010 on air traffic flow management (ATFM regulation) relevant articles.

3.3 Network Operations Plan

The Network Operations Plan (**NOP**) has been developed to build a single document that provides a consolidated view of the forecast seasonal, monthly, weekly and daily ATFCM situation.

This service improves through a consolidation of the planning and monitoring activities and a stronger cooperation with Airspace design, Airspace management, Aircraft Operators, Air Traffic Services and Airport partners supported by an enhancement of the information exchange system. It incorporates the existing information on traffic demand and capacity plans, identifying bottlenecks and presenting the ATFCM and ASM measures foreseen to counterbalance them.

The objectives are to update permanently the ATM Network Operations Plan, using scenarios, providing common situation awareness, and minimising the

impact of the lack of resources while ensuring a common understanding of the situation.

In the context of the NOP, winter is defined as the period 31st October – 30th April and summer 1st May – 30th October.

Special events expected to affect the demand and for which specific ATFCM measures have been planned are also described in detail in the document.

The NOP is published on the NOP portal at:

https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html

3.4 ATFCM Phases

The ATFCM provision in the ECAC region is carried out in four phases:

1. **Strategic Flow Management** takes place **seven days or more prior to the day of operations** and includes research, planning and coordination activities through a Collaborative Decision Making (CDM) process. This phase comprises a continuous data collection with a review of procedures and measures directed towards an early identification of major demand / capacity imbalances (such as: axis management, air shows, major sport events, military exercises, etc.). When imbalances are identified, the NM is responsible for the overall coordination and execution of strategic ATFCM planning to optimise all available capacity and achieve performance targets. The output of this phase is the Network Operations Plan (NOP).
2. **Pre-Tactical Flow Management** is applied during the **six days prior to the day of operations** and consists of planning and coordination activities. This phase studies the demand for the day of the operation, compares it with the predicted available capacity on that day, and makes any necessary adjustments to the plan that was developed during the Strategic phase. The main objective of the pre-tactical phase is to optimise efficiency and balance demand and capacity through an effective organisation of resources (e.g., sector configuration management, use of scenarios, etc.) and the implementation of a wide range of appropriate ATFCM measures. The work methodology is based on a CDM process between the stakeholders (e.g. the NM, FMPs, AOs).The output is the ATFCM Daily Plan (ADP) published via ATFCM Notification Message (ANM) / Initial Network Plan (INP) and via the NOP portal.
3. **Tactical Flow Management** takes place **on the day of operations** and involves considering, in real time, those events that affect the ADP and making the necessary modifications to it. This phase is aimed at ensuring that the measures taken during the strategic and pre-tactical phases are the minimum required to solve the demand / capacity imbalances. The need to adjust the original plan may result from disturbances such as staffing problems, significant meteorological phenomena, crises and special events, unexpected limitations related to ground or air infrastructure, etc. and taking advantage of any opportunities that may arise. The provision of accurate information is of vital importance in this phase, since it permits short-term forecasts, including the impact of any event and maximises the existing capacity without jeopardising safety.
4. **Post Operational Analysis** is the final step in the ATFCM planning and management process and takes place **following the tactical phase** of operations. During the post operations analysis phase, an analytical process is

carried out that measures, investigates and reports on operational processes and activities throughout all domains and external units relevant to an ATFCM service. All stakeholders within the ATFCM service should provide feedback on the efficiency of the ADP (ATFM measures and delays, the use of predefined scenarios, etc.), flight planning and airspace data issues. This phase compares the anticipated outcome (where assessed) with the actual measured outcome, generally in terms of delay and route extension, while taking into account performance targets. The final result of this phase is the development of best practices and / or lessons learnt for improving upon those operational processes and activities.

3.5 Areas Covered

The NM Central Airspace and Capacity Database (CACD) covers several different geographical areas that have common and uncommon elements.

The FPM Distribution Area (FPM DIST) is the area in which IFPS is responsible for the distribution of flight plans and associated messages.

The ATFCM Area is the area in which the NM is responsible for the provision of ATFCM.

Certain states are cooperating with the NM by exchanging data with the NM and participating in the NM ATFCM service. These States are described as cooperating States and the NM collectively refers them as the ATFCM Adjacent Area. The NM provides them with limited ATFCM services based on an NM Agreement which details the service level provision.

Additionally, the FMPs of these FIRs may request to apply ATFCM measures for the airports within the FIR or for significant points at the interface between the FIR and the ATFCM Area.

The NM may apply ATFCM measures to flights which:

- Depart from within the ATFCM area.
- Enter the ATFCM area after departing from an adjacent Flight Information Region (FIR) within the ATFCM Adjacent Area.

Latest update of the list of adjacent FIRs may be found on the website:

http://www.nm.eurocontrol.int/STATIC/NM_AREA/

3.6 AO Liaison Cell

An important element of the NM operational organisation is the integration of the AOs into the operations by means of the Aircraft Operator Liaison Cell (AOLC), which is staffed by representatives of the airlines. During the daily activities of the NM, the cell is the focal point for the operators for strategic pre-tactical, and post-operations information about the airspace and ATFCM situation in Europe. In addition, the cell is involved in the NM crisis management procedure ensuring transparency versus the AOs in crisis situations as such. **The focal points for tactical information are the EUROCONTROL-employed Operations Managers (OMs) and Deputy Operations Manager (DOMs) in the NM Operations Centre (NMOC).** The cell liaises with NM operational services, AOs and ATM providers, proposes NM developments to benefit airspace users and ATM providers, follows up on any repetitive

problems affecting the operators, and monitors the equity of the flow management process.

The latter is a key point – because the AOs are involved and the system is transparent, the AOs accept the NM proposals and are realistic both in their demands and expectations. For the first time in European ATM, all partners address the problems together.

4 COLLABORATIVE DECISION MAKING (CDM)

Collaborative Decision Making is a process which allows decisions to be taken by those best positioned to make them on the basis of the most comprehensive, up-to-date accurate information and ensuring that all concerned stakeholders are given the opportunity to influence the decision. This enables decisions agreed collaboratively to reach performance objectives and enable particular flights to be dynamically optimised to reflect near or real-time events.

A decision to implement and execute ATFCM measures within the Area of Responsibility (AoR) of an FMP shall normally be preceded by a CDM process. This process provides the various organisations with the opportunity to update each other continuously on events from the strategic level to the real-time in a timely and accurate manner. To be efficient and reach the required objectives, CDM must be:

a) an **inclusive** process;
b) a **transparent** process;
c) a process that **builds trust** between the parties involved.

The organisation and structure of the ATFCM CDM process has been designed to ensure that the affected stakeholders, service providers and airspace users alike, can discuss airspace, capacity / demand and flight efficiency issues through regular sessions and formulate plans that consider all pertinent aspects and points of view. The discussions occurring during the CDM activities shall lead to a consensus view and solution implying an official commitment of each participant.

In the Strategic phase the focus is made on analysing major and significant events as well as anticipated capacity shortfalls for individual ACCs / airports. The result is a set of agreed ATFCM measures / solutions to be considered for implementation in the pre-tactical and tactical phases. Conferences and briefings take place in advance to consider these ATFCM events (e.g. axis conferences) following the CDM process.

ATFCM measures considered in pre-tactical / tactical phases could be extracted from pre-agreed strategic ATFCM measures or envisaged as ad-hoc measures to respond to a new situation triggered by a change either in traffic demand or ATC system capacity. The CDM process occurs daily and may be scheduled more frequently depending on the traffic and capacity situation. The output of these daily conferences is the ATFCM daily plan (ADP).

The ADP is then constantly updated during the day of operations through further CDM processes. Tactical briefings and conferences are scheduled depending on the traffic patterns and their intensity applicable to the area.

Participants should include involved **NM staff, ANSPs** (FMP and ATS units), **AOs** (chief or senior dispatchers and the AO Liaison Cell), affected **military authorities** and **airport authorities**, as applicable.

When, despite all attempts, an agreement cannot be reached, the implementation of a specific regulation shall ultimately be the responsibility of the FMP, however a monitoring and eventual escalation process to higher management should be envisaged if such a situation endures.

Whereas the final decision on the regulation implementation is for the FMP, the details on the regulation itself should be coordinated with the NM except if otherwise specified through particular instruction.

The implementation of a Network measure (e.g. level capping, rerouteing) affecting the area of responsibility of **multiple FMPs** remains the responsibility of the NM who shall ensure the Network benefit through the CDM process.

Measures within the area of responsibility of an **individual FMP** remain the responsibility of that FMP. In such cases, the NM should be informed.

4.1 CDM Conferences

NM CDM conferences are usually run using EUROCONTROL e-conferencing.

4.1.1 Network Briefings

Briefing on critical situations or traffic load imbalance in the network is carried out through the NOP portal Headline News.

4.1.2 Seasonal CDM Conferences

Seasonal CDM conferences are held during the summer (e.g. South-West Axis, etc.) and winter (e.g. Ski Axis, etc.) seasons on an ad-hoc basis according to the axes to review previous activities and prepare for the following activities. Coordination is initiated and led by the NM.

4.1.3 Ad-hoc CDM Conferences

Ad-hoc CDM conferences are organised whenever there is a need to discuss a course of action in order to prepare for and monitor events such as industrial actions, etc.

Notification and invitation will be given by AIM and / or NOP Portal Headline News which will give details on how to attend.

4.2 ATFCM Daily Plan (ADP)

The ATFCM Daily Plan (ADP) is a set of tactical ATFCM measures that will be in force in European airspace on the following day.

The NM shall coordinate and define the daily plan and inform Aircraft Operators and ATC units about the ATFCM measures (e.g. sector configuration, application of scenarios). Through the ATFCM Daily Plan the NM is trying to optimise available capacity to meet forecast demand and to manage demand to minimise delay and cost. The NM shall publish the agreed plan for the day of operations after a collaborative decision making process.

The ATFCM Daily Plan shall be altered if necessary through real-time optimisation of capacity / demand creating common situational awareness across the Network.

The ADP is promulgated by means of an ANM and the Initial Network Plan (INP).

4.2.1 Initial Network Plan (INP)

In addition to the ANM, excerpts from the ATFCM Daily Plan are published on D-1 by 17:00 UTC in wintertime (1 hour earlier in summer time) in the INP via the NOP Portal. Through the INP the NM advises ANSPs and AOs of all areas predicted to have a significant impact on the Network together with advice offered to AOs on actions to take including routes and / or levels to be filed to contribute to better utilisation of network capacity while avoiding heavy delays.

4.2.2 Feedback on ADP Quality

The opinions and comments concerning the ADP quality received from FMPs, AOs as well as from the NM units represent very important input for further improvement of the NM Pre-Tactical planning. This feedback will help the NM to identify the reason(s) and determine corrective actions to avoid reoccurrence.

4.3 Routeing Scenarios

To overcome some of the limitations of the RAD and improve medium and short-term management of ATC capacity, reducing complexity or workload in a sector, the NM, together with the FMPs concerned, will develop reroutes during the planning period to help resolve forecast ATC capacity problems and to achieve a global decrease of delays by spreading the traffic. These measures are known as routeing scenarios and are published in the form of alternative or a mandatory instruction via ANM and the INP. Routeing scenarios are promulgated on the NOP Portal:

https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html

4.3.1 Mandatory Routeing Scenarios

Depending on the type of rerouteing required, they may be considered in two parts:

- Rerouteing Scenarios (**RR**) (e.g. RR1FUJ): mandatory diversion of flows to offload traffic from certain areas. If affected by a RR, AOs shall file / refile their FPL to meet the RR requirements.
- Flight Level Capping Scenarios (**FL**) (e.g. FL11FFM): rerouteings of flows carried out by means of level restrictions (e.g. flights from EDDN to Paris TMA should file below FL245). If affected by a FL scenario, AOs should file / refile their FPL to meet the FL requirements.

What are the benefits of using mandatory scenarios?

a) Implementation of scenarios avoids having a considerable penalising regulation giving high delays to all traffic.
b) Mandatory scenarios are only active for short periods (when the imbalance between demand and capacity is considered to be critical). Tactically these scenarios are cancelled if the alternative routeings are subject to unforeseen restrictions.
c) The use of scenarios often guarantees a stable, manageable and predictable traffic pattern.

d) These mandatory scenarios are always agreed with the different FMPs involved and fully embrace the CDM process.
e) Mandatory scenarios are in the benefit of the majority of the flights as they reduce delays in a given sector considerably and are beneficial especially to those flights, which cannot avoid the regulation.

4.3.2 Alternative Routeing Scenarios (AR)

These are alternative routes which are exceptionally made available to offload traffic from certain areas, implemented by regulations with a low rate. To avoid heavy delays and achieve better spreading of traffic, the NM may reach an agreement with the FMPs concerned to enable AOs to use routes, which are otherwise not available for this type of traffic. Activation of AR (e.g. AR7SKI) normally causes higher traffic complexity in the sector(s) concerned, which is the reason for there being a low rate in an AR scenario.

5 ROUTE PLANNING

5.1 Route Availability Document (RAD)

The Route Availability Document (RAD) is an ATFCM tool that is designed as a sole-source flight-planning document, which integrates both structural and ATFCM requirements, geographically and vertically.

The RAD is updated each AIRAC cycle following a structured standard process of Requirement, Validation and Publication by the NM in cooperation / coordination with the States and the AOs. For details of route characteristics, refer to the ENR section of the relevant AIP.

The objective of the RAD is to facilitate flight planning in order to improve ATFCM while allowing aircraft operators' flight planning flexibility. It provides a single, fully integrated and coordinated routeing scheme. Except where otherwise specified the RAD affects all NM airspace.

The RAD is designed as a part of the NM ATFCM operation. It organises the traffic into specific flows to make the best use of available capacity. Whilst, on its own, it will not guarantee the protection of congested ATC sectors during peak periods, it should facilitate more precise application of tactical ATFCM measures when required.

The RAD should also assist the NM in identifying and providing re-routeing options. Global management of the demand will potentially, lead to an overall reduction of delays.

The RAD is subject to continuous review by the NM, the ANSPs and AOs to ensure that the requirements are still valid and take account of any ATC structural or organisational changes that may occur. Further reviews may be initiated at the request of the States or the user organisations.

The RAD is promulgated on the NOP Portal:

https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html

Temporary changes due to exceptional circumstances (e.g. major equipment failure, industrial action or large-scale military exercises) may necessitate the suspension of part of the RAD for specified periods, and additional routeings will be activated where possible following coordination with the relevant FMPs and AO organisations. Changes will be published by AIM giving details of the traffic affected, the period of activation and the corresponding routeings.

5.2 Publication of EAUP / EUUP

The European Airspace Use Plan (EAUP) contains the consolidated list of available CDR2s, and closed CDR1s or permanent ATS routes as repetition of prior notice by NOTAM. It also contains the planned activations of restricted airspaces, but the access to this data is for the moment restricted to certain types of users.

The EAUP is issued by the NM each day by 14.00 / 15.00 UTC (summer / winter time). It covers the 24 hour time period between 06.00 UTC the next day to 06.00 UTC the day after. After the publication of the EAUP, updated Airspace Use Plans may be issued and published as European Updated Airspace Use Plan (EUUP).

EAUPs and EUUPs are available through the NOP Portal, in the EAUP / EUUP portlet. A Compare function enables the user to visualise the changes made between different versions.

In the context of B2B web services, the same data is also available through the e-AMI (electronic Airspace Management Information). A system to system connection can be established to integrate the e-AMI into stakeholders' own applications.

6 FLIGHT PLAN SUBMISSION AND UPDATE

6.1 Flight Plan Submission

The NM requirements for the submission of flight plans conform to the ICAO EUR Region supplementary procedures (Doc 7030 part 1 Chapter 3) for flight planning.

AOs filing flight plans for flights departing from within the ATFCM area or from within the ATFCM Adjacent area and entering the ATFCM area, shall assume their flight is subject to ATFCM measures and subject to the requirement to submit a flight plan at least three hours before EOBT unless:

- The flight is exempted from ATFCM slot allocation as defined in the ICAO EUR Regional Supplementary Procedures (Doc 7030).
- The flight is taking place in an area or under conditions specified in the AIP of the State from which the flight is departing as not subject to ATFCM Measures.

It should be noted, however, that effective application of ATFCM measures depends on an accurate assessment of air traffic demand which, in the Tactical Phase is based on flight plan information. AOs are, therefore, urged to file flight plans more than three hours before EOBT whenever possible.

Where applicable, flight plans shall be submitted in accordance with the route restrictions and specific requirements published in RAD in force, taking into account any change of validity.

If required by exceptional circumstances, Operators may submit a flight plan for a route normally forbidden in RAD but only after its availability has been confirmed by the NM. (e.g. tactical rerouteing scenarios).

If operators, in conjunction with the NM decide to use a route other than that contained in their previously submitted flight plan (**FPL**) it is mandatory to file either a Modification (**CHG**) message or use Replacement Flight Plan Procedure (**RFP**) (see IFPS Users Manual for details) to that effect.

Flight plan submission procedures, including cancellation and replacement procedures, within the Flight Planning Messages (**FPMs**) Distribution area are described in the IFPS Users Manual.

Note: The IFPS shall not accept DLA and CHG messages for those flight plans that have been ATC_Activated.

6.1.1 'Ghost' and Duplicate Flight Plans

'Ghost' is the term used to refer to the flight plans of flights which do not take place i.e. flight plans that were not cancelled by the originators.

Only one Flight Plan shall exist at any given time for the same flight.

It is absolutely essential that flight plan originators:

- Cancel a flight plan as soon as they know that the flight is not going to take place.
- Cancel an existing flight plan before filing a replacement flight plan for the same flight.

The existence of ghost or multiple flight plans is to be condemned as they will:

a) Present ATC with false information.
b) Impair the efficiency of the NM.

c) Be responsible for the issuance of unnecessary new slots.
d) Cause additional unnecessary delays to regulated flights.
e) Lead to an under-utilisation of ATC capacity.

6.1.2 Reception of REJ Message

Message originators shall always react to the reception of a REJ message by amending the original message as appropriate and re-submitting it to the IFPS.

Therefore, if a REJ message is received from IFPS, then no flight plan will exist.

6.2 Flights not subject to ATFCM Slot Allocation

6.2.1 Exempted Flights

The following flights are exempted from ATFCM slot allocation:

- flights carrying Head of State or equivalent status [STS / HEAD].
- flights conducting search and rescue operations [STS / SAR].
- flights authorised by the relevant States Authorities to include in the flight plan [STS / ATFMX].
- flights carrying a life-critical emergency evacuation [STS / MEDEVAC].
- Flights engaged in fire-fighting [STS / FFR]

Note: These principles are based on the relevant chapter on ATFCM slot allocation as established by ICAO in the Doc. 7030 (points a) to c)) and behaviour of the NM system (point d)).

Where can I find if a flight qualifies for exemption?

The procedures for requesting ATFCM slot allocation exemptions (STS / ATFMX) can be found in the national AIPs.

Flights departing from outside the ATFCM Area of and the ATFCM Adjacent Area are not subject to ATFM measures.

If a flight belongs to a flow that is exempted from the regulation by the traffic volume definition it will not be subject to ATFM measures either.

6.2.2 Airborne Flights

The ETFMS collects surveillance data, also called Correlated Position Reports (CPRs), and the First System Activation (FSA) data from the ACCs. Automatic Dependent Surveillance – Broadcast B (ADS – B) data will be processed by ETFMS in the same manner as the CPR data received. The same time/vertical/lateral deviation thresholds apply. The refresh rate of the ADS – B data is 1 minute.

See the figure below for further information.

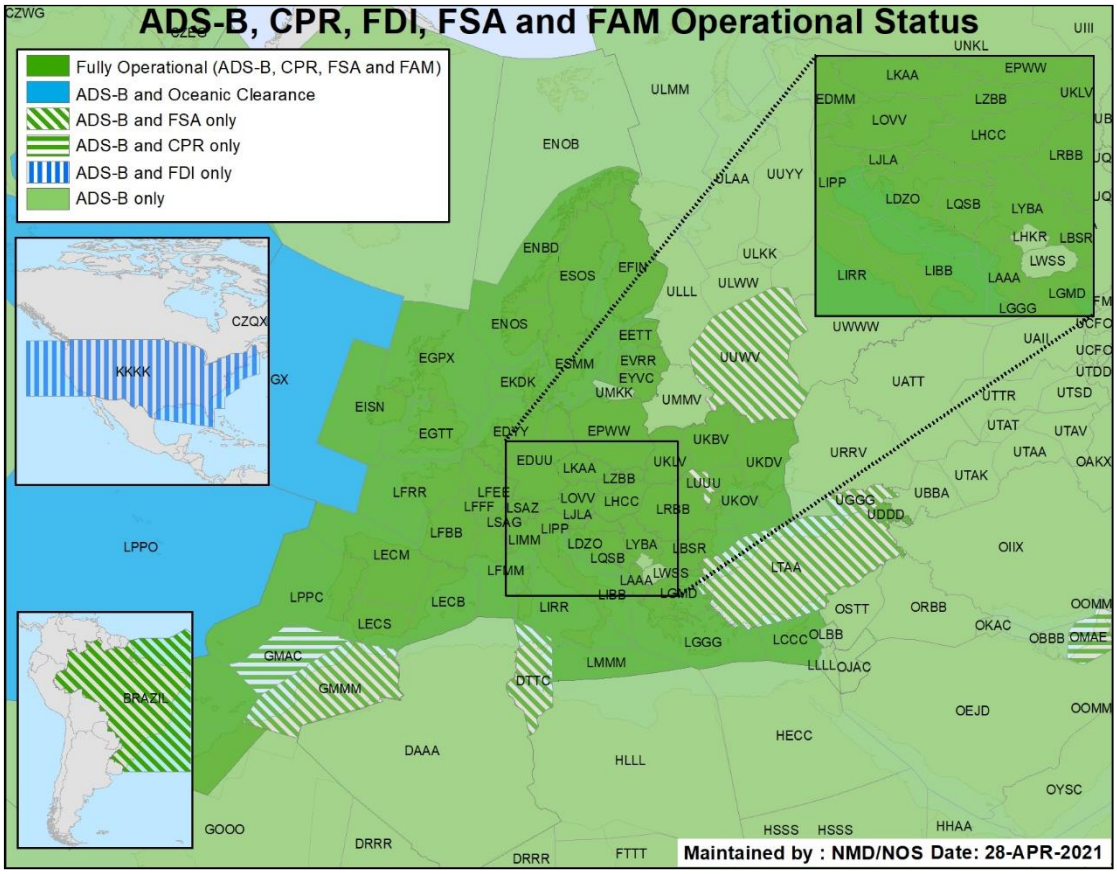


Figure 1 – ADS-B, CPR, FDI, FSA and FAM Operational Status

If the flight is already airborne when the regulation is created, or due to FSA / CPR data a flight is pushed into an active regulation the flight will be forced into that regulation without delay.

Note: To ensure that flights are correctly terminated in the system, ADS-B data received 5 minutes after the CTFM arrival time of a flight will be discarded in ETFMS.

6.3 Flight Plan Updates

6.3.1 EOBT Requirements

It is a requirement for both ATC and ATFCM, that the EOBT of a flight shall be an accurate EOBT. This applies to all flights, whether subject to a flow management regulation or not.

Any change to the EOBT of more than 15 minutes for any IFR flight within the FPM distribution area shall be communicated to the IFPS.

- To amend the EOBT to a later time, a DLA or CHG message shall be sent to IFPS.

Note: The update of the EOBT with a second FPL is not allowed in IFPS. When a FPL is associated to another FPL changing the EOBT, the FPL will be invalidated with the EFPM401 error saying “NOT ALLOWED TO USE A FPL TO UPDATE THE EOBT. DLA OR CHG IS REQUIRED”.

- To amend the EOBT to an earlier time, a CNL message shall be sent to IFPS, which, on receipt of ACK message, shall be followed by a new flight plan with the new EOBT indicated.

Note: The AO may ask the local ATC Unit (TWR) or the FMP to set the flight as Ready (REA). See REA status for further details.

An AO should not modify the EOBT to a later time simply as a result of an ATFCM delay (**CTOT**). When an AO submits an amendment message (e.g. DLA or CHG) to IFPS, they must always give as EOBT the earliest EOBT they may comply with. The EOBT in IFPS should always reflect the time at which the AO actually wants to be off-blocks. The EOBT should always be changed if the original EOBT established by the AO cannot be met by the AO for reasons other than ATFCM delay.

If, by changing EOBT, the flight gets affected by another more penalising regulation, its CTOT will be recalculated.

Note: Some States outside the NM area of responsibility still require AOs to update the EOBT regardless of why the flight's original EOBT may have changed. AOs should bear in mind the formula explained below when doing this. Where it is known that ATC send Departure (DEP) messages for all flights, then this DEP message will suffice.

Take the current CTOT, minus the taxi time, minus 10 minutes and send the new EOBT, which must not be after this time e.g. EOBT 1000, CTOT 1100, but the flight cannot go off blocks until 1025. The taxi time is say 15 minutes:

1100 minus 15, minus 10 = 1035. The new EOBT must be earlier than 1035. If it is, then this action will not trigger a revised CTOT.

6.3.2 Last Validity

Stakeholders are able to find in CHMI, in NMP, NMUI and the protected NOP Portal the Last Validity value (LV column) which shows the maximum time to which the OBT of the flight may be shifted without triggering IFPS errors. This information is aimed at improving AOs awareness and hence their own operations by anticipating the necessary actions on flights that might be delayed (DLA). The Last Validity field displays the following characters:

- "+" if the validity time found is over 4 hours (the system does not scan validity further than 4 hours in the future).
- "<" if the validity time is exactly the one displayed and is less than 4 hours.
- "?.." if the Last Validity parameter has not been computed for the flight (e.g. PREDICT, SIMEX, CHMI archive…).

6.3.3 Modification of Flight Plan in non-CDM (DLA, CHG, RFP)

When do I send a DLA?

A DLA message shall be sent for any change of EOBT greater than 15 minutes. The new EOBT must be in the future.

What is the response of the NM?

The NM will inform all other ATC Units concerned with the flight and will re-calculate the flight profile if needed. The resulting calculation may lead to the issuance of a slot revision such as an SRM or an SLC.

What is the subsequent response of AOs?

Comply with the relevant ATFCM message.

Any revision to a flight plan by means of DLA, CHG or the Replacement Flight Plan Procedure (RFP) is taken into account by the ETFMS. As a result, messages such as SAMs, SRMs and SLCs may be sent. SAMs or SRMs will be issued immediately if the new EOBT is at or after EOBT - 2 hours.

If the flight plan revisions do not alter the ETFMS calculation any SAM or SRM already sent remains valid. In that event ETFMS will not send new messages and the AO is expected to comply with messages already received.

How do I modify the field 18 of the FPL?

The CHG message is used to update one or several items of the field 18. **The complete field** 18 **must be repeated**, not only the changed item.

My flight, departing from a non-CDM aerodrome, is active in ETFMS due to incorrect ATC message, but flight is in reality still on the ground. What can I do?

You can request deactivation of the flight in the ETFMS via the FM Helpdesk. Do not forget to update the EOBT via DLA / CHG afterwards (to be sure that your flight is covered by the IFPS revalidation process).

My flight is terminated (TER) in the ETFMS, although it has not yet departed, what action can I take?

Ask the FM Helpdesk to re-activate the flight. The NM tactical team can manually de-activate (undo activation) a flight up to 3 hours after it was terminated (TER). Once de-activated, the flight will go into filed status and a Flight Update Message (FUM) will be sent to the IFPS.

6.3.4 Modification of Flight Plan in A-CDM (E-DPI, T-DPI-t, T-DPI-s, A-DPI)

When do I update the TOBT?

Following the CDM process, TOBTs are updated as soon as the responsible person for updating the CDM platform is aware of the delay. Depending on the local working practice, DPI messages will be automatically generated and sent to the ETFMS. In addition to this, a DLA message shall be sent if your TOBT is more than 15 minutes after the last EOBT.

Airlines can delegate to the NM the filing of DLA messages for departures from designated CDM airports (EOBT Update Service for A-CDM departures). For flights operated by an airline which has delegated the DLA-filing, the ETFMS will automatically file a DLA message using the TOBT values in the DPI messages received. The airline can also opt to defer the transmission of the DLA. The rationale is to prevent that NM sends a DLA that is based on an unstable/inaccurate TOBT, potentially forcing the airline to cancel and refile the flight plan at a late stage.

What is the response of the NM?

Upon reception of a DPI message in the ETFMS, the ETFMS will inform all other ATC Units concerned with the flight data and will re-calculate the flight profile if needed. The resulting calculation may lead to the sending of a slot revision such as an SRM or an SLC.

If the TTOT in a T-DPI-t or T-DPI-s message is after the CTOT tolerance window, the CTOT will be re-calculated accordingly.

What is the subsequent response of AOs?

Comply with the relevant ATFCM message.

Note: Normally, the sequence of DPI messages is: E-DPI > T-DPI-t > T-DPI-s > A-DPI.

a) **E-DPI** (Early DPI): It is sent from EOBT - 3 hours after verification of the flight plan EOBT with the airport slot (SOBT) and as such confirms the ICAO FPL message.
b) **T-DPI-t** (Confirmed): It is sent from EOBT - 2 hours and it is based upon the Target Off-Blocks Time (TOBT) derived from data such as the estimated landing time of the inbound aircraft, passenger connections, crew connections and the estimated turn-around time. In general this information represents the AO's desires and does not take into account ATC constraints at the airport and / or ATFCM restrictions
c) **T-DPI-s** (Sequenced): It is sent from TOBT - 40 minutes and it is based upon the Target Start-up Approval Time (TSAT) derived from the ATC sequencing plan. This information represents the ATC's desires and takes into account ATFCM restrictions and as accurately as possible any other taxiing / sequencing delays.
d) **A-DPI** (ATC DPI): It is sent at off-block and it provides the ETFMS with an accurate estimation of the actual off-block time. It is based upon the take-off-sequence of the flight.
e) **C-DPI** (Cancel DPI): It is sent if the turn-around process is interrupted at the airport.

Will a T-DPI-t and T-DPI-s be rejected by the ETFMS if no E-DPI has been received previously?

T-DPI-t and T-DPI-s will be accepted by the ETFMS even if no E-DPI has been received. A comment in the operational log 'T-DPI received before E-DPI' will be displayed.

Why is the Registration mark of a flight in a CDM airport different from the one from my FPL?

The ETFMS overwrites the Registration (REG) from the FPL with the information from the DPI message. The handling agent should have the most accurate registration (for the loading and load sheet of aircraft).

How can I update the Registration of the flight?

The CDM platform can send DPI messages with the correct aircraft registration. The AO should send a CHG message with the correct aircraft registration, when different from the one from the FPL.

My flight, departing from a CDM aerodrome, is active in ETFMS due to an ATC incorrect message, but the flight is in reality still on the ground. What can I do?

You can request the TWR to do the necessary to de-activate the flight: either to provide a C-DPI with reason UNDOADPI that will automatically de-activate the flight, or if this is not possible and the flight is ready, to contact NMOC to de-activate the flight. Do not forget to update the EOBT via DLA / CHG or update your TOBT afterwards.

6.4 Flight Plan Cancellation

To cancel a FPL, a CNL message shall be sent to IFPS by the AO.

At CDM aerodromes, usually a C-DPI followed by a FLS from the ETFMS is expected to take place before the AO sends a CNL message.

Note: CDM airports could pass this information to the Network Manager from as early as EOBT - 48h or, if the flight plan is filed later, as soon as the flight plan is filed. This will enable NM to update the traffic demand picture before the aircraft operator cancels the flight plan through a CNL message.

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7 MANAGEMENT OF THE READINESS STATUS OF THE FLIGHT

7.1 RFI Status

The RFI status indicates that the flight can accept SRMs with CTOT improvements. All **flight plans** are **by default in RFI status**. In case an improvement is possible, flights in status RFI will immediately receive a Slot Revision Message (SRM).

The AO may change the status of a particular flight from SWM to RFI by sending the RFI message. It will immediately receive a Slot Revision Message (SRM) in case of improvement.

When do I send a RFI?

An RFI can be sent when the AO can again accept any improvement to the allocated CTOT.

What is the response of the NM?

The NM will send an SRM if an improvement is possible for this flight.

How do I receive a SIP?

By sending a SIP Wanted Message (SWM), the AO will receive a SIP instead of SRM when an improvement is possible.

7.2 SIP Wanted Message (SWM) Status

The SIP Wanted Message (SWM) status allows the flight to receive a Slot Improvement Proposal (SIP), instead of directly receiving an SRM, when there is a possibility to improve the flight. The default status (RFI) may be changed to SWM status. Flights in SWM status are not affected by the Recover Hole mechanism.

When do I send an SWM?

When the AO is not ready to accept direct improvement for the flight concerned. This message can be sent at any time after the flight is known by ETFMS.

What is the response of the NM?

The NM will send a SIP if there is any possibility to improve the flight.

Note In case of modification of the most penalising regulation, by default, only flights in an **RFI** status or in a Ready (**REA**) status will be considered for improvement via SRM. However, if the situation requires it, the NM tactical team will be able to manually let all flights be considered for improvement by SRM, including flights for which an SWM has been received.

When does the NM send a SIP?

A Slot Improvement Proposal (SIP) message is sent to the AO by the NM for a flight being in SWM status to propose a new take-off time if it is possible to improve the existing CTOT by a significant amount (due to slots being released by other flights, improvements in rates, etc.).

What is the response of AOs?

An AO responds by means of either a Slot Improvement Proposal Acceptance (SPA) message or a Slot Improvement Proposal Rejection (SRJ) message.

A SIP expires if:

either

1. no response is received:

   then the flight retains the last received CTOT.

   or

2. the response is sent after the **RESPBY** (respond by) time:

   then the message is discarded and an error message is sent by the NM stating the REASON i.e. VOID. The flight also retains the last received CTOT.

   or

3. the AO sends a CHG, CNL, DLA, etc. before the end of the RESPBY period providing the revised take-off time is after the NM proposed one in the SIP.

   When AOs do not wish the improvement offered in a SIP, they are requested to **promptly use the SRJ** rather than allow the SIP to lapse so that the slot may be offered to another AO. In this event the AO will comply with the slot sent prior to the SIP.

What is the response of the NM to an SPA?

The NM confirms a NEWCTOT with an SRM. If it is sent after the RESPBY time the message is discarded.

What can I do if I have received a SIP but the RESPBY time provided has expired?

If the flight is ready send an RFI or ask local ATC (TWR) or the FMP to send a REA.

What is the response of the NM to an SRJ?

No response should be expected from the NM unless the SRJ is sent after the RESPBY time in the SIP.

In that case the message is discarded and an ERROR message is sent stating the REASON i.e. VOID.

7.3 Ready (REA) Status

For regulated flights being in a situation to depart before their CTOT / EOBT (doors closed and ready to depart), the AO may ask local ATC to send a Ready (REA) message or, in an A-CDM aerodrome, the TWR may send a TTOT (T-DPI-s) before the CTOT tolerance window (-5, +10).

Traffic departing from A-CDM airports will automatically be given REA status when clock reaches TOBT – 5 and a T-DPI-s has been received for the flight. Note that when a T-DPI-s is received and the TTOT is inside the STW, ETFMS will no longer search for an improved CTOT.

7.3.1 The Ready (REA) Message

A REA may be sent between EOBT minus 15 minutes, and no later than the CTOT – TAXITIME / MINLINEUP – SRM minimum improvement time (5 minutes) of the flight which may result in a flight being offered earlier CTOT or even take off time before its original EOBT.

When do I send a REA message?

The REA message relates to the regulated flights only. If it is sent for a non-regulated flight an error message will be generated by the ETFMS with the COMMENT “MESSAGE RECEIVED BUT NO SLOT HAS BEEN ISSUED”.

The REA message can only be sent by ATC following a request from AO. AO may ask ATC to send a REA in 2 situations:

1. The flight is ready to depart before the EOBT (maximum 15 minutes before).
2. The flight is ready to depart before its CTOT (no later than CTOT – TAXITIME / MINLINEUP – SRM minimum improvement time (5 minutes)).

ATC may include a MINLINEUP time in the REA to indicate the minimum time needed to get from its present position to the take-off.

Note The TIS parameter is not relevant when ATC has sent an REA message for a flight.

How does the NM check the REA message originator?

There are 2 possibilities to send an REA:

- Via NM Client Application.
- Via AFTN or SITA.

NM CLIENT APPLICATION

Access to the REA message is permitted according to the User Id. Only ATC Units (i.e. TWR, ARO) are granted this permission. The FMP responsible for the ADEP is also able to send a REA message.

AFTN / SITA

When a REA message is received, the NM systems check to see if the originator of the message is the TWR / ARO of the aerodrome of departure.

In the CACD, each TWR / ARO definition has an address to which the ATFM messages are sent. It is this address that will be checked.

Some other units may receive, for information, a copy of the ATFCM message. They are not permitted to send the REA.

If the check fails, the REA message will be rejected by the NM systems and an ERR message will be issued.

What will the NM do?

The NM will use the REA message to try to improve the CTOT of the flight up to present time plus the duration indicated in the —MINLINEUP (if included in the REA, otherwise the default taxi time of the ADEP is used).

If the regulated flight is ready before its EOBT, the NM will consider the filing time as a new EOBT and the MINLINEUP, if any, as a revised taxi time.

If a CTOT improvement is possible the NM will send an SRM.

How can I change the REA status?

By sending a DLA / CHG message with a later EOBT. A CTOT recalculation could be triggered, or not, depending on the slot zones.

Does a REA message update the EOBT (update the FTFM)?

Yes, when the REA message is sent before the EOBT, the time stamp of the REA message will be the new EOBT.

Can a REA push traffic outside a regulation?

Yes. In that case a slot cancellation (SLC) will be sent by the ETFMS.

7.3.2 TTOT transmitting aerodromes via T-DPI-s

Traffic departing from A-CDM may send a REA message by following the same process as for non-CDM airports. This may result in recalculating the CTOT and deleting relevant information received in previous DPI messages.

A **T-DPI-s** message might also be used instead of a REA message and ETFMS will react similarly if the **TTOT (T-DPI-s)** is **before the CTOT tolerance window** (-5, +10). Then the TTOT is stored for possible future use as a “no slot before time”. The ETFMS will consider this message as a REA and will try to improve the CTOT at regular intervals and the ETFMS will use the “no slot before time” when the regulations are modified (e.g. if flight AAA123 has a TTOT 10:00 and the CTOT is 10:30, a T-DPI-s with TTOT 10:15 can be sent to set the flight status to REA and may recalculate its CTOT).

In case the TTOT is before the last ETOT in the FPL, then the filed profile (FTFM) will be updated. In fact, in this case the T-DPI-s is processed in exactly the same way as a REA message.

When could a TTOT trigger a REA status?

CDM airports will trigger a REA status for a flight when ETFMS receives the T-DPI-s message and clock time reaches or has reached TOBT – 5.

What will the NM do?

If the TTOT is before the CTOT tolerance window, the flight will be set to the REA status and it may be improved up to the new TTOT of the flight. If a CTOT improvement is possible the NM will send an SRM.

If the TTOT is inside the CTOT tolerance window, the REA status of the flight is kept but ETFMS will no longer search for an improved CTOT.

How can I change the REA status?

By sending an EOBT or TOBT update.

7.4 Type of Flight Data (States)

During the processing by the ETFMS, a flight can be in one of the following states:

ETFMS	Field Values		Description
	CHMI / NMP / NMUI/ NOP Portal flight list (T column)	FUM (FLTSTATE)	
Planned	P (PFD)		A flight is in the state 'Planned' if its data comes from PREDICT Flight Data (PFD)
Planned, Slot Allocated	P (PFD)		A “Planned” flight is in the state “Planned, Slot Allocated” after slot allocation was applied to it
Planned, Re-routed	P (PFD)		A “Planned” flight is in the state “Planned, Re-routed” after it was re-routed
Planned, Slot Allocated, Re-routed	P (PFD)		A “Planned” flight is in the state “Planned, Slot Allocated, Re-routed” after slot allocation was applied to it and it was re-routed
Filed	I	FI	A flight is in the state “Filed” after ETFMS received its FPL
Filed, Slot Allocated	I	FS	A “Filed” flight is in the state “Filed, Slot Allocated” after slot allocation was applied to it
Filed, Slot Issued	I	SI	A “Filed” flight is in the state “Filed, Slot Issued” after slot allocation was applied to it and the corresponding SAM was sent
TACT Activated	**t**	TA	**If an A-DPI was accepted.**
TACT Activated	T	TA	A flight is “TACT Activated”: • In A-CDM, when the clock time reaches TTOT or CTOT (if regulated). • In non-CDM, when the clock time reaches ETOT or CTOT (if regulated).

ATC Activated	A	AA	The reception of a coordination message (FSA, APL, ACH), an Air-Filed Flight Plan (AFIL), an APR, a DEP, an FAA Departure Information (FDI) and a CPR will put a flight in the state "ATC Activated". IFPS sends an ACH message when the time of the estimate changes by more than 40 minutes (with no other change to the flight).
Cancelled		CA	Flight data in the state "Cancelled" is never shown in counts, flight lists, etc... and is almost equivalent to removed flight data, with the exception that a new FPL can correlate with cancelled flight data (rerouteing and departure information)
Terminated	E	TE	An "ATC activated" flight (receiving ATC updates such as CPRs) will be "Terminated" 20 minutes after the latest Actual Time of Arrival (ATA), which is derived from ATC data A "TACT activated" flight (no ATC updates received) will be "Terminated" 180 minutes after the latest ATA, which is derived from the flight plan
Filed	I	SU	A flight is suspended if an FLS was sent, the flight will return to the Filed status in the ETFMS

8 MANAGEMENT OF SLOT ALLOCATED FLIGHTS

8.1 Slot Allocation Process

The slot allocation procedures detailed below are those applicable to the NM ETFMS. They are applied to all flights subject to ATFCM slot allocation departing from within the ATFCM area or from within the ATFCM Adjacent area and entering the ATFCM area.

8.1.1 Description of the Computer Assisted Slot Allocation (CASA)

The CASA system is largely automatic and centralised, and functions from an AO's point of view in passive mode. In other words, the act of filing a flight plan effectively constitutes a request for a slot.

After coordination with the FMP, the NM decides to activate regulations in those locations where it is necessary. ETFMS regulations include the start and the end times, the description of the location, the entry rate and some other parameters. For each regulated point, area or airport, CASA builds and manages a list of slots i.e. the Slot List. A regulation may contain one or more sub-periods with specific rate and conditions. CASA uses these elements to build initially an empty Slot List. For instance, a four hour long sub-period associated with a basic rate of 28 flights per hour, would result in a Slot List made up of 112 slots separated from one another by approximately 2 minutes.

In accordance with the CASA prioritization algorithm, which aims at minimizing the global delay, the system will place the flights in the slots.

On this basis, the Take-Off Time (TOT) for the flight is calculated. This information, the Calculated Take-Off Time (CTOT), is transmitted to the AO concerned and to the control tower at the aerodrome of departure at EOBT – 2 hours. The slot is issued at EOBT – 2 hours through a dedicated message, the Slot Allocation Message (SAM), and the slot status becomes Allocated.

The slot list displays a column containing the priority factor of each flight. This indicates to the NM operator which flights are likely to benefit from a higher priority than the basic "first come first serve" principle.

8.1.2 Description of the Slot Allocation Process

8.1.2.1 Slot Allocation List – Basic Rate

For each regulated point, area or airport, CASA builds and manages a list of slots i.e. the Slot List. A regulation may be specified over sub-periods, each sub-period being assigned a rate. CASA uses these items to build initially an empty Slot List. For instance, a four hour long sub-period associated with a basic rate of 28 flights per hour, would result in a Slot List made up of 112 slots separated from one another by approximately 2 minutes.

8.1.2.2 Pre-Allocation Stage

When the regulation is activated, CASA starts to receive flight data, based on Filed Flight Plans (**FPL**), as available. Each flight concerned by the regulation is given a provisional slot based on the order of their Estimated Time Over (**ETO**) the restricted location.

This initial reservation is internal to the ETFMS system and is subject to amendment.

Due to the constant recalculation of the Slot Allocation List (SAL) as new flight plans arrive, the provisional slot is very likely to be changed.

When CASA receives new flight data, it pre-allocates the flights to the free or pre-allocated slot ~~slot as~~ closest to the ~~requested Estimated Time Over~~ Time resulting from the CASA prioritization algorithm(**~~ETO~~**) ~~the restricted location as it is available:~~ **If flights are competing for the same free or pre-allocated slot, the flight with the highest priority factor will prevail.**

a) If that slot is free, it is assigned to the flight, which thus suffers no delay.

b) If that slot is already pre-allocated to a flight which is planned to overfly the restricted location after the new flight then the latter takes the slot. Of course, the consequence can be a chain reaction, because the flight whose slot has been taken tries to recover another slot, possibly by taking the slot of another flight, etc.

8.1.2.3 Pending Rate

In order to reduce the number of large delays for late updaters the pending rate will be kept entirely for flights that are modified after the SAM is issued with messages such as FCM, DLA or CHG messages. Late filers will not be considered for allocation of pending slots.

Pending slots are not used during activation of a regulation, taxi time change, deep rectification. A pending slot with an earlier time will not be allocated to a flight from a later slot, i.e. a flight will not be improved to an earlier slot by being a late updater, but will be allocated the next available later slot. At a certain time a pending slot is converted into a normal slot.

8.1.3 Slot Amendment Procedure

When CASA receives the flight data for the cancellation of a flight, this may improve the slots given to other flights. The slot amendment procedure aims to take into account the new slots made available. It applies only to pre-allocated flights. Therefore it is an essential requirement, with beneficial interest for AOs, to **cancel as early as possible** those flight plans which will **no longer operate.**

8.1.4 Allocation Stage

At a fixed time before the Estimated Off-Block Time (**EOBT**) of each pre-allocated flight, called Slot Issue Time 1 (**SIT1**), the slot is allocated to the flight and a Slot Allocation Message (**SAM**) is sent to the AOs and ATC.

An allocated slot cannot be taken by another flight, unless the regulation is deep rectified and the CTOT has not been forced. However, an AO should update its EOBT, if it is thought that the flight will not be able to comply. Moreover, the slot allocated to a flight may be improved by the true revision process.

Why my flight did not receive a CTOT even if it is inside the regulation period?

Whenever a flight is subject to an ATFCM measure there is a possibility to receive a CTOT except if:

a) Flights with C / ETOT – TAXI – TRS before clock time of the time when the regulation is applied / changed will not be recalculated in order not to disturb the start-up sequence.

b) The C / EOBT of the flight is after the clock time of the application / change of the regulation (the flight is still on the ground) but close to its departure time and the OBT of the flight is within the next 30 minutes. E.g. 10:00 is the clock time of the application / change of the regulation and the OBT of the flight is 1010. The 30 minutes is a default time parameter in the ETFMS and can be manually modified. It protects the airport start-up sequence in case of regulation changes, like TRS and TIS, but it also avoids that last minute SRMs are sent to AOs.

The 30 min parameter could be subject to modifications based on the operational safety criteria (e.g. chaotic situations).

8.1.5 Late Filing

FPLs sent to the IFPS less than 3 hours before the EOBT will render those flights as “late filer”. These flights may be penalised during the slot allocation process. In the flight status column (STA) of the flight list in CHMI / NMP / NMUI/ NOP Portal these flights can be identified with a “LF”.

8.1.6 Late Updating

Modifications to the FPL (DLA / CHG) sent less than 2 hours before EOBT will cause the flights to be considered as “late updater” if the update changes the profile calculation. In the flight status column (STA) of the flight list in CHMI / NMP/ NMUI / NOP Portal these flights can be identified with a “LU”.

These flights may benefit from the Recover Hole mechanism and pending slots (a late updater may be allocated the next available pending slot, not an earlier pending slot) in order to avoid excessive delay.

8.1.7 Combined Flow Measures for one Flight

The general principle is that a flight which is subject to several CASA regulations is given the delay of the most penalising regulation and is forced with that delay into all other regulations.

A flight was rerouted out of a regulation but no SLC message was received, why is this?

If an SRM is received, with or without a new CTOT, the flight is subject to a new most penalising regulation.

The regulations for a flight can be found in CHMI, NMP, NMUI, the NOP Portal and the SAM / SRM (REGUL field).

How do I know which one is the most penalising regulation for a flight?

In the SAM / SRM each regulation is specified in the REGUL field. The most penalising regulation is the first in the list. The Most Penal Reg field in CHMI / NMP / NMUI/ NOP Portal in flight details also provides this information.

8.1.8 True Revision Process

This is the automatic mechanism that routinely attempts to improve the slot of allocated flights every minute; for a given flight, the true revision process takes place after the SAM has been issued until a time parameter before the CTOT.

8.1.9 Recover Hole Mechanism

The Recover Hole mechanism has been implemented so that a **late updater** flight, releasing its slot, should benefit from flights with an earlier ETO making use of the released slot. It works ad-hoc and it is separated from the True Revision Process

When a DLA / CHG message is received for a regulated flight, the Recover Hole mechanism will try to improve flights having an ETO before the new ETO of this flight. So that the new reservation for the delayed flight could find a better alternative and, thanks to these improvements, non-disproportionate delayed slot will be available to the flight that provided the new EOBT.

Only flights in RFI or REA status, as well as pre-allocated flights, will receive improvements through this mechanism. The same criteria as for the True Revision process are used for RFI and REA flights, based on minimum improvement time, TIS, etc.

When new data enters in CASA for a flight for which an E-DPI or a confirmed T-DPI has already been received, the Recover Hole mechanism will also be activated.

8.1.10 Aerodrome Parameters

8.1.10.1 Taxi Time

The taxi time at aerodromes is a parameter taken into account in the slot allocation process. The default taxi time parameter is specified for each runway at an aerodrome in the CACD. The default aerodrome taxi time parameter in CACD is overridden by the taxi time provided by the AO in the flight plan.

The taxi time parameter of an aerodrome can be modified for a given time period following a request of the FMP/TWR concerned. The modification of the default aerodrome taxi time parameter will take precedence over the taxi time specified by the AO in the flight plan for all flights with an EOBT inside the period. Some issued slots may be recalculated and a few short notice SRMs issued.

In CDM airports, taxi times provided via DPI take precedence over flight plan or tactical updates to the taxi time parameter of the aerodrome. NM systems consider taxi time updates provided via NMP, NMUI as CDM airport updates, also taking precedence over flight plan or tactical updates to the taxi time parameter of the aerodrome.

Which flights are impacted by changes in the runway configuration implemented at clock time?

Flights with OBT within the clock time + 30 minutes will not be impacted in order not to disturb the TWR sequencing. The 30 minutes is a default time parameter in the ETFMS and can be manually modified.

This applies to Runway updates in non-CDM aerodromes and also to SID and taxi time updates in DPI messages.

The modification of RWY criteria is performed by FMPs, TWRs and the NM on request of the FMP or TWR. Accurate taxi times improve predictability in the Network (e.g. more accurate E / CTOTs will be calculated). Additionally, fewer suspensions due to FAM, while taxiing, will occur.

A-CDM towers are not affected because DPI messages contain taxi time and SID information for individual flights.

8.1.10.2 TIS and TRS

Time to Insert into Sequence (TIS) and Time to Remove from Sequence (TRS) are parameters used to prevent last minute modifications of the CTOT. These values are stored in CACD and kept updated by the relevant FMPs and TWRs. They may be adjusted at any time depending on the local aerodrome traffic situation and may vary during the day.

The Time to Remove from the Sequence (TRS) prevents a change to a later CTOT, or the allocation of a CTOT, when the flight is already in the departure sequence.

The Time to Insert into the Sequence (TIS) prevents an improvement into an already organised departure sequence.

The TIS parameter is not relevant when ATC has sent an REA message for a flight.

8.1.11 Late Reception of Slot Messages

There are many mechanisms within the NM systems to prevent, in normal circumstances, the late transmission of a slot, or update to a slot. Nevertheless, there are four conditions that can cause the late reception of a slot time:

a) Late Flight Plan Submission / Update

The flight plan is filed or modified (reception of a FPL / DLA / CHG message by the ATFCM system) shortly before the EOBT. If needed, a SAM / SRM is sent immediately. Consequently, in this case the SAM / SRM is also late.

b) A Regulation is Created or Modified

For flights having already received a slot, a SRM may be sent. However, a SRM is not sent for flights that are close to their off block time. The parameter TRS (Time to Remove from Sequence), related to each aerodrome, prevent it from happening. The values of the TRS for each aerodrome are available via the NM Client Application in the Environment / Aerodrome Details menu.

For flights that become regulated as a result of the new or modified regulation, a SAM is sent. There is no mechanism to forbid sending a SAM up to the last minute, however, for flights very close to their EOBT, the SAM will not indicate a delay i.e. it will indicate an 'on time' slot. The main reason for sending the SAM is to inform the Tower and the pilot that the flight has become regulated. If the flight preparation is on schedule, it should not be unduly affected. If the

flight preparation is late, then the normal procedure for flights not able to cope with their slots must be used. See also **Allocation stage**.

In case of cancellation of a regulation, a SLC may be sent. This can happen any time up to the CTOT. The main reason is to inform the Tower and the pilot that the flight is no longer regulated.

c) Manual Intervention

The NM tactical team (e.g. NOC, SNOC) manually allocates another slot to a given flight causing a SRM to be sent. This normally only happens following an agreement between the parties.

d) Transmission Delay

The message is sent early enough, but due to transmission problems it arrives late. The occurrence is limited but it may happen.

8.2 Slot Adherence

AOs and ATC are jointly responsible for achieving CTOT compliance at departure aerodromes.

8.2.1 Aircraft Operators

In order to comply with a CTOT, AOs need to plan the departure of a flight so that the aircraft will be ready for start-up in sufficient time to comply with a CTOT taking into account the taxi time.

AOs shall inform themselves of and adhere to:

a) General ATFCM procedures including flight plan filing, strategic ATFCM Measures and message exchange requirements.

and

b) Current ATFCM Measures (e.g. specific measures applicable on the day in question, such as ATFCM slot or flight suspension).

8.2.2 ATC

a) ATC is responsible for CTOT compliance monitoring at departure aerodromes. Whereas the exact procedures to be followed will depend on the way that ATS is organised at each aerodrome, the following requirements shall apply in all cases:

b) States shall ensure that CTOT, if applicable, be included as part of the ATC clearance. ATC shall take account of an applicable slot or flight suspension when a clearance is issued.

c) ATC units responsible for CTOT compliance monitoring shall be provided with the necessary information concerning the ATFCM measures in force and CTOTs allocated.

d) ATC shall provide all possible assistance to AOs to meet CTOT or to coordinate a revised CTOT.

e) A slot tolerance (-5’ to +10’) is available to ATC for which the aircraft must not depart outside.

f) ATC may deny start up clearance to a flight unable to meet its CTOT until coordination with the ATFCM units concerned has been effected and a revised CTOT issued.

8.2.3 Slot Revisions

Revisions to CTOTs should, where possible, be coordinated between the AO and the NM using the ATFM message exchange procedures. However, it may be the case that last minute revisions to CTOTs and slot extensions when the pilot is in direct communication with ATC, are more easily or efficiently coordinated with the FMP / NM by ATC.

8.2.3.1 Slot Allocation Message (SAM)

When does the NM send a SAM?

A SAM is sent to AOs / ATS any time a flight becomes regulated (new flight entering the system, new period of regulation in the system, in response to an FCM or CHG providing new RVR after a suspension) but at the earliest 2 hours before the last received EOBT.

The SAM is used to inform AOs and ATS of the Calculated Take-Off Time (CTOT) for an individual flight.

What is the normal response of AOs / ATS?

They shall comply with the CTOT. A slot is issued as a Calculated Take-Off Time (CTOT). The CTOT is defined as a time at which the aircraft shall take-off.

The calculation of take-off times takes into account the off-block times and an average taxiing time for the runway in use at the airfield concerned.

8.2.3.2 Slot Revision Message (SRM)

When does the NM send an SRM?

An SRM may be sent by the NM:

a) To notify all concerned of either a significant change (>5') to the original CTOT or a modification of the most penalising regulation or both. Such changes are due to circumstances unrelated to the flight e.g. the introduction of a new restriction or a change to the parameters of an existing restriction. By default, only flights in an RFI status or in a Ready (REA) status are considered for improvement but if the situation requires it, the NM Flow Controllers are able to let all flights, including those in SWM status, be considered for improvement.

b) In response to a DLA, CHG or DPI when the current CTOT is no longer compliant with the new information.

c) To notify all concerned of a routine improvement of the CTOT by the revision process for a flight in an RFI status or in a Ready (REA) situation.

d) In response to a valid SPA to notify all concerned of the improvement of the CTOT.

e) In case of a change of the most penalising regulation.

What is the response of AOs / ATS?

They must comply with the NEWCTOT.

8.2.3.3 REGUL Field

The —**REGUL** field indicates the name of the regulation affecting the flight.

Several —**REGUL** fields may be present, the first one being the most penalising regulation i.e. the regulation giving the biggest contribution to the delay. The other regulations are those with the calculated time of entry inside the regulation period.

The name of the regulation is built with the following elements:

Location of the regulation (ATC sector, aerodrome, …).

Date of the regulation.

Period in the day:

M	=	Morning
A	=	Afternoon
N	=	Night
E	=	Early morning
X	=	Other

8.2.3.4 REGCAUSE Field

In order to provide more specific nomenclature for delay causes and, at the same time, to assist the post-flight analysis, the ADEXP field —**REGCAUSE** comprises:

a) Regulation cause code (one letter code corresponding to the cause assigned by the NM to the most penalising regulation).
b) Regulation Location code - one letter code: **D**, **E** or **A**), describing the phase of the flight (**D**eparture, **E**nroute and **A**rrival) affected by the most penalising regulation.
c) A space.
d) The IATA Delay Code in numeric (e.g. 81, 82, 83, 89) or 00 when no IATA Code available.

The —**REGCAUSE** appears in the SAM and SRM messages, and is associated only with the most penalising regulation. The code appearing in the message is the code valid at the time the delay was given to the flight. (see Annex A)

8.2.3.5 Slot Requirement Cancellation (SLC) Message

When does the NM send an SLC?

A SLC is sent to AOs / ATS to advise that a flight which has received a CTOT is no longer subject to an ATFCM regulation.

It may be due to the change in parameters of an existing regulation or its cancellation, to the reception of a message from AOs such as DLA, CHG, and FCM, or a DPI message from the CDM platform.

Note When the current EOBT is more than 15 minutes in the past a —COMMENT PLEASE UPDATE EOBT WITH A DLA MSG will be included in the SLC reminding the AO to update its EOBT by sending a DLA. In the meantime, the flight will be counted as departed at taxi time + TIS after the slot requirement cancellation.

It may also be due to the reception of a CNL message from AOs.

Note In this example the field —COMMENT FLIGHT CANCELLED is present because the slot is cancelled as a result of the cancellation of the flight plan.

An SLC does not guarantee that the flight will not be subject to further regulations. If following receipt of the SLC, a new regulation is imposed which affects the flight, the AO will receive a new SAM.

What is the response of AOs / ATS?

A flight may normally depart without an ATFCM regulation. Departures from A-CDM will have to comply with the relevant TTOT.

When the SLC is issued after EOBT + 15 minutes the AO must update its EOBT by sending a DLA to IFPS.

What does "adjustment to clock" time indicate?

It is the time difference between the filed EOBT and the COBT of a flight when the flight has received a SLC message after its FPL EOBT.

For a flight adjusted to clock, FAM will start to shift (and eventually suspend) the flight after SLC timestamp + TIS + taxi time.

8.2.3.6 Error (ERR) Message

When does the NM send an ERR?

The NM sends an ERR message when a message is received where:

Its syntax is incorrect and, therefore, cannot be processed.

or

The message or a part of the message is not relevant.

In the following example the EOBD is not correct:

The message will not be processed and the following ERR message will be answered:

What is the Response of AOs / ATS?

A correct message should be sent to the NM where appropriate.

8.3 Rerouteing Procedures

8.3.1 Rerouteing Proposals

During the Tactical Phase, the NM monitors the delay situation and, where possible, identifies flights subject to delays that would benefit from a reroute. When the Network situation permits, rerouteing proposals can be sent to propose more efficient routes to airspace users.

This is achieved by selecting a flight and then either:

1. Choosing an alternative route.

Or

2. Asking ETFMS to process all possible options.

In both cases, ETFMS considers the routes as well as the possible flight level limitations and give the consequent result in terms of delay, miles to fly and CRCO route charge information.

The NM may depending on the circumstances, consult the AO concerned about their final selection. Once the final decision is taken, the NM will then propose

the selected route, which will result in the booking of a slot for that flight and at the same time trigger the sending of a Rerouteing Proposal (RRP) message to the originator, associated with the appropriate comment. AOs who wish to benefit from the offer shall consequently modify their flight plan (either with a CHG or a CNL and refile using the RFP procedure).

To secure the new CTOT, the CHG / new FPL should be received before the Respond By (RESPBY) time in the RRP. Upon the reception of the new route in the flight plan, the ETFMS shall merge the new route with the proposal. Then SLC, SAM or SRM messages will be transmitted by the ETFMS as appropriate.

Alternatively, an AO may respond to an RRP by sending ETFMS a Rerouteing Rejection (RJT) message. In this case the last received slot remains valid.

AOs not wishing to take up an RRP are requested to use the RJT so as to enable the proposed improvement to be re-offered to another AO.

The OBT validity period field (OBTLIMIT – VALPERIOD) is presented in the RRP message. This field presents the period for which the proposed route is IFPS compliant. The calculation is done from EOBT until a maximum of four hours in the future. This field can help in the decision making process for accepting or rejecting the proposal.

8.3.1.1 Rerouteing Proposal (RRP) Message

When does the NM send an RRP?

Airspace users will receive RRP message in two different cases:

CASE 1 - A sudden deterioration across the network would certainly be noticed when one of the ACCs reduces capacity resulting in excessive delays for example. ATFCM staff shall assess the situation before any decision is made. Assessment would include the best and worst case scenarios with alternatives to both. RRP will be one of the solutions to mitigate potential delays with the specific comment: ‘PURPOSE IS ATFCM’.

The RRP may be issued after the transmission of a slot (i.e. SAM) or prior to the slot transmission i.e. when a Provisional Take-Off Time (PTOT) has been allocated to the flight.

CASE 2 – Under the flight efficiency initiatives, the NM is constantly trying to propose opportunity routeing looking to achieve a better utilisation of the route network.

Route opportunities will be transmitted to airspace users via RRP with the specific comment: ‘PURPOSE IS FLIGHT EFFICIENCY’.

Six POSSIBLE SCENARIOS must be considered

- The flight has already received a CTOT corresponding to its original route.

  A new CTOT is offered provided the flight is re-filed along the proposed New Route (**NEWRTE)**. The Validity Period field indicates the time period the NEWRTE is IFPS compliant. The computation is done starting from original EOBT for a maximum period of four hours. The comment included in the RRP message is: ‘PURPOSE IS ATFCM’ ‘PURPOSE IS STAM’ or ‘PURPOSE IS AOWIR

  ACTION **An RRP with a NEWRTE, NEWCTOT and OBT validity period is proposed.**

- The flight has already received a CTOT corresponding to its original route.

  A New Route (**NEWRTE) without a regulation (REASON OUTREG**) is offered. The Validity Period field indicates the time period the NEWRTE is IFPS compliant. The computation is done starting from the original EOBT for a maximum period of four hours. The comment included in the RRP message is: 'PURPOSE IS ATFCM'.

  ACTION An RRP with a NEWRTE, OBT validity period and REASON OUTREG is proposed.

- The flight has not yet received a CTOT, only a PTOT was calculated.

  A New Provisional Take-Off (**NEWPTOT**) is offered provided the flight is re-filed along the proposed New Route (**NEWRTE**). The Validity Period field indicates the time period the NEWRTE is IFPS compliant. The computation is done starting from the original EOBT for a maximum period of four hours. The comment included in the RRP message is: 'PURPOSE IS ATFCM'.

  ACTION An RRP with a NEWRTE, NEWPTOT and OBT validity period is proposed.

- The flight has not yet received a CTOT, only a PTOT was calculated.

  A New Route (**NEWRTE**) with no regulation active at the time of the proposal is offered. The Validity Period field indicates the time period the NEWRTE is IFPS compliant. The computation is done starting from the original EOBT for a maximum period of four hours. The comment included in the RRP message is: 'PURPOSE IS ATFCM'.

  ACTION An RRP with a NEWRTE and OBT validity period is proposed.

- The flight is not regulated, therefore no CTOT / PTOT present.

  A New Route (**NEWRTE**) with no regulation active at the time of the proposal is offered. The Validity Period field indicates the time period the NEWRTE is IFPS compliant. The computation is done starting from the original EOBT for a maximum period of four hours. The comment included in the RRP message is: 'PURPOSE IS ATFCM'.

  ACTION An RRP with a NEWRTE and OBT validity period is proposed.

- The flight is not regulated, therefore no CTOT / PTOT present.

  A New Route (**NEWRTE**) with no regulation active at the time of the proposal is offered, following the concept of the flight efficiency initiatives. The Validity Period field indicates the time period the NEWRTE is IFPS compliant. The computation is done starting from the original EOBT for a maximum period of four hours. The comment included in the RRP message is: 'PURPOSE IS FLIGHT EFFICIENCY'.

  ACTION An RRP with a NEWRTE and OBT validity period is proposed.

What is the Response of AOs to accept the RRP?

An AO who wishes to benefit from a reroute proposal must modify the relevant flight plan either with a:

—**CHG** (this solution is preferred where the flight is conducted wholly within the IFPS / ATFCM area of responsibility).

or

—**CNL** and refile using the Replacement Flight Plan Procedure (RFP).

Either of the above actions must be performed before the RESPBY time in the RRP otherwise the last received CTOT, where relevant, remains valid and the booked slot, if any, will be lost.

What is the Subsequent Reaction of the NM?

The NM shall respond by issuing SLC, SAM or SRM messages as appropriate.

Can I receive a RRP that shows a shorter Estimated Elapsed Time (EET) but is longer in mileage than the original route?

Yes, the ETFMS calculates the flight profile taking into account the forecast wind. It also receives weather updates every 6 hours that may trigger a profile recalculation.

Are RRPs checked against IFPS validity?

Yes, but only for portions inside the IFPS zone (IFPZ). Do not copy and paste for portions outside this area without checking with the relevant authorities.

8.3.1.2 Rerouteing Rejection (RJT) Message

What is the Response of AOs to reject the RRP?

A **Rerouteing Rejection (RJT)** message is a negative response to a Rerouteing Proposal (RRP) message.

The AO should send an RJT to indicate that the proposed new route (**NEWRTE**) is not a preferred option. In this event the AO shall comply with the slot sent prior to the RRP. AOs should use an RJT rather than allow the RRP to lapse so that the new CTOT may be offered to another flight. Note that otherwise a booked slot will be left unused until the RESPBY time elapses, this reduces effective capacity and may cause slot wastage.

8.3.2 Flight Management / Aircraft Operator 'WHAT-IF' Reroute (AOWIR)

8.3.2.1 Initial Steps

This NM function allows an AO to request a modification of a filed flight plan (FPL) routeing within the NM system, via NM Client Application (only routeings, which are entirely within the FPM_DIST area may be modified by means of the Flight Management / AOWIR).

Via the Flight Management / AOWIR, the AO can either generate a new route by means of the dynamic route generator or enter manually their preferred route. Flight Management / AOWIR function for a specific flight can be used until OBT. Such rerouteing alternatives generated and evaluated through the Flight Management / AOWIR can be filtered to display only IFPS-compliant ones, or search for rerouteing alternatives avoiding specific ATFCM measures.

For the rerouteing alternatives, it is possible to retrieve the estimated delay (CTOT), the ATFCM measures impacting the flight and the last valid EOBT for the route.

On identifying an acceptable rerouteing possibility, the user has two FPL refiling options:

CASE 1. Allow the NM to simultaneously initiate an FPL change (**CHG** or **CNL / FPL**) on successful acceptance.

CASE 2. Allow the NM to simultaneously initiate an FPL cancellation (**CNL**) and **slot_booking** on successful acceptance, **but, in addition the user must then refile the FPL**.

Users should note that an APPLY requires manual refile or an APPLY / FILE initiates an automatic refile.

- If the AUTOMATIC filing was selected by using the Reroute Apply File option, then no action is required from the user if the 'Apply File' process is successful.
- If the MANUAL filing was selected by using the Reroute Apply option, if the 'Apply' process is successful, a new slot will be booked and the user will have to REFILE a new FPL via SITA or ATFN networks.

8.3.2.2 CASE 1. NORMAL: The Flight Plan is Changed

The IFPS proceeds as if a Change (CHG) message had been submitted by the user.

As a consequence the following actions are initiated by the NM:

- The original FPL is updated and all IFPS messages indicating this change (**FPL, CHG**) including a flag '**AWR / Rn**' in FIELD18 or FIELD22, are distributed to the appropriate ATC addresses.
- A (long) Acknowledgement (**ACK**) message, with '**—MSGTYP IFPL**', is dispatched to the address associated to the NM Client Application having made the rerouteing acceptance **AND to the originator of the initial flight plan, if identifiable AND** to the originator of the latest Flight Plan message received prior to the **AOWIR**, if any. The ACK contains all the flight plan details of the rerouted flight as accepted by the NM and a FIELD18 flag '**AWR / Rn**' is also inserted.

In addition, the ACK will contain a field:

—COMMENT FLIGHT PLAN CHANGED AS A RESULT OF AOWIR

In order to be consistent with the existing ICAO Replacement Flight Plan procedure, the IFPS additionally inserts or increments an '**RFP / Q**' indicator in FIELD18 of the FPL in accordance with the following rules:

- If no '**RFP / Q**' indicator is given in the FPL which is being treated for rerouteing, the IFPS inserts both '**RFP / Q1**' and '**AWR / R1**' in FIELD18.
- If an '**RFP / Q**' indicator is given in the FPL which is being treated for rerouteing, the IFPS increments the '**RFP / Q**' indicator and inserts '**AWR / R1**' in FIELD18.

e.g.: received FPL gives RFP / Q3

output FPL will give RFP / Q4 + AWR / R1

Appropriate ATFM messages (SRM, SLC, FLS, DES...) corresponding to the new Flight Plan are dispatched according to existing addressing rules.

These messages may include a field:

—COMMENT FLIGHT REROUTED BY AO

What is the response of AOs / ATS ?

No action is required.

8.3.2.3 CASE 1. SPECIAL: The System Cancels the Flight Plan & a New Flight Plan is Generated

In certain circumstances there could be a mismatch between the last known EOBT stored in IFPS and the latest known EOBT stored in ETFMS. If such a case occurs then the IFPS will NOT proceed as if a CHANGE (CHG) message had been submitted by the user but will:

- Distribute an FPL Cancellation (**CNL**) to appropriate ATC addresses.
- Dispatch a (short) Acknowledgement (**ACK**) message, with '**—MSGTYP ICNL**' including the flag '**AWR / Rn**' to the address associated to the NM Client Application having made the rerouteing acceptance **and** to the originator of the initial flight plan if identifiable **and** to the originator of the latest flight plan message received prior to the **AOWIR**, if any.

  In addition, the ACK contains a field:

  —COMMENT FLIGHT PLAN CANCELLED AS A RESULT OF AOWIR

- A Slot Cancellation (**SLC**) message is distributed in accordance with the existing addressing rules for this message.

  The message will include the fields:

  —COMMENT FLIGHT REROUTED BY AO FPL CANCELLED
  and

  —REASON RRTE

- Wait for an appropriate period (to allow adequate time for the transmission of the CNL).
- Distribute a new FPL to appropriate ATC addresses using the latest known OBT from ETFMS in FIELD13 and including the flag '**AWR / Rn**' in FIELD18.
- Dispatch a (long) Acknowledgement (**ACK**) message with '**—MSGTYP IFPL**' to the address associated to the NM Client Application having made the rerouteing acceptance. The ACK contains all the flight plan details of the rerouted flight as accepted by the NM and FIELD18 flags '**RFP / Qn**' and '**AWR / Rn**' are also inserted therein.

  In order to be consistent with the existing ICAO Replacement Flight Plan procedure, the IFPS additionally inserts or increments an 'RFP / Q' indicator in FIELD18 of the FPL in accordance with the rules detailed above.

  Appropriate ATFM messages (SAM, FLS) are dispatched according to the existing rules for these messages.

8.3.2.4 CASE 2. The Flight Plan is Cancelled & a New Slot is Booked

The IFPS proceeds as if an FPL Cancellation (CNL) message had been submitted by the user i.e.:

- An FPL Cancellation (**CNL**) message is distributed to the appropriate ATC addresses.
- As a consequence of the FPL cancellation (**CNL**) an acknowledgement (**ACK**) message with '**—MSGTYP ICNL**', including the flag '**AWR / Rn**', is dispatched to the address associated to the NM Client Application having made the rerouting acceptance **and** to the originator of the initial Flight Plan message**, if identifiable and** to the originator of the latest flight plan message received prior to the **AOWIR**, if any.

  In addition, the ACK contains a field:

  —COMMENT FLIGHT PLAN CANCELLED AS A RESULT OF AOWIR

  A Slot Cancellation (**SLC**) message is distributed in accordance with the existing addressing rules for this message.

  The message will include the fields:

  —COMMENT FLIGHT REROUTED BY AO FPL CANCELLED
  and

  —REASON RRTE

  A Rerouteing Notification (**RRN**) message is generated by ETFMS to the address associated to the NM Client Application having made the rerouteing acceptance **AND** to the same addresses as for a Rerouteing Proposal (**RRP**) / Slot Improvement Proposal (**SIP**) messages.

  This message includes the new route description and the new slot calculation result e.g.:

  —NEWCTOT 1130
  or

  —REASON OUTREG when the new route is not submitted to ATFCM regulation.

  What is the response of AOs / ATS?

  After the reception of ACK for the CNL, the user is required to file a new Flight Plan to the IFPS Units in accordance with the normal rules and where appropriate to all relevant units outside the IFPS distribution area. The FPL shall include the flags '**RFP / Qn**' and '**AWR / Rn**' in FIELD18.

Note The route in the new FPL shall be fully consistent with the one provided within the RRN message.

The booked slot will be used only if the profile of the FPL matches with the profile of the booked flight representing the accepted rerouteing.

The matching is using the following rules:

a) Only the aerodromes and 'en-route' points of the point profile are used in the matching. Points on the departure or arrival procedure are ignored.
b) There can be more points in the route of the replacement FPL than in new route description of the provisional flight plan reserved in ETFMS. Any additional points found in the FPL are ignored.
c) The sequence of the 'en-route' points must be identical.
d) The levels and the timing on the points must be similar (a very small tolerance is accepted).
e) The criteria indicated above are intended to give a reasonable flexibility (i.e. additional points for level / speed, SID / STAR free choice) without being too permissive.

Processing of the New Flight Plan by NM

IFPS

a) When the new FPL is received and has been processed successfully by the IFPS:

An ACK message is dispatched to the address (es) associated to the originator of the flight plan. The ACK will give the complete flight plan concerning the rerouted flight and will include the flags '**RFP / Qn**' and '**AWR / Rn**', as provided by the AO, in FIELD18.

The FPL (including the flags '**RFP / Qn**' and '**AWR / Rn**' as provided by the AO) is distributed to the appropriate ATS Units.

b) In the exceptional case that the new FPL fails automatic processing in the IFPS, the user upon receipt of the Manual (**MAN**) message is expected to call the responsible IFPS Unit (**IFPU**).

c) In the case of an FPL being rejected by IFPS a rejection (**REJ**) message is sent back to the originator according to normal rules. The user must resubmit a correct FPL.

ETFMS

Once processed by IFPS the new FPL is sent to the ETFMS.

- In the case where the new FPL and in particular the new route, successfully matches the 'booked' flight in ETFMS:
- Appropriate ATFCM messages (**SAM, FLS**) are dispatched according to the existing rules for these messages.

  A field: **—COMMENT FLIGHT REROUTED BY AO** may be inserted in these messages.

- When the new flight is not subject to regulation, no further message will be generated by ETFMS.
- In the case that the match in ETFMS fails, a new slot allocation may be executed. No account is taken of the 'booked' slot associated to the rerouting, which is released.

A field: **—COMMENT REROUTE CONDITION CHANGED** may be inserted in the relevant ATFCM message.

After a time parameter in which no new FPL has been received the 'booked' slot is released.

An Error (ERR) message including a field: —COMMENT REROUTE TIMEOUT is distributed to the relevant addresses including the one associated to the NM Client Application where the rerouting was originated.

Note There may be slot revisions for rerouted flights as a consequence of new or revised ATFCM regulations with the result that the delay expected with the rerouting is modified.

8.4 FM Helpdesk Services

The FM Helpdesk is established to provide assistance to those Flow Management Positions, Towers, Aircraft Operators and Flight Handling Agents

who have critical operational problems which cannot necessarily be solved by use of ATFM message exchange;

- Assistance to follow the correct procedure for particular problems;
- When possible assistance to reduce delays;
- Information concerning ATFCM measures.

An e-Helpdesk has been developed to handle queries faster than the telephone and to minimise the amount of calls to the telephone Helpdesk.

The e-Helpdesk can be accessed via B2C and B2B by all aircraft operators, flow management positions and towers who have access to NM systems, by using secure access.

The e-Helpdesk is the principle tool for dealing with requests for help with flights from flow management positions, towers, aircraft operators and flight handling agents. For this reason e-Helpdesk has priority over Helpdesk calls. The e-Helpdesk queries will be answered before the telephone. The telephone service is reserved for business aviation and those who do not have internet access.

Neither the e-Helpdesk nor the telephone helpdesk should be used to systematically request improvement for every flight which has a delay. The Help function is provided to assist with critical flights only

8.4.1 e-Helpdesk

Only one request per flight should be submitted. Do not send repeated requests for the same flight concerning the same problem, this will result in the response ‘Unable’ being sent.

The e-helpdesk provides answers to the most frequently asked questions. If a question does not appear in the drop down menu it may be submitted as a free text message via “Other e-Helpdesk request Type” or via the phone

Some of the queries will provide answers without submitting them to the NM, for example: “How can I freeze my CTOT”. The correct actions are already described in the selection.

It is not necessary to follow up an REA message with a query to the e-Helpdesk as, flights in REA status are marked in the queue in the details area of the e-Helpdesk. The ETFMS will automatically look for improvements for flights in REA or RFI status.

Automatic submissions will be rejected with the response ‘Unable’.

Do not request improvements for flights which have no delay. e-Helpdesk airspace users are able to provide the earliest take-off time that they can achieve and help the NM Tactical team when finding the most suitable improvement. This can increase the likelihood of getting the requested improvement and reduce the time of response.

Airspace users have the possibility to flag e-Helpdesk requests as critical for:

- Specific flight schedules which are key for airspace users’ operations plans, or;
- Flights for which reducing ATFM delay is critical for their business.

Each airspace user can submit a critical request for:

- 5% of its regulated flights;

- A minimum of 1 flight, and;
- A maximum of 20 flights.

Note that NM systems use the flight callsign, not the operator indicated in the flight plan, for determining the aircraft operator submitting the critical request

Critical requests are highlighted in the flight lists and e-Helpdesk queue to the NMOC staff for processing in magenta colour. Critical e-Helpdesk requests might be subject to e-Helpdesk automatic processing rules (e.g. automatic rejection) when the FMP cannot accommodate critical flights.

Critical e-Helpdesk requests are subject to Network constraints depending on:

- The number of filed flight plans during the day of operations;
- The number of regulated flights in the system.

All e-Helpdesk functionalities are available via both NM B2B and B2C.

8.4.2 Telephone Helpdesk

Whenever possible, customers should use the e-Helpdesk to contact the FM Helpdesk services.

However, for where no other option exists, a telephone service will be retained. If it is possible to access the e-Helpdesk do not use the telephone Helpdesk.

For those who do not have access to the internet the Helpdesk telephone number is:

++32 (0) 2 745.19.01

When connected to the Helpdesk, callers are requested to provide the flight's call sign before stating the problem. This enables the Helpdesk to display the relevant data concerning the flight before any problem solving takes place.

Callers who have no specific operational flight critical problem to resolve, should not call the Helpdesk. Business jet users should contact EBAA (European Business Aviation Association) for details on how to access help services at info@EBAA.org. Use NM HELPDESK in the subject line.

8.4.3 Slot Extensions

Slot extensions are limited to a **maximum of 10'** and are considered under the following circumstances:

If requested by a TWR

- For operational reasons the slot extension should normally be given. The appropriate tactical staff should be informed if there is an adverse impact on the load. It will then be the responsibility of the NM tactical team to either negotiate extra capacity from the affected FMP or to rectify the load.
- If an unacceptable overload is unavoidable, a slot extension should be refused. Co-ordination with the appropriate tactical staff will be necessary to ensure that nothing can be done prior to refusing a request from a TWR.

If requested by an AO

1. If present **clock time is still 20 minutes or more before the COBT** (CTOT –Taxi time) no slot extension should be given. The customer should be instructed to send a DLA message.

2. If a flight has already been given a slot extension no further extension should be given. The customer should be instructed to send a DLA message
3. If it is within 20' of the COBT (CTOT -Taxi time - less than 20') and no later than the earliest COBT (non-CDM airport departures) or AOBT (Advanced ATC TWR departures), the extension does not generate IFPS errors and no prior slot extension has been given:
   - Check the load. If the extension would create an overload no slot extension should be given unless a swap is possible with a later flight.
   - If the extension would not generate an overload a 10 minute slot extension may be given.

   The capacity should be respected in ALL regulations, not just the most penalising.

   For traffic departing **from CDM airports**, **no slot extension will be provided if requested by the AO**. If the flight has received start-up approval only the pilot can call the TWR (over the frequency) for a slot extension. If the flight has not received start-up approval an update of the TOBT is required.

8.4.4 Slot Swapping Procedure

The ETFMS slot swapping functionality is used to swap flights when requested by aircraft operators and also to improve another flight if an aircraft operator requests a slot extension (i.e. instead of forcing the flight).

Aircraft operators shall only request swaps concerning flights for which they are the responsible operator (OPR field) or where there is a formal agreement between both aircraft operators for swaps to take place between their flights.

8.4.4.1 Conditions

- A request for a swap from an AO via the e-Helpdesk, TWR or FMP is received.
- The **NMOC will not check** whether flights are from the same operator or where there is a formal agreement between both aircraft operators for swaps to take place between the concerned operators.
- FMPs can request swaps for two flights of the same aircraft operator or, during critical events at airports, also for different aircraft operators;
- The two concerned flights must be in status slot issued.
- The two flights must be subject to the same most penalising regulation.
- Up to three swaps per flight shall be accepted, except critical events.

Can I swap flights that are impacted by different regulations?

Yes, but only if the regulation where they are swapped is the most penalising one.

8.4.5 Slot Improvements

CTOTs may be manually modified in the ETFMS upon request from FMP / TWR staff or AOs. AOs can make such requests via the FM Helpdesk. FMPs and TWRs can also use the e-Helpdesk. The NM tactical team may also identify flights that could be improved.

This is possible for critical flights (e.g. crewing difficulties) or flights with disproportionately heavy delays.

8.4.5.1 Conditions

- Any improvement depends on a Network assessment. No improvement will be granted if it produces a negative Network impact.
- The flight must be in either RFI or REA status.
- The taxi time and TIS (MINLINEUP if in REA status) need to be respected.
- For flights departing from A-CDM, an improved CTOT cannot be before the last known TTOT.

How can I avoid automatic slot improvements?

Change the flight status to SWM by sending the message SWM to the ETFMS.

My flight cannot be improved, what can I do?

You can check rerouteing / level capping possibilities or swap partners.

9 MANAGEMENT OF FLIGHT SUSPENSIONS

9.1 Slot Missed Message (SMM) – new EOBT is NOT Known

When do I send an SMM?

An SMM is sent when the last received CTOT issued cannot be met and a new EOBT is NOT known.

Note The NM attempts to reallocate the slot made available by an SMM and thereby reduce overall delays. It is important, therefore, to send an SMM as early as possible.

What is the response of the NM?

The NM will cancel the original CTOT, issue the suspension with a Flight Suspension (FLS) message and await the response of the AO.

How does an AO respond to such an FLS?

The AO will send a new EOBT by using a CHG or DLA message or cancel (CNL) the flight if it will not operate.

What is the response of the NM to receipt of a new EOBT?

The NM responds with a Slot Allocation Message (SAM) or a De-Suspension (DES) message.

9.2 FLS Triggered by C-DPI Messages

Airports that provide accurate Take-Off-Time (TTOTs) to the NM via DPI messages (CDM airports and Advanced ATC Towers) may also occasionally send Cancel DPI (C-DPI) messages. See the list below for possible reasons that may cause a C-DPI:

Reason value	Possible transmission reasons	Possible Actions
NOAIRPORTSLOT	The airport did not have an airport slot for the departure	AO to request an airport slot or to CNL the flight plan
TOBTUNKNOWNOREXPIRED	The TOBT was deleted, the pilot did not request start-up or report ready in accordance with the procedures at the Airport…	AO / Handling Agent to update the TOBT, to file a DLA message, AO to CNL the flight plan…
TSATEXPIRED	The pilot did not request start-up in accordance with the CDM procedures at the airport	AO / Handling Agent to update the TOBT, to file a DLA message, AO to CNL the flight plan…
RETURNTOSTAND	After having started taxi, the flight returned back to stand / ramp	AO / Handling Agent to update the TOBT, to file a DLA message, to CNL the flight plan…
FLIGHTPLANINVALID	The discrepancy between TOBT and EOBT is larger than 15min (and needs to be resolved before start-up will be issued)	AO / Handling Agent to update the TOBT or send a DLA message

FLIGHTCANCELINAODB	Cancellation of the airport slot or Schedule before the ICAO FPL has been cancelled (CNL).	CNL the flight plan

Where can I find the reason for the C-DPI?

Apart from the C-DPI itself, it can be found in the Flight Data display of the CHMI, the NMP, the NMUI, the NOP Portal and the ETFMS. It is also included in the comment-field of the FLS message, along with a recommended action for the AO. At de-suspension, the C-DPI reason will no longer be displayed.

My TOBT is unknown, how can I generate a C-DPI?

Usually, C-DPIs cannot be manually sent. If your new TOBT is not known, you should remove your current TOBT and the CDM platform will automatically generate a C-DPI.

What will the NM do?

The ETFMS will reply with an FLS.

How can I identify if a flight has been suspended due to a C-DPI from the departure aerodrome?

The COMMENT field in the FLS will contain the following:

C-DPI reason value	FLS comment field
NOAIRPORTSLOT	SUSPENDED BY DEPARTURE AIRPORT. NO AIRPORT SLOT OR EOBT DOES NOT MATCH WITH AIRPORT SLOT. REQUEST AN AIRPORT SLOT OR UPDATE THE EOBT.
TOBTUNKNOWNOREXPIRED	SUSPENDED BY DEPARTURE AIRPORT. TOBT UNKNOWN OR EXPIRED. UPDATE THE TOBT/EOBT.
TSATEXPIRED	SUSPENDED BY DEPARTURE AIRPORT. TSAT EXPIRED. UPDATE THE TOBT/EOBT.
RETURNTOSTAND	SUSPENDED BY DEPARTURE AIRPORT. A/C RETURNED TO STAND. UPDATE THE TOBT/EOBT WHEN KNOWN, OR CNL THE FPL.
FLIGHTPLANINVALID	SUSPENDED BY DEPARTURE AIRPORT. ALIGN EOBT AND TOBT.

FLIGHTCANCELINAODB	SUSPENDED BY DEPARTURE AIRPORT. FLIGHT CANCELLED IN AODB. CNL THE FPL.

How can I de-suspend a flight that has been suspended due to C-DPI (no other suspension reasons occur)?

The flight will be de-suspended at reception of a DLA / CHG updating the EOBT or a new DPI message triggered by a TOBT update. An A-DPI message is rejected for suspended flights. However, an A-DPI TWRUPDATE message will be accepted. The message will be followed by a SAM, DES or FLS sent by the ETFMS. If the flight has already departed, the first received ATC message (DEP / FSA) or the first received CPR will automatically de-suspend the flight in ETFMS (no SAM or DES is sent).

Can a C-DPI be sent before any other DPI?

Yes, this usually indicates that there is a mismatch between the FPL and the airport slot.

9.3 Flight Activation Monitoring (FAM)

With the development of the ETFMS, the NM is now receiving updates on flights once they have departed. These updates are provided by the ATC systems and based on ATC radar and flight plan updates. The benefit of this information is a better knowledge of the present traffic situation.

To take advantage of this information and to improve the prognosis of the traffic pattern, the ETFMS:

- monitors flights, regulated or non-regulated, which should have been airborne but have not been reported as such at the expected time;
- takes action on these flights through an internal update of the Actual take-off. In order to improve the traffic forecast, the internal ETFMS mechanism works as follows;
    - flights departing from within, or with an elapse time of less than 3 hours to, a CPR-covered FAM enabled area will be ‘shifted’ in ETFMS up to 3 times, for 5 minutes each time, and will then be suspended after another 2 minutes (i.e. after 17 minutes in total) by an FLS.
    - flights departing from non-CPR covered areas with an elapse time of more than 3 hours to a CPR-covered FAM enabled area will be ‘shifted’ up to 23 times, for 5 minutes each time, and will then be suspended after another 5 minutes (i.e. after 120 minutes in total) by an FLS.
- suspends them, after a time parameter, unless a message which confirms that the flight is airborne, has been received in the meantime;
- informs the AOs and local ATC of the suspension by sending an FLS message with the comment ‘NOT REPORTED AS AIRBORNE’ , enabling them to react.

The expected results is to release the slots unduly occupied by these flights and to create an incentive for the AOs to update their flights in due time.

FAM is applied on all flights, whether regulated or not, departing from, landing at or crossing areas where CPRs are received by the NM and FAM activated.

When such an FLS is received by the AO and the Tower of aerodrome of departure the following cases may occur:

- The flight is still effectively on the ground either on stand or already taxiing.

How does an AO respond to such an FLS?

The AO should then ensure that the flight plan is re-initiated in ETFMS by means of a DLA message with a correct EOBT. ETFMS will then respond with a DES or SAM message depending whether the flight is non-regulated or regulated respectively.

- The TWR of departure should not let the aircraft start-up / depart before such a message (DES or SAM) is received.
- The flight is already airborne. No action is needed from the AO or from the Tower of aerodrome of departure. The continuous re-occurrence of the above may mean a lack of proper information sent to NM. A possible solution would be in a DEP message sent by the aerodrome of departure.

I sent a FCM for a flight suspended by FAM (no other reasons for suspension apply) but it remained suspended. What can I do to de-suspend it?

A CHG / DLA message with an updated EOBT will de-suspend the flight.

What can TWRs (or FMPs on behalf of TWRs) at standard airports do to avoid last minute suspensions due to FAM, for non-regulated flights?

TWR control, and FMPs on behalf of standard TWRs, are able to manually update the individual taxi-time of a flight for a maximum of +5 minutes, i.e. up to 17 minutes after ETOT, for non-regulated flights departed from standard airports. This allows more flexibility for TWRs in avoiding FAM suspension for flights that are sequencing for departure (e.g. taxiing, approaching holding point).

9.4 Suspension due to Route Restriction

FPLs may be suspended by the IFPS up to 30 minutes prior to their EOBT if their profile enters an environmental restriction. See the **IFPS Users Manual** for further information.

What can I do to de-suspend a flight suspended due to the IFPS revalidation process?

A CHG / DLA message with a compliant EOBT / route (field 15) will de-suspend the flight.

My flight received a CTOT but the destination airport was closed in the AIP or by a NOTAM. Why was my flight not suspended in the ETFMS?

A zero rate regulation, which will suspend the flight in the ETFMS, is not compulsory if there is a NOTAM prohibiting take-off and landing in an aerodrome. It is the airline who is responsible for making sure that handling

services are available as well as the AO is responsible to check that the airport is fully operational before commencing the flight.

9.5 Flight Confirmation Message (FCM)

In certain occasions the NM may request AOs to confirm that their flight will take place. In those cases an FLS will be sent by the ETFMS and an FCM message from the AO will be required to confirm the flight. This may happen particularly during:

(1) the application of **mandatory scenarios** (where a delay threshold value of **20 minutes** is used);

(2) **industrial actions** (where, if used, the default delay threshold value is **3 hours**);

(3) **disruptions**, e.g. unavailability of airspace or aerodrome or very high delays (where the default delay threshold value is **3 hours**);

(4) and low visibility with **RVR unknown**.

Note: The NM may request this confirmation depending on the amount of delay each flight has. The delay threshold mechanism is used in such cases.

When the delay threshold value is used, suspended flights have to reply with an FCM within the RESPBY time provided in the FLS if they wish to secure a CTOT according to the initial order of the entry in the regulated location (ETO). Replying after the RESPBY time will also grant a CTOT, but placed at the end of the queue at the moment and, potentially, with larger delay.

Those flights that do not reach the delay threshold value will receive a SAM and will not be suspended.

I sent an FCM for a suspended (FLS) flight, why is it still suspended?

A flight may be suspended due to one or more regulations. A FCM message **for each regulation** that has suspended the flight is required to de-suspend the flight. Note that this applies for the cases listed above.

9.6 De-Suspension (DES) Message

When does the NM send a DES?

The NM sends a DES when a flight not subject to ATFCM restrictions is de-suspended.

The original suspension could have been due to e.g. receipt of an SMM, the effect of exceptional conditions, non-availability of aerodrome, termination of the activation monitoring.

Note When the current EOBT is more than 15 minutes in the past a —COMMENT PLEASE UPDATE EOBT WITH A DLA MSG will be inserted to remind the AO to update his EOBT by sending a DLA.

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10 OPERATIONS IN UNUSUAL CIRCUMSTANCES

10.1 Flights Subject to Unusual Circumstances

All flights, including flights exempted from ATFCM slot allocation, will be affected by the measures applied to handle unusual situations, except flights departing from outside the ATFCM area and from outside the ATFCM Adjacent area.

Latest update of the NM Area of Responsibility may be found on the website:

http://www.eurocontrol.int/network-operations

10.2 Low Visibility Operations

Aerodromes that wish to continue operating in poor visibility or are available for instrument approaches in conditions of low cloud are required to develop and maintain Low Visibility Procedures.

LVPs have been devised to allow aircraft to operate safely from and into aerodromes when the weather conditions do not permit normal operations. To this end, they comprehensively cover all relevant issues relating to non-aircraft surface movement within the designated aircraft manoeuvring area. NM will assist any effort and facilitate ATFCM measures which will contribute to safe operations.

Definition

Low Visibility Procedures (LVP) are procedures applied at an aerodrome for the purpose of ensuring safe operations during Category II and III approaches and Low Visibility Take-offs. (JAR-OPS 1, paragraph 1.435 (a) (2))

Category II and III approaches are discussed under Precision Approach.

A low visibility take-off (LVTO) is a take-off where the RVR is less than 400 m (JAR-OPS 1, paragraph 1.435 (a) (3)).

LVPs are the combination of CAT II / III operations (BKN / OVC 200ft or below, or sky obscured, or IRVR below 600m) and runway safeguarding.

The NM may take the following actions:

- Implement an XCD (Exceptional Conditions) Low Visibility regulation whereby:
- flights **not able to land** according to a specified RVR will be regulated to arrive after the low visibility period;
- flights **able to land** according to a specified RVR will be regulated to arrive within the low visibility period;
- flights for which the RVR capability is unknown will be suspended.

Note 1 This RVR value relates to the filtering of demand and not to the actual RVR, at the affected aerodrome. Nevertheless, AOs shall respect the minima set in the exceptional condition and the use of minima, which subsequently cannot be met upon arrival, shall be considered as an ATFCM incident.

Note 2 In certain rare circumstances, where many flights would become delayed to arrive after a long low visibility period, NM may choose to suspend flights with insufficient RVR in addition to flight with unknown RVR. In these rare cases AOs will have to confirm their RVR with FCM irrespectively if they have

previously provided their RVR. An AIM will be issued to reflect this rare requirement.

- Issue revised slots at short notice.

  Specific operational procedures for managing Low Visibility situations depend on the local situation. They are coordinated in advance between individual FMPs and the NM in accordance with the FMP operational procedures.

  When are the flights going to be suspended?

  The NM will send an AIM message describing the situation, in particular the time period and the minimum RVR required.

  The RVR may be provided in different ways:

  either

  via an FPL or CHG message (FIELD18 e.g. RVR / 200)

  or

  via an FCM message if the FPL has already been filed. This message may be sent as soon as the AO is aware that there is a risk of low visibility at an aerodrome.

  The messages issued by the NM will depend on the RVR status of the flight and whether or not the flight is exempted. Three main scenarios are possible:

  either

  The RVR minima of the flight are known and satisfy the minimum required:

  A SAM / SRM is issued for non-exempted flights due to a reduction of the landing rate. Exceptionally no message is issued if the current slot is still compatible with the landing rate.

  or

  The RVR minima of the flight are known and are not sufficient, then the flight is delayed to arrive after the end of the low visibility period and a SAM or an SRM is issued indicating the (new)CTOT, the COMMENT: ‘RVR CRITERIA NOT MET’ as well as the minimum RVR required.

Note The (NEW)CTOT may evolve as the situation requires. When an AO submits an amendment message (e.g. DLA or CHG) to IFPS, they must always give as EOBT the earliest EOBT they may comply with. This time is not directly related to the (NEW)CTOT provided in the SAM / SRM. The EOBT in IFPS should always reflect the time at which the AO actually wants to be off-blocks.

If this delayed flight is also subject to other regulations, the subsequent SAM / SRM will include the —COMMENT: ‘RVR CRITERIA NOT MET’ as well as the minimum RVR required.

or

The RVR minima of the flight are not known.

The flights are suspended and an FLS is issued indicating the COMMENT: ‘RVR UNKNOWN’ as well as the minimum RVR. A RESPBY time is also in the message enabling the AO to keep its present CTOT if the FCM with sufficient RVR is received by the NM in due time.

Note The FLS are sent when the exceptional conditions are implemented but at SIT1 at the earliest.

What is the Response of AOs?

An AO must provide the NM with the RVR capability of the flight, either by sending an FCM or CHG message.

Depending on the RVR the result will be:

either

The RVR minima of the flight are sufficient then a SAM or a DES will be issued to the AO:

i. SAM with possibly an additional comment if the flight is not exempted.
ii. DES if the flight is exempted.

Note When the current EOBT is more than 15 minutes in the past a —COMMENT PLEASE UPDATE EOBT WITH A DLA MSG will be inserted to remind the AO to update its EOBT by sending a DLA. In the meantime the flight will be counted as if departed taxi time + TIS after the de-suspension.

or

The RVR minima of the flight are not sufficient, then the flight is delayed and a SAM is issued indicating the CTOT as well as the minimum RVR required.

Note The management of the situation for the flight will be maximised where the RVR information is provided to the NM at the earliest possible time.

What happens if the situation deteriorates?

i. Flights having RVR minima which still comply: no message.
ii. Flights for which the RVR minima do **not** meet the new minima: the flight is delayed and an SRM is issued indicating the deteriorated CTOT as well as the new minimum RVR required.
iii. Flight with unknown minima: receive a new FLS with the new RVR.

What happens if the situation improves?

- Flights that have not been suspended or have not received a SAM: no message.
- Flights whose minima meet those published by the NM:

i. for a non-exempted flight that received a SAM, a SRM or SIP will be issued as appropriate;
ii. for an exempted flight a SLC is issued.

When the current EOBT is more than 15 minutes in the past a —COMMENT PLEASE UPDATE EOBT WITH A DLA MSG will be included reminding the AO to update its EOBT by sending a DLA.

- Flights whose minima do **not** meet those published by the NM: the flight remains delayed and an SRM may be issued indicating, if possible, an improved CTOT as well as the new minimum RVR required.
- Flights with unknown minima: the flight is kept suspended and a new FLS is issued indicating the new minimum RVR required.

What happens when the Exceptional Condition ends?

The NM will cancel or remove the Exceptional Condition. As a consequence:

- All suspended flights are de-suspended:
- if they become non-regulated then non-exempted flights will receive a DES;
- if they remain regulated, non-exempted flights will receive a SAM;
- exempted flights will receive a DES.

When the current EOBT is more than 15 minutes in the past a —COMMENT PLEASE UPDATE EOBT WITH A DLA MSG will be included in the DES reminding the AO to update its EOBT by sending a DLA.

- All flights delayed due to insufficient or unknown RVR are repositioned in the slot list:

a) if they become non-regulated then non-exempted flights will receive a SLC;
b) if they remain regulated, non-exempted flights will receive a SRM;
c) exempted flights will receive a SLC.

When the current EOBT is more than 15 minutes in the past a —COMMENT PLEASE UPDATE EOBT WITH A DLA MSG will be included in the SLC reminding the AO to update its EOBT by sending a DLA.

10.3 Management and Recovery of a Disruption

10.3.1 Disruption Phase

In the event of a major disruption (mainly for ANSP system failures, but the same concept is applicable to any other kind of disruption affecting the Network), the NM and FMPs will apply measures (zero rate or any other rate agreed with FMP) with an initial standard duration of 2 (two) hours and to be reviewed every 30 minutes. However, a different duration of the initial zero / low rate regulation could be set, depending on the type or location of the disruption and taking into account the flight list (high number of long haul flights). This procedure can be applied for **en-route sectors, AUA and aerodromes**.

In the event of the non-availability (zero-rate regulation) of an aerodrome or airspace, NM exceptional conditions (XCD) will be used. FPLs will be accepted in the IFPS and processed by the ETFMS accordingly. After the non-availability period, the regulation may continue without XCD to regulate a possible bunching if needed.

Note The CTOT may be modified as the situation requires. When an AO submits an amendment (e.g. DLA or CHG) to IFPS, it must always give the earliest EOBT they may comply with. This time is not directly related to the (NEW) CTOT provided in the SAM / SRM. The EOBT in IFPS should always reflect the time at which the AO actually wants to be off-blocks.

If the NM requests AOs to send a Flight Confirmation Message (FCM), all flights, including the exempted flights, originating from the ATFCM Area and the Adjacent Area will be affected by the regulation during the non-availability period and will be suspended (FLS including the COMMENT ‘AERODROME OR AIRSPACE OR POINT NOT AVAILABLE’). The identifier of the regulation concerned together with the corresponding regulation cause will be inserted in the FLS message.

Alternatively, the delay threshold mechanism may be used instead. In this case, flights with a delay larger than the threshold (usually 3 hours in this case) will be suspended (FLS) and those with a delay lower than the threshold will receive a SAM.

In exceptional cases, the flight may be subject to several regulations (e.g. strike on ADEP, non-availability on ADES). Flights which are suspended in multiple regulations will have to be confirmed for every single regulation. As for a SAM / SRM the REGCAUSE of the first regulation (most penalising regulation) in the list will be provided for information.

Flights still wishing to depart shall send:

either

- An FCM confirming all or a sub-set of regulations of the FLS in which the flight is still operating. A flight confirmed (by one or several FCM) in all regulations requesting a confirmation will be de-suspended and delayed to arrive after the re-opening time therefore a SAM will be issued indicating the CTOT and including the specific COMMENT. In case the delay threshold mechanism is used, sending the FCM before the RESPBY time (20 minutes) should ensure that the CTOT issued after the re-opening time will respect the initial order of the entry in the disrupted location.

or

- A DLA or CHG indicating an EOBT that will bring its Estimating Time Over (ETO) after the re-opening time. A flight confirmed (by one or several FCM) in all regulations requesting a confirmation will be de-suspended and considered according to the new EOBT.

Either immediately or at the earliest 2 hours before the new EOBT, one of the following will occur:

- if the flight becomes non-regulated then a non-exempted flight will receive a DES;
- if it remains regulated, a non-exempted flight will receive a SAM;
- exempted flights will receive a DES.

Flights which do not send an FCM or which do not confirm in all regulations requesting a confirmation will remain suspended and will be considered as not flying. An FLS will be issued including the list of remaining regulations affecting the flight still requesting a confirmation and for which ETFMS did not get a confirmation yet. **However**, in order to inform ATC that the flight is not taking place, AOs are requested to send a CNL to cancel the **FPL**.

Flights willing to operate to another aerodrome shall cancel their existing flight plans and re-file new ones to ensure accurate data is sent to ATC and to avoid wasting capacity.

The **NM will publish and update relevant information** via the NOP Portal Headline News and AIM regarding:

- any ATFCM measure applied,
- the reason of the disruption,
- information on airports capability for diversion management,
- information for long haul flights,
- the prognosis for the coming hours,

10.3.2 Non-Availability due to a Strike

When the non-availability is due to a strike with a list of flights allowed to fly the procedure is identical. In addition, NM will manually exclude all the authorised

flights according to the request received from the FMP and all the exempted flights according to the NOTAM (emergency, rescue, etc.).

The NM will send an AIM message describing the situation, in particular the time period and the reason.

10.3.3 Recovery Phase

At a certain point in time, the FMP will communicate to the NMOC that the problem is going to be solved and therefore it will be necessary to replace the disruption measures with recovery measures. The application of the recovery procedure will address the bunching issue and it will minimise CTOT fluctuations, giving AOs more stable departure times, and improving Network predictability. However, a stable CTOT will only be achieved when full capacity / sector configuration will be provided by the FMP.

As the duration of the recovery measures depends on the capacity values and sector configuration availability, it is not possible to set any fixed value beforehand.

10.4 Diverted Flights from CPR Information

ETFMS is able to identify the different ADES (compared with the original filed ADES) from the CPR messages and set the flight as diverted. The diversion will be visible on CHMI, NMP, NMUI and NOP applications and provided via NM B2B web services.

Note: In CHMI, NMP, NMUI and NOP applications, the Flight List could indicate the diversion in the “D” column (by the sign ‘>’). As well, in case of diversion, the Flight Data will contain the diverted aerodrome (under ‘ADES’ field) and the original filed ADES (under the ‘Filed ADES’ field).

10.5 Diversions to Original Aerodrome of Departure (ADEP)

If a flight diverts back to its original **ADEP** for technical or other reasons, a ‘Diversion’ Arrival (**ARR**) message shall be sent by ATC. The plan of the diverted flight will be ‘closed’ in the NM systems. The normal practice is to file a Replacement Flight Plan using the **original** Aircraft Identification (**ARCID**). The NM system will process this Replacement Flight Plan as a new flight.

If the ‘Diversion’ Arrival message is not sent, the Replacement Flight Plan will supersede the plan of the diverted flight. To overcome this situation AO should file the new flight plan with a **different** Aircraft Identification (**ARCID**) e.g. ABC123 becomes ABC123A.

My flight diverted, why was this not visible in the NOP Portal, NMP, NMUIand the CHMI application?

Diverted CPRs, ADS-B data, ACH or ARR messages could modify the destination of a flight. CPRs and ADS-B data are automatically collected by the ETFMS, while, ACH and ARR messages are sent by ATC to the IFPS.

Nevertheless there still is the possibility that a diversion is missed by the system. In case your flight’s status is not updated, you should contact ATC.

ARR messages can be sent up to 120 minutes in the future. ARR messages can be sent for flights in filed status as well.

10.6 ATFCM Procedural Contingency

If the ETFMS fails, the ATFCM procedural contingency will be initiated. This is a phased operation, whereby nominated airports will apply predetermined departure intervals. In this case AOs concerned may expect high delays. Flights departing from non-nominated airfields are not affected by the ATFCM procedural contingency plan.

In order to permit an effective and orderly resumption of slot allocation by the ETFMS following recovery, flight plan and flight plan update messages will continue to be sent to the IFPS throughout the whole period of operation of the contingency plan.

More details of the actions that may be expected in the event of an ATFCM procedural contingency event are published in the seasonal ATFCM Procedural Contingency Plan that is published in the NOP Portal. It is important that FMPs and affected towers, download and save or print the plan when it is issued (twice a year) both to familiarise themselves with any changes and to ensure that the plan is available even if the NOP Portal is u/s.

10.6.1 NMOC Site Contingency

In the event of NMOC contingency and unavailability of the NM site at Brussels, the Nossegem contingency site will send Headline News emails (if the users are subscribed at the NOP to the email service for the Headline news), while MUAC will send AIMs (if the users have AFTN connection) informing users about the contingency situation and the address to type for Contingency NOP for any other relevant instruction for NM Contingency operations.

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11 GENERAL INFORMATION ON ATFCM MESSAGES

11.1 NM ATFM Message Addresses

The NM Addresses for ATFM messages are:

- AFTN: EUCHZMTA
- Type-B: BRUEC7X

Note: 'SITA' changes to 'Type-B' because Type-B serves both SITA and ARINC addresses.

11.2 General Format of Messages

NM ATFM messages conform to the EUROCONTROL standard message format for use within the ECAC States, the ATS Data Exchange Presentation (ADEXP).

This format is based on a sequence of fields each of which is identified by a hyphen ('-') followed by a keyword (e.g. 'ADEP' for Aerodrome of Departure), a separator (a space ' ') and the information (e.g. 'LEMD').

It is important that the exact format is used in all messages. For example, a hyphen must always be used at the start of a field but cannot be used in the content of a field. Failure to use the exact format will result in rejection and, in some cases, an error message being sent.

11.3 Message Fields

Each **ATFM** message comprises a number of fields, some of which are mandatory and some are optional. This may vary from message to message. Specific requirements are given in this document according to the principles of the **ADEXP** Standard document already mentioned.

All ATFM messages shall begin with the TITLE field. The order of other fields is optional.

The field IFPLID, the unique identifier assigned to a flight by IFPS (2 alphabetic characters followed by 8 digits, e.g. —IFPLID AA12345678), will be in all ADEXP messages issued by the NM. ETFMS will accept the IFPLID when provided in an incoming message in ADEXP format. Therefore, messages originated by AOs may include the IFPLD, preferably only if generated automatically.

AOs may extract the IFPLID from the ACK message.

11.4 Addressing by the NM

ATFM messages are distributed to:

i. The **AO**: either to the Flight Plan Originator address (this could be an ARO) or to an address (SITA or AFTN) notified in advance to the NM by the operator. The AO is responsible for making arrangements to ensure receipt of any CTOT issued by the NM.
ii. **ATC** at the aerodrome of departure.

iii. En-route ATC Centres.

11.4.1 Addressing of ATFM Messages by the NM to AOs

The AO is identified either from the aircraft identification or from Item 18 (OPR) of the ICAO filed flight plan.

In the case where both are present, but different, the concerned AO is recognised by the aircraft identification unless the AO has expressly requested a default to Item 18 (OPR). If so requested, both AOs may receive the ATFM messages.

The choice of the addresses belongs to the AO. Any request for modification should be issued by the central operations and sent to the NM.

Initiation of Messages by the NM

The **NM** may, depending on the requirements of **AOs**, send all **ATFCM** messages

either

i. to a **unique centralised address** (the AO control centre AOCC);

or

ii. to an AOs representative office for the aerodrome of departure (the AO control unit ADEP-AOCU) or to the AOs local Handling Agent for this ADEP;

or

iii. to both a centralised address and a representative office for the aerodrome of departure (AOCC and ADEP-AOCU).

In the cases where no AO has been identified or the NM has not found either a centralised nor a local address for an AO (although requested), messages are sent to:

a) the **ATS Reporting Office** at the aerodrome of departure (ADEP-ARO);

and, if different

b) the address of the originator of the last flight plan related message (FPL and related MSGs).

In addition to the above mechanism the NM addresses the **MSG ORIGINATOR** in response to an ATFCM MSG which has been previously received (e.g. an SRM in response to an RFI).

11.4.2 Addressing of Messages by the NM to Air Traffic Services

Messages resulting from slot allocation (SAM, SRM, SLC, FLS)

They are transmitted:

a) Systematically to the **Tower** responsible for the aerodrome of departure (**ADEP-TWR**) and / or to any addresses associated to this Tower (FMP).
b) Optionally to Air Traffic Control Units e.g. approaches, Area Control Centres (APPs, ACCs) along the route of the flight.

A Central Flight Processing Unit (**CFPU**) in national services may be used to substitute this addressing mechanism. In that case the CFPU takes up the responsibility and **shall** readdress the data to appropriate units.

ATS may receive all kinds of NM messages as default addressees for unidentified AOs representative offices at the aerodrome of departure.

The default addresses may be:

- the **ATS Reporting Office** in charge of the aerodrome of departure (ADEP-ARO);

  and, if different,

- the **originator** of the last flight plan related message.

Response to ATS previous NM Messages

(an ATS Unit is active on behalf of an AO)

In addition to the above mechanism, **NM** addresses the **MSG ORIGINATOR** in response to an **ATFCM** MSG which has been previously received (e.g. an **SRM** in response to an **RFI**).

11.5 ATFCM Notification Message (ANM) and ATFCM Information Message (AIM)

The ANMs and AIMs are available online on the NOP Portal:

https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html

These messages are also online via CHMI / NMP and NMUI.

11.5.1 ATFCM Notification Message (ANM)

The ANM (ATFCM Notification Message) is a message issued by the NM to notify all concerned of any ATFM regulations. The ANMs resulting from the ATFCM Daily Plan are sent the day before the day of operations upon finalisation and release of the plan, around 17:00 UTC in winter time (1 hour earlier in summer time).

ANM messages are also online via the NMP/NMUI applications.

11.5.1.1 Description

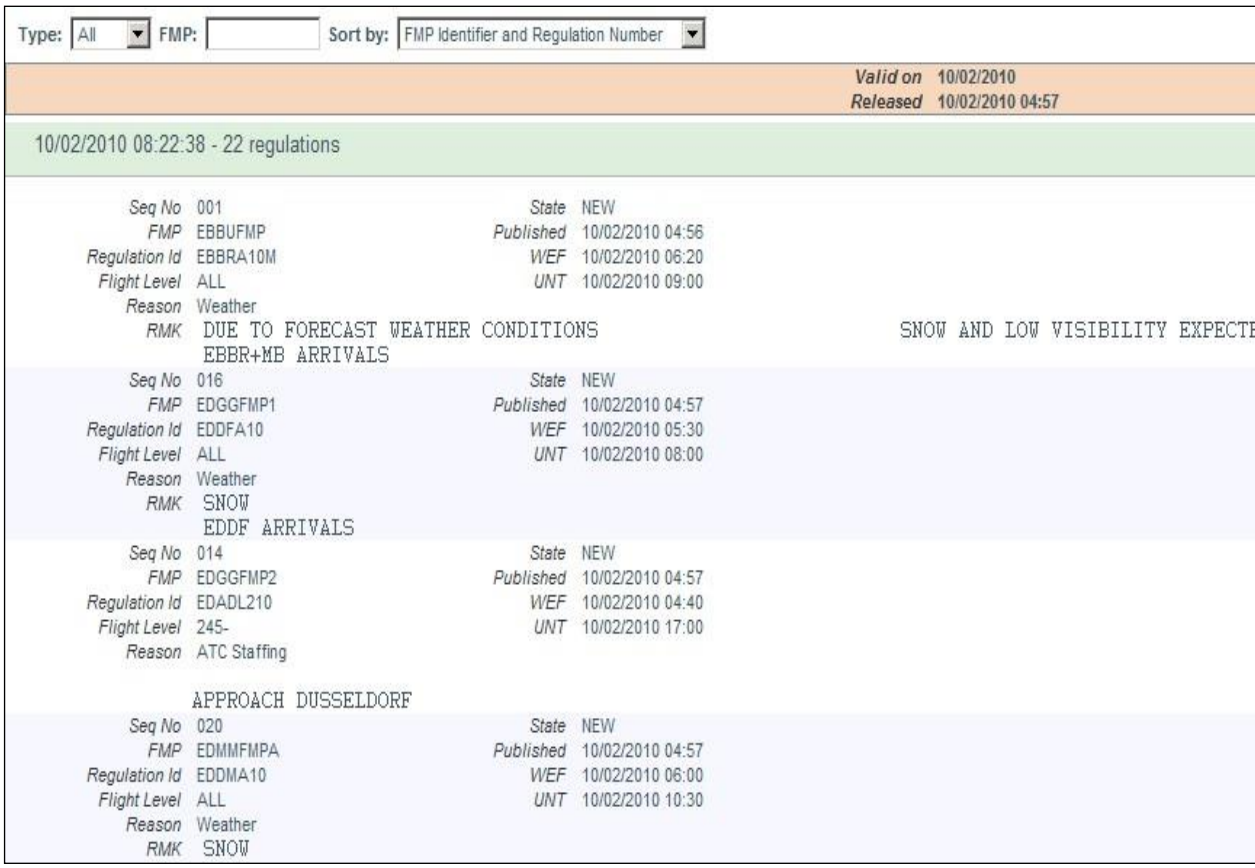


Figure 2 - ATFCM Notification Message (ANM)

The elements included in the ANM are described below:

Header:

Valid Validity date for the ANM. It is important to ensure that the ANM referred to is the correct one.(i.e.: current or applicable for the next day)

Released Date and time of release. As the ANM is regularly updated it is important to ensure that the one being used is the latest format of regulation description

Seq No The sequence number of the regulation which is valid for a specific date (the number is not reused if the regulation is cancelled)

State (NEW, CANCEL, or CHANGE).

FMP Flow Management Position (FMP) identifier (first four characters of the traffic volume set identifier).

Published Date and time of the REGULATION release

Regulation ID The regulation identifier.

WEF The time of validity of the restriction.

Flight Level Flight levels affected.

UNT The time of validity of the restriction.

Reason The regulation cause

RMK Any remarks relevant to the regulation. **This line is optional**.

11.5.2 ATFCM Information Message (AIM)

The AIM may be used to send information to NM customers about NMOC daily operations such as possible disruptions.

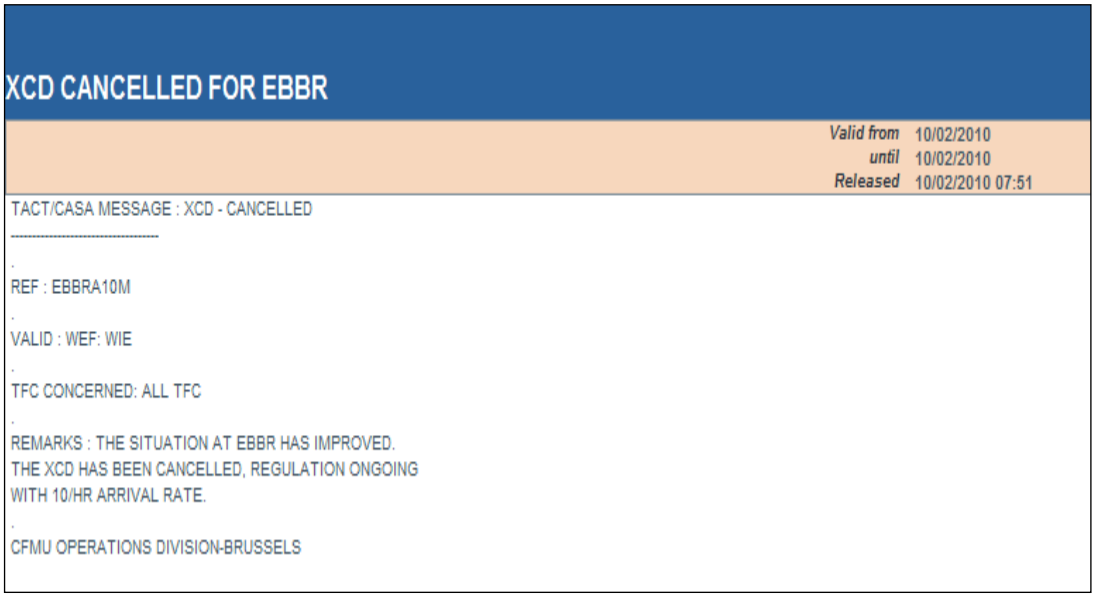


Figure 3 - ATFCM Information Message (AIM)

The elements included in the AIM are:

DESCRIPTION Summary description of the AIM message.

VALIDITY Start and end date of the AIM message.

RELEASED Released date and time of the AIM message (in brackets).

DETAIL The message in detail.

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Appendix

A. MESSAGE FIELDS – ABBREVIATIONS AND DEFINITIONS

KEYWORD	DEFINITION
ARCTYP	Aircraft type.
ADEP	ICAO indicator for Aerodrome of Departure.
ADES	ICAO indicator for Aerodrome of Destination.
ARCID	ICAO Aircraft Identification.
COMMENT	This field provides additional information.
CTOT	Calculated Take-Off Time.
EOBD	Date of Flight (this field can optionally be used in messages from AOs to the NM when an ambiguity may exist with the date). The format is and will remain YYMMDD (i.e. no century).
EOBT	Estimated Off-Block Time.
ERRFIELD	ADEXP name of erroneous field(s).
FILTIM	Date and Time Stamp of original message.
FURTHRTE	Further route, i.e. the route to be followed after the reference point (It may optionally repeat the reference point).
IFPLID	IFPS Identification. This is the unique flight plan identification which is issued by IFPS. It is only available in flight plans which have been distributed in ADEXP format.
IOBD	Initial Off-Block Date. The format is and will remain YYMMDD (i.e. no century).
IOBT	Initial Off-Block Time.
MINLINEUP	Minimum time to line-up for take-off.
NEWCTOT	Revised CTOT.
NEWPTOT	New Provisional Take-Off Time.
NEWRTE	New Route (when a Rerouting is proposed).
OBTLIMIT - VALPERIOD	Validity period of a rerouting proposal. The calculation is performed from the EOBT until a maximum of four hours in the future (YYYYMMDDhhmm).

ORGMSG	Reference to the title of a message originally received.
ORGRTE	Original Route (when a Rerouting is proposed).
POSITION	The actual position of the aircraft. The POSITION field is a composite field, which may consist of the following subfields: ADID : Aerodrome Identification, i.e. ICAO location indication of the airfield. PTID : Point identification, i.e. the name of the route point. TO : For Aerodromes, this field contains the Actual-Take-Off time and for route points, this field contains the actual Time-Over the point. FL : For Aerodromes, this field shall (if present) contain the airfield elevation and for route points, this field contains the actual flight level over the point.
PTOT	Provisional Take-Off Time.
REASON	Reason to explain an action by ETFMS (e.g. rejection, cancellation, etc.).
REGCAUSE	Reason of Regulation.
REGUL	Identifier for the restriction imposed.
REJCTOT	Rejection of a new CTOT where a Slot Improvement has been proposed by the NM.
RESPBY	Latest time by which a Response must be received.
RRTEREF	Reroute Reference designation.
RVR	Runway Visual Range (this field is optional in certain messages).
TAXITIME	The average taxiing time for the runway in use which was considered by ETFMS to derive the take-off times from the off-block times when calculating the last flight profile.
TITLE	Message name.

B. SLOT RELATED MESSAGES

B.1 Slot Related Messages – Originated by the NM

The following table gives examples of all ATFCM messages currently in use. The table includes a brief description of each message and subsequent actions.

The corresponding NM B2B examples associated to ATFCM messages in use are included in the document **ATFM messaging AOWIR via NM B2B Use Cases**, chapter *Annex 7.4 ATFCM messages and their corresponding B2B services*.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE SAM (1) **-ARCID *AMC101*** **-IFPLID *AA12345678*** **-ADEP *EGLL*** **-ADES *LMML*** **-EOBD *160224*** **-EOBT *0950*** **-CTOT *1030*** **-REGUL *RMZ24M*** **-TTO -PTID *VEULE* -TO *1050* -FL *F300*** **-TAXITIME *0020*** **-REGCAUSE *CE 81***	**SAM: SLOT ALLOCATION MESSAGE** The **SAM** is used to inform AOs & ATS of the Calculated Take-Off Time (CTOT) computed by CASA for an individual flight, to which AOs / ATC must adhere.	Sent to AOs / ATS 2 hours before the last received EOBT. AOs / ATC must comply with the CTOT.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
TITLE SAM (2) **-ARCID** ***AMC 101*** **-IFPLID** ***AA12345678*** **-ADEP** ***EGLL*** **-ADES** ***LMML*** **-EOBD** ***160224*** **-EOBT** ***0945*** **-CTOT** ***1200*** **-REGUL** ***LMMLA24*** **-TTO -PTID** ***GZO*** **-TO** ***1438*** **-FL** ***F060*** **-COMMENT** ***AERODROME OR AIRSPACE OR POINT NOT AVAILABLE*** **-TAXITIME** ***0010*** **-REGCAUSE** ***AA 83***	**SAM: SLOT ALLOCATION MESSAGE** ***In the case of:*** **Non Availability** A **SAM** message is sent by the NM when a problem occurs on the flight path requiring a modification of the take-off time e.g. non-availability of aerodrome for a short period.	In the event of a non-availability for a short period the NM activates exceptional condition mechanism to inform AOs individually of the delay of their flight(s). The AO and ATC shall comply to the(NEW)CTOT according to the usual ICAO rules. The (NEW may be modified as the situation requires. When an AO submits an amendment (e.g. DLA or CHG) to IFPS, he must always give as EOBT the earliest EOBT he may comply with. This time is not directly related to the (NEW)CTOT provided in the SRM. The EOBT in IFPS should always reflect the time at which the AO actually wants to be off-blocks. The flight plan may be modified to avoid the problem area. Reference shall be made to AIM / ANM and NOTAM.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE SAM (3) **-ARCID *AMC 101*** **-IFPLID *AA12345678*** **-ADEP *EGLL*** **-ADES *LMML*** **-EOBD *160224*** **-EOBT *0945*** **-CTOT *1200*** **-RVR *100*** **-REGUL *LMMLA24*** **-TTO -PTID *GZO* -TO *1438* -FL *F060*** **-COMMENT *RVR CRITERIA NOT MET*** **-TAXITIME *0010*** **-REGCAUSE *WA 84***	**SAM: SLOT ALLOCATION MESSAGE** ***In the case of*** **Runway Visual Range (RVR)** An SAM message is sent by the NM when a problem occurs at or around aerodromes requiring a modification of the take-off time e.g. low visibility conditions which affect ATC capacity. The flight is delayed to arrive when RVR requirement is met (the RVR field will be added in the SAM message indicating the minimum RVR required as well as the related comment).	ETFMS sends individual Slot Allocation Messages to inform AOs and / or ATC that a flight has been delayed to arrive when RVR requirement is met. An SAM will be sent immediately at or after the moment of slot issue. AOs / ATC must conform to the SAM and, where required, the relevant AIM. Flights delayed due to insufficient RVR are repositioned in the slot list at reception of messages from AOs (see FCM below). The message will be followed by a SRM (indicating the NEWCTOT) or an SLC which indicates the departure requirements. Flights affected by weather conditions may become subject to other ATFCM regulations as well.
-TITLE SRM (1) **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP *EGLL*** **-ADES *LMML*** **-EOBD *160224*** **-EOBT *0950*** **-NEWCTOT *1020*** **-REGUL *RMZ24M*** **-TTO -PTID *VEULE* -TO *1025* -FL *F300*** **-TAXITIME *0020*** **-REGCAUSE *CE 81***	**SRM: SLOT REVISION MESSAGE** After CASA has issued an initial **SAM**, subsequent updates may be notified via the **Slot Revision Message** (**SRM**). This message may be used to indicate a delay increase or decrease.	The **SRM** notifies a significant change of slot. It is issued not earlier than 2 hours before the last received EOBT. This EOBT may be provided by DLA or CHG. AOs / ATC must comply with the NEWCTOT.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
TITLE SRM (2) **-ARCID** *AMC 101* **-IFPLID** *AA12345678* **-ADEP** ***EGLL*** **-ADES** ***LMML*** **-EOBD** ***160224*** **-EOBT** ***0945*** **-NEWCTOT** ***1200*** **-REGUL** ***LMMLA24*** **-TTO -PTID** ***GZO*** **-TO** ***1438*** **-FL** ***F060*** **-COMMENT** ***AERODROME OR AIRSPACE OR POINT NOT AVAILABLE*** **-TAXITIME** ***0010*** **-REGCAUSE** ***AA 83***	**SRM: SLOT REVISION MESSAGE** ***In the case of :*** **Non Availability** An **SRM** message is sent by the NM when a problem occurs on the flight path requiring a modification of the take-off time e.g. non-availability of aerodrome.	In the event of a non-availability for a short period the NM activates exceptional condition mechanism to inform AOs individually of the delay of their flight(s). The AO and ATC shall comply with the (NEW) CTOT according to the usual ICAO rules. The (NEW) CTOT may be modified as the situation requires. When an AO submits an amendment (e.g. DLA or CHG) to IFPS, he must always give as EOBT the earliest EOBT he may comply with. This time is not directly related to the (NEW) CTOT provided in the SAM / SRM. The EOBT in IFPS should always reflect the time at which the AO actually wants to be off-blocks. The flight plan may be modified to avoid the problem area. Reference shall be made to AIM / ANM and NOTAM.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE SRM **(3)** **-ARCID** *AMC 101* **-IFPLID** *AA12345678* **-ADEP** ***EGLL*** **-ADES** ***LMML*** **-EOBD** ***160224*** **-EOBT** ***0945*** **-NEWCTOT** ***1200*** **-RVR** ***100*** **-REGUL** ***LMMLA24*** **-TTO -PTID** ***GZO*** **-TO** ***1438*** **-FL** ***F060*** **-COMMENT** ***RVR CRITERIA NOT MET*** **-TAXITIME** ***0010*** **-REGCAUSE** ***WA 84***	**SRM : SLOT REVISION MESSAGE** ***In the case of*** **Runway Visual Range (RVR)** An SRM message is sent by the NM when a problem occurs at or around aerodromes requiring a modification of the take-off time e.g. low visibility conditions which affect ATC capacity. The flight is delayed to arrive when RVR requirement is met (the RVR field will be added in the SRM message indicating the minimum RVR required as well as the related comment).	ETFMS sends individual Slot Allocation Messages to inform AOs and / or ATC that a flight has been delayed to arrive when RVR requirement is met. A SRM will be sent immediately AOs / ATC must conform to the SRM and, where required, the relevant AIM. Flights delayed due to insufficient RVR are repositioned in the slot list at reception of messages from AOs (see FCM below). The message will be followed by a SRM (indicating the NEWCTOT) or an SLC which indicate the departure requirements.
-TITLE SLC **(1)** **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *0945* **-REASON** *OUTREG* **-TAXITIME** *0020*	**SLC: SLOT REQUIREMENT CANCELLATION MESSAGE** Sent to AOs / ATS to advise that a flight which has received a **CTOT** is no longer subject to an ATFCM restriction.	The flight is no longer subject to ATFCM measures and may depart without delay. If the EOBT of the flight is not realistic (e.g. more than 15 minutes in the past) the SLC will indicate a COMMENT PLEASE UPDATE EOBT WITH A DLA MSG reminding the AO to update its EOBT by sending a DLA**)**.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE SLC (2) **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *0945* **-REASON** *VOID* **-COMMENT** *FLIGHT CANCELLED* **-TAXITIME** *0020*	**SLC: SLOT REQUIREMENT CANCELLATION MESSAGE** ***In the case of*** **Cancel** Sent to AOs / ATS to confirm that the slot of a regulated flight has been released as a result of a CNL.	When an SLC is issued as a result of a CNL, the field -COMMENT FLIGHT CANCELLED will be included in the SLC.
-TITLE SLC (3) **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD** *080901* **-EOBT** *0945* **-REASON** *NONE* **-COMMENT** *NEW ATFM MESSAGES MAY POSSIBLY BE PUBLISHED AT 2 HOURS BEFORE THE EOBT* **-TAXITIME** *0010*	**SLC: SLOT REQUIREMENT CANCELLATION MESSAGE** ***In the case of*** **EOBT Update** Sent to AOs / ATS to inform that due to an update on their EOBT which pushes it further than two hours in the future, previous CTOT is no longer valid. If applicable a new SAM will be sent by NMOC two hours before the new EOBT.	When an SLC is issued as a result of an EOBT update which pushes the EOBT at least two hours after current clock time, the comment - *NEW ATFM MESSAGES MAY POSSIBLY BE PUBLISHED AT 2 HOURS BEFORE THE EOBT* - will be included in the SLC. No action is required by the users. If applicable a SAM will be sent by CASA at EOBT-2 hours.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE SIP **-ARCID** *AMC 101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *0945* **-CTOT** *1030* **-NEWCTOT** *1010* **-REGUL** *UZZU11* **-RESPBY** *0930* **-TAXITIME** *0020*	**SIP: SLOT IMPROVEMENT PROPOSAL MESSAGE** The **SIP** proposes a NEWCTOT. A response is expected from the AO. If no response is given, the proposal expires at the respond by (RESPBY) time (15 minutes after the SIP issue time) and the last published CTOT remains valid.	If CASA is able to improve the CTOT by a significant amount, by using the slots freed due to a revised EOBT, Slot Missed Message or an improved flow rate, etc., a proposal is put to the AO before the NEWCTOT becomes firm. The AO accepts the proposal with an **SPA** or rejects with an **SRJ**.
-TITLE FLS **(1)** **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *0945* **-REGUL** *LMMLA01* **-COMMENT** *AERODROME OR AIRSPACE OR POINT NOT AVAILABLE* **-TAXITIME** *0020* **-REGCAUSE** *AA 83*	**FLS: FLIGHT SUSPENSION MESSAGE** ***In the case of :*** **Non Availability** The ETFMS indicates with an **FLS** that this flight is considered as not taking off. The flight data are kept in the database but suspended (non-availability of an aerodrome for a long period).	In the event of a non-availability for a long period the NM activates the exceptional condition mechanism to inform AOs individually of the suspension of their flight(s). The identifier of the regulation(s) concerned together with the corresponding regulation reason are inserted in the FLS message AO must confirm their intent to operate in the provided regulation(s) with an FCM, in order to receive a slot after re-opening.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE FLS **(2)** **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *0945* **-RVR** *350* **-RESPBY** *0855* **-REGUL** *UZZU11* **-COMMENT** ***RVR UNKNOWN*** **-TAXITIME** *0020* **-REGCAUSE** WA *84*	**FLS: FLIGHT SUSPENSION MESSAGE** ***In the case of*** **Runway Visual Range (RVR)** The flight is suspended (comment will be RVR UNKNOWN) until the flight's RVR is provided to the NM.	ETFMS sends individual Flight Suspension Messages to inform AOs and / or ATC that a flight has been suspended. A **RESPBY** time is also in the message enabling the AO to keep its present CTOT if the **CHG / FCM** with sufficient RVR is received by the NM in due time. An **FLS** will be sent immediately where a flight has already received a CTOT. The **FLS** is sent instead of a **SAM** at the moment of slot issue. The identifier of the regulation concerned together with the corresponding regulation reason are inserted in the FLS message.
-TITLE FLS **(3)** **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *0945* **-COMMENT** ***SMM RECEIVED*** **-TAXITIME** *0020*	**FLS: FLIGHT SUSPENSION MESSAGE** ***In the case of :*** **Slot Missed Message (SMM)** After the reception of a **SMM**, the flight is put in suspension and ETFMS originates an **FLS**. The flight will be de-suspended after the reception of a message updating the EOBT.	The flight will be de-suspended at reception of a **DLA / CHG** updating the EOBT or a new DPI message triggered by a TOBT update.. The message will be followed by a SAM (indicating the CTOT) or a DES, indicating 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. AOs / ATC must conform to the **FLS** and, where required, the relevant AIM.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE FLS **(4)** **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *0945* **-COMMENT** ***NOT REPORTED AS AIRBORNE*** **-TAXITIME** *0020*	**FLS: FLIGHT SUSPENSION MESSAGE** ***In the case of :*** **Flight Activation Monitoring** The flights, which are expected to be airborne but are not actually reported as airborne will be regularly 'shifted' then suspended and ETFMS will originate an FLS.	Flights may be reactivated at reception of **DLA** or **CHG** messages from AOs. AOs / ATC must conform to the **FLS** and, where required, the relevant AIM. The message will be followed by a **SAM** (indicating the CTOT) or a **DES** indicating 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.
-TITLE FLS **(5)** **-ARCID** *BEL2CC* **-IFPLID** *AA00126947* **-ADEP** *EBBR* **-ADES** *LIPZ* **-EOBD** ***120119*** **-EOBT** *0543* **-COMMENT** ***SUSPENDED BY DEPARTURE AIRPORT*** **-TAXITIME** *0016*	**FLS: FLIGHT SUSPENSION MESSAGE** ***In the case of :*** **Cancel DPI** At airports transmitting DPI messages the Cancel DPI (C-DPI) is sent when there is an interruption to the departure planning process and a new Off-Block-Time is not (yet) known, triggering the FLS. When present in the C-DPI, the reason for sending the C-DPI will be included in the FLS comment-field, along with a recommended action for the airline.	The flight is de-suspended at reception of: 1. A delay or change message (DLA/CHG) updating the EOBT; 2. Any DPI message other than the A-DPI. 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.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE FLS **(6)** **-ARCID** *BEL2CC* **-IFPLID** *AA00126947* **-ADEP** *EBBR* **-ADES** *LIPZ* **-EOBD** ***120119*** **-EOBT** 0543 **-PTOT** 1000 **-RESPBY** 0720 **-REGUL** DVR9811 **-COMMENT** SUSPENDED DUE TO DELAY EXCEEDING THRESHOLD VALUE. SEND FCM BEFORE RESPBY TO SECURE PTOT. ALTERNATIVELY, REROUTE, OR UPDATE EOBT WITH A DLA MSG, OR CNL	**FLS: FLIGHT SUSPENSION MESSAGE** ***In the case of :*** **Regulation with Delay threshold Monitoring (used in specific circumstances decided by the NM)** To additionally give to the airspace users delay information and time to react before fully suspending a flight crossing a high delays regulation. An additional benefit is that the flights do not lose the initial sequence based on the ETO, as the slot is kept booked for a period of 20 minutes.	If, at SIT1 (EOBT - 2 hours) or later, the delay of the flight is bigger than the Delay Confirmation threshold time specified in the regulation editor, a slot for that flight will be booked, for a period of 20 min. Flights presenting delays below the threshold value will get a SAM. A FLS will be sent containing a Proposal Take-Off Time (PTOT) and a Time for response by (Time of FLS issuance +20 min). By sending a Flight Confirmation Message (FCM) message within the time for response by, the airspace user shows its acceptance of the PTOT, upon receipt of a FCM a SAM is sent (PTOT becomes the CTOT). If the airspace user fails to respond within the Time for response by, the booking is lost and the flight remains suspended. Before SIT1, provisional delays and flights affected by delay threshold regulations can be monitored using external interfaces (NOP / CHMI / NMP/NMUI).
-TITLE DES **(1)** **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *0945* **-TAXITIME** *0020*	**DES: DE-SUSPENSION MESSAGE** This NM message indicates that a flight which was previously suspended is now de-suspended.	The flight is de-suspended by ETFMS and is no longer subject to ATFCM measures. No action is normally required of AOs / ATS but if the EOBT of the flight is not realistic (e.g. more than 15 minutes in the past) the **DES** will indicate a COMMENT PLEASE UPDATE EOBT WITH A DLA MSG reminding the AO to update its EOBT by sending a DLA. In the meantime the flight will be counted as if departed at taxi time + TIS after the de-suspension. AO shall update the EOBT by sending a DLA / CHG.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE DES **(2)** **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *0945* **-COMMENT** *NEW ATFM MESSAGES MAY POSSIBLY BE PUBLISHED AT 2 HOURS BEFORE THE EOBT* **-TAXITIME** *0020*	**DES: DE-SUSPENSION MESSAGE** ***In the case of*** **EOBT Update** Sent to AOs / ATS to inform that due to an update on their EOBT which pushes it further than two hours in the future, previous CTOT is no longer valid. If applicable a new SAM will be sent by NMOC two hours before the new EOBT.	When a DES is issued for a previously regulated flight because of an EOBT update, which pushes the EOBT at least two hours after current clock time, the flight is de-suspended by ETFMS and is no longer subject to ATFCM measures. The comment "*NEW ATFM MESSAGES MAY POSSIBLY BE PUBLISHED AT 2 HOURS BEFORE THE EOBT* - will be included in the DES message. No action is normally by AOs / ATS.. If applicable a SAM will be sent by CASA at EOBT-2 hours

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE RRP **(1)** **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *1030* **-ORGRTE** *MID UA1 RBT UG32 TOP UA1 ELB UA12 PAL UA18 EKOLA A18 MLQ* **-CTOT** *1230* **-RRTEREF** *EGLLLMML1* **-NEWRTE** *MID UA1 RBT UG32 BAJKO UA21 NIZ UA2 AJO UA9 CAR UB21 PANTA B21 MLQ* **-NEWCTOT** *1105* **-RESPBY** *0900* **-COMMENT** *PURPOSE IS ATFCM* **-TAXITIME** *0020* *-TOT LIMIT -VALPERIOD 2008090110502008090145 0*	**RRP: REROUTEING PROPOSAL MESSAGE** This message is sent to an AO to offer a different CTOT or to avoid the need for a slot on a new route. A 'respond by time' is also added. ***Example 1*** The flight had already received a CTOT corresponding to its original route (ORGRTE). A new CTOT is offered provided the flight is refiled along the proposed new route (NEWRTE).	This issue follows a what-if reroute and 'apply' made at the NM. The AO who wishes to benefit from the offer shall consequently modify its flight plan either with a CHG (this solution preferred when the flight is conducted wholly within the IFPS / NM area of responsibility) or a CNL and refile using the Replacement Flight Plan procedure (RFP). This should be received before the RESPBY time. At the reception of the new route in the flight plan ETFMS will merge it to the proposal.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE RRP **(2)** **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *1030* **-ORGRTE** *MID UA1 RBT UG32 TOP UA1 ELB UA12 PAL UA18 EKOLA A18 MLQ* **-CTOT** *1230* **-RRTEREF** *EGLLLMML2* **-NEWRTE** *MID A1 BOGNA UA1 RBT UG32 TOP UA1 ELB UA12 UA18 EKOLA A18 MLG DCT MLQ* **-RESPBY** *0900* **-REASON** *OUTREG* **-COMMENT** *PURPOSE IS ATFCM* **-TAXITIME** *0020* *-TOT LIMIT -VALPERIOD 200809 200809011450*	***Example 2*** This flight is rerouted from a route which is crossing a regulated area(s) to a new route without a regulation. The REASON OUTREG indicates that there is no slot required, for that route.	Then SLC, SAM, SRM messages will be transmitted as appropriate. The possible combination of optional fields is as follows : -CTOT -NEWCTOT -CTOT -REASON -PTOT -NEWPTOT -PTOT -REASON -PTOT -NEWCTOT -NEWCTOT only -NEWPTOT only

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE RRP **(3)** **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *1030* **-ORGRTE** *MID UA1 RBT UG32 TOP UA1 ELB UA12 PAL UA18 EKOLA A18 MLQ* **-PTOT** *1230* **-RRTEREF** *EGLLLMML1* **-NEWRTE** *MID UA1 RBT UG32 BAJKO UA24 NIZ UA2 AJO UA9 CAR UB21 PANTA B21 MLQ* **-NEWPTOT** *1100* **-RESPBY** *0730* **-COMMENT** *PURPOSE IS ATFCM* **-TAXITIME** *0020* *-TOT LIMIT -VALPERIOD 200809 200809011450*	***Example 3*** This flight has not yet received its slot, only a provisional take-off (PTOT) time was calculated. A new provisional take-off (NEWPTOT) time is calculated which corresponds to the new proposed route. This value may be modified until the final slot is issued.	This issue follows a what-if reroute and 'apply' made at the NM. The AO who wishes to benefit from the offer shall consequently modify its flight plan either with a CHG or a CNL and refile using the Replacement Flight Plan procedure (RFP). This should be received before the RESPBY time. At the reception of the new route in the flight plan ETFMS will merge it to the proposal. Then SLC, SAM, SRM messages will be transmitted as appropriate.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE RRP **(4)** **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *1030* **-ORGRTE** *MID UA1 RBT UG32 TOP UA1 ELB UA12 PAL UA18 EKOLA A18 MLQ* **-PTOT** *1230* **-RRTEREF** *EGLLLMML2* **-NEWRTE** *MID A1 BOGNA UA1 RBT UG32 TOP UA1 ELB UA12 UA18 EKOLA A18 MLG DCT MLQ* **-RESPBY** *0730* **-REASON** *OUTREG* **-COMMENT** *PURPOSE IS ATFCM* **-TAXITIME** *0020* *-TOT LIMIT -VALI* *2008090110502008090114 30*	***Example 4*** Same as above. The flight has not yet received a slot and is proposed a route with no regulation active at the time of the proposal.	The possible combination of optional fields is as follows : -CTOT -NEWCTOT -CTOT -REASON -PTOT -NEWPTOT -PTOT -REASON -PTOT -NEWCTOT -NEWCTOT only -NEWPTOT only

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE RRP **(5)** **-ARCID** *GRV090A* **-IFPLID** *AT00002136* **-ADEP** *LGKV* **-ADES** *LGAL* **-EOBD** *140204* **-EOBT** *0525* **-ORGRTE** *N0250F090 IDILO* **-RRTEREF** *LGKVLGALG3* **-NEWRTE** *N0250F090 SOSUS1A SOSUS* **G12** *IDILO IDILO1A* **-RESPBY** *1305* **-REASON** *OUTREG* **-COMMENT** *PURPOSE IS FLIGHT EFFICIENCY* **-TAXITIME** *0005* **-***TOTLIMIT* **-***VALPERIOD 201402040530 201402040930*	***Example 5*** Flight which is not regulated receives a new route with no regulation active at the time of the proposal.	This issue follows a what-if reroute and 'apply' made at the NM. The AO who wishes to benefit from the offer shall consequently modify its flight plan either with a CHG or a CNL and refile. This should be received before the RESPBY time.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE RRP **(6)** **-ARCID** *GRV090A* **-IFPLID** *AT00002136* **-ADEP** *LGKV* **-ADES** *LGAL* **-EOBD** *140204* **-EOBT** *0525* **-ORGRTE** *N0250F090 IDILO* **-RRTEREF** *LGKVLGALG3* **-NEWRTE** *N0250F090 SOSUS1A SOSUS* **G12** *IDILO IDILO1A* **-RESPBY** *1305* **-REASON** *OUTREG* **-COMMENT** *PURPOSE IS ATFCM* **-TAXITIME** *0005* **-***TOTLIMIT* **-***VALPERIOD 201402040530 201402040930*	***Example 6*** Flight which is not regulated receives a more efficient route proposed route with no regulation active at the time of the proposal.	This issue follows a FLIGHT EFFICIENCY PROPOSAL made at the NM. The AO who wishes to benefit from the offer shall consequently modify its flight plan either with a CHG or a CNL and refile. This should be received before the RESPBY time.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE RRN **(1)** **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *1030* **-ORGRTE** *MID UA1 RBT UG32 TOP UA1 ELB UA12 PAL UA18 EKOLA A18 MLQ* **-CTOT** *1230* **-RRTEREF** *EGLLLMML1* **-NEWRTE** *MID UA1 RBT UG32 BAJKO UA21 NIZ UA2 AJO UA9 CAR UB21 PANTA B21 MLQ* **-NEWCTOT** *1105* **-RESPBY** *0900* **-COMMENT** *PURPOSE IS AOWIR* **-TAXITIME** *0020* *-TOT LIMIT -VALPERIOD 2008090110502008090114 50*	**RRN: REROUTEING NOTIFICATION MESSAGE** This message is sent to an AO to notify a rerouting triggered through the NM Client Application. ***Example 1*** The flight had already received a CTOT corresponding to its original route (ORGRTE). A new CTOT is offered provided that the flight is refiled along the proposed new route (NEWRTE).	The RRN message is issued in case of an acceptance of the rerouteing with option 'CNL original FPL', book slot and flight plan refile by the AO via SITA / AFTN. The flight plan is cancelled in the NM system and a new slot may be booked : **-NEWCTOT** *1105* the new slot calculation result The IFPS proceeds exactly as if a cancel (CNL) message had been submitted by the user. SLC are distributed with the FPL cancellations. RRN messages are sent by ETFMS to AO addresses in accordance with the addressing rules in the ATFCM Users Manual and, in addition, to the address associated to the NM Client Application having made the Apply.

SLOT RELATED MESSAGES - ORIGINATED BY THE NM		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE RRN (2) **-ARCID** *AMC101* **-IFPLID** *AA12345678* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *1030* **-ORGRTE** *MID UA1 RBT UG32 TOP UA1 ELB UA12 PAL UA18 EKOLA A18 MLQ* **-CTOT** *1230* **-RRTEREF** *EGLLLMML2* **-NEWRTE** *MID A1 BOGNA UA1 RBT UG32 TOP UA1 ELB UA12 UA18 EKOLA A18 MLG DCT MLQ* **-RESPBY** *0900* **-REASON** *OUTREG* **-COMMENT** *PURPOSE IS AOWIR* **-TAXITIME** *0020* *-TOT LIMIT -VALPERIOD 200809011050200809011450*	***Example 2*** This flight is rerouted from a route which is crossing a regulated area(s) to a new route without a regulation. The REASON OUTREG indicates that there is no slot required, for that route.	This message includes the new route description and e.g. : **REASON** *OUTREG* when the new route is not subject to ATFCM regulation or **The user is now expected to file a new flight plan in order to match the new conditions**. **This shall be received before RESPBY time.** The route should be fully consistent with the one provided within the RRN message and also displayed on the NM Client Application. Then SAM or FLS messages will be transmitted as appropriate. The possible combination of optional fields is as follows : -CTOT -NEWCTOT -CTOT -REASON -NEWCTOT only
-TITLE ERR **-ARCID** *AMC101* **-FILTIM** *0915* **-ORGMSG** *SMM* **-REASON** *SYNTAX ERROR*	**ERR: ERROR MESSAGE** The error message indicates that an error has been found in a message previously received by ETFMS. The erroneous field or the reason for rejection may be indicated.	This message is sent by ETFMS when a message is received but its syntax is incorrect and cannot be processed. It can also be sent when a message is received with a correct syntax but the message cannot be correlated to an existing flight plan or the message is not relevant (e.g. an EOBT earlier than the previous one). AOs / ATS resend the correct message.

B.2 Slot Related Messages – Originated by AOS / ATS

The corresponding NM B2B examples associated to ATFCM messages in use are included in the document **ATFM messaging AOWIR via NM B2B Use Cases**, chapter *Annex 7.4 ATFCM messages and their corresponding B2B services*.

SLOT RELATED MESSAGES - ORIGINATED BY AOs / ATS		
It is highly recommended that ATFCM messages originated by AOs / ATS include the EOBD and the IFPLID, preferably only if generated automatically. These fields being used by ETFMS in the correlation mechanism will precisely indicate to which flight the ATFCM message is addressed.		
MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE SMM **-ARCID** *AMC101* **-IFPLID** *AA11857784* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *0945* **-CTOT** *1020*	**SMM: SLOT MISSED MESSAGE** This message is originated by an AO when a slot time given in the **SAM** cannot be achieved but where a new EOBT cannot be supplied.	NM cancels the issued CTOT and issues the suspension with an FLS message. The flight is suspended until : AOs / ATS will advise new EOBT (when known) via a Change (**CHG**) / Delay (**DLA**), a new DPI message triggered by a TOBT update or CNL and refile into IFPS. The NM responds with an SAM or a DES.
-TITLE SPA **-ARCID** *AMC101* **-IFPLID** *AA11857784* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD** *190328* **-EOBT** *0945* **-NEWCTOT** *1010*	**SPA: SLOT IMPROVEMENT PROPOSAL ACCEPTANCE MESSAGE** This message is a positive response to a Slot Improvement Proposal (**SIP**) message.	NM confirms thereafter NEWCTOT with an SRM if an SPA is received within the RESPBY time. If an **SPA** outside RESPBY time or if parameters of restriction have changed, an error message will be sent stating the REASON i.e. VOID. AOs / ATC comply with the NEWCTOT or SRM.

-TITLE SRJ **-ARCID** *AMC101* **-IFPLID** *AA11857784* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD** *190328* **-EOBT** *0945* **-REJCTOT** *1010*	**SRJ: SLOT PROPOSAL REJECTION MESSAGE** This message is confirmation that an AO cannot comply with a Slot Improvement Proposal (**SIP**) message.	Use of this message will allow the SIP slot to be released back into the system for potential use elsewhere. The AO keeps the original slot received before the **SIP**.

MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE RFI **-ARCID AMC101** **-IFPLID AA11857784** **-ADEP EGLL** **-ADES LMML** **-EOBD 080901** **-EOBT 1030**	**RFI: RFI MESSAGE** The RFI message is used by the AO to change the flight's readiness status from SWM (RFI NO) to RFI. The RFI status of the flight will be set to YES.	The AO operating a flight having its RFI status set to YES will receive an SRM if any improvement is possible. ATC will also receive the same message. AO and ATC shall comply with the NEWCTOT.

MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE SWM **-ARCID** *AMC101* **-IFPLID** *AA11857784* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *1030*	**SWM: SIP WANTED MESSAGE** The SWM message is used by the AO to indicate that it cannot accept SRM when an improvement is possible but wants to be in a position to refuse an improvement. The RFI status of the flight will be set to NO.	The AO operating a flight having its RFI status set to NO will receive a SIP if any significant improvement is possible. The AO will accept the proposal with an SPA or reject it with an SRJ.
-TITLE REA **-ARCID** *ABC101* **-IFPLID** *AA11857784* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD 08***0901* **-EOBT** *1030* **-MINLINEUP** *0005*	**REA: READY MESSAGE** For flights having already received their slot and being in a situation to depart before their CTOT (doors closed and ready to depart), the AO may ask local ATC to send a Ready (REA) message. In the REA local ATC may also include a MINLINEUP time, to indicate the minimum time needed for that flight to get from its position to take-off.	Only ATC / ATFCM units can send a REA message. **REA** may be sent between EOBT minus 15 minutes and the CTOT of the flight. When the REA is filed before the EOBT, the flight is considered as having a new EOBT at this filing time and the MINLINEUP as a revised taxi time. The MINLINEUP is constrained in the range [**0** min, **90** min] If an improvement is possible AO and ATC will receive an SRM.
-TITLE FCM (1) **-ARCID** *AMC101* **-IFPLID** *AA11857784* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD** *190328* **-EOBT** *0945* **-RVR** *200*	**FCM: FLIGHT CONFIRMATION MESSAGE** An AO indicates to ETFMS the RVR capability of a flight with an EOBT in the future. A suspended flight with an EOBT in the past or an obsolete EOBT must first be amended by a DLA and then confirmed by an FCM, which includes the flight's RVR capability. When the route has also to be changed it must be amended by a CHG, which will include an amended route and the flight's RVR capability.	An AO may send an **FCM** in response to a selective AIM or to an individual FLS message to provide the RVR operating minima which should be given in metres. When the flight's RVR capability is requested, the flight is kept suspended within ETFMS until this RVR capability is provided by CHG or FCM message or until the NM releases the RVR requirement or until a DLA / CHG message pushes the flight outside the period requesting the RVR.

MESSAGE & *example*	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE FCM (2) **-ARCID AMC101** **-IFPLID AA11857784** **-ADEP EGLL** **-ADES LMML** **-EOBD 190328** **-EOBT 0945** **-REGUL LMMLA01**	**FCM: FLIGHT CONFIRMATION MESSAGE** An AO indicates to ETFMS that a flight with an EOBT in the future is now confirmed for the regulation(s) provided in this FCM. A suspended flight with an EOBT in the past or an obsolete EOBT must first be amended by a DLA and then confirmed by an FCM. When the route has also to be changed it must first be amended by a CHG and then confirmed by an FCM.	An AO may send an FCM in response to a selective AIM or to an individual FLS message. When a confirmation is requested, the flight is kept suspended within ETFMS until FCM message(s) confirm the flight in all affecting regulation(s) requesting a confirmation or until the NM releases the confirmation requirement or until a DLA / CHG message pushes the flight outside the period requesting the confirmation.

MESSAGE & example	**DEFINITION**	**PROCEDURE & ACTION**
-TITLE FCM (3) **-ARCID** *AMC101* **-IFPLID** *AA11857784* **-ADEP** *EGLL* **-ADES** *LMML* **-EOBD** *190328* **-EOBT** *0945* **-RVR** *200* **-REGUL** *LMMLA01*	**FCM: FLIGHT CONFIRMATION MESSAGE** An AO indicates to ETFMS that a flight with an EOBT in the future is now confirmed for the regulation(s) provided in this FCM. The message may include the flight's RVR capability. A suspended flight with an EOBT in the past or an obsolete EOBT must first be amended by a DLA and then confirmed by an FCM. When the route has also to be changed it must first be amended by a CHG and then confirmed by an FCM.	An AO may send an **FCM** in response to a selective AIM or to an individual FLS message. If so required, it includes the RVR operating minima which should be given in metres. When both a confirmation and a flight's RVR capability are requested, the flight is kept suspended within ETFMS until FCM message(s) confirm the flight in all affecting regulation(s) requesting a confirmation and provide the flight's RVR capability or until the NM releases the confirmation and the RVR requirement or until a DLA / CHG message pushes the flight outside the period requesting the confirmation and the RVR.

-TITLE RJT **-ARCID** *AMC101* **-IFPLID** *AA11857784* **-ADEP** *EGLL* **-EOBD** *190328* **-EOBT** *0945* **-ADES** *LMML* **-RRTEREF** *EGLLLMML1*	**RJT: REROUTEING REJECTION MESSAGE** Used by an AO to reject an **RRP** message.	Use of the **RJT** will enable the slot potentially associated with the RRP, to be released back into the system for possible use elsewhere.

Note: The corresponding NM B2B examples for ATFCM messages are available in the document *"ATFM messaging AOWIR via NM B2B Use Cases".*

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C. PRIMARY FIELD COMPOSITION OF TACTICAL ATFCM MESSAGES EXCHANGE

PRIMARY FIELD COMPOSITION OF TACTICAL ATFCM MESSAGES EXCHANGE (1)

Message Field	SAM	SRM	SLC	SIP	FLS	DES	RRP	RRN	ERR	SMM SlotMissedRequest	SPA SlotProposalFeedbackRequest	SRJ SlotProposalFeedbackRequest	FCM FlightConfirmationRequest	RJT ReroutingProposalRejectedRequest
-TITLE	1	1	1	1	1	1	1	1	1	1	1	1	1	1
-IFPLID (flightId)	1	1	1	1	1	1	1	1	(1)	(1)	(1)	(1)	(1)	(1)
-ADDR	(1)	(1)	(1)	(1)	(1)	(1)								
-ARCID (aircraftId)	1	1	1	1	1	1	1	1	(1)	1	1	1	1	1
-ADEP (aerodromeOfDeparture)	1	1	1	1	1	1	1	1	(1)	1	1	1	1	1

PRIMARY FIELD COMPOSITION OF TACTICAL ATFCM MESSAGES EXCHANGE (1)

Message Field	SAM	SRM	SLC	SIP	FLS	DES	RRP	RRN	ERR	SMM SlotMissedRequest	SPA SlotProposalFeedbackRequest	SRJ SlotProposalFeedbackRequest	FCM FlightConfirmationRequest	RJT ReroutingProposalRejectedRequest
-EOBD (estimatedOffBlockTime)	1	1	1	1	1	1	1	1	(1)	(1)	(1)	(1)	(1)	(1)
-EOBT (estimatedOffBlockTime)	1	1	1	1	1	1	1	1	(1)	1	1	1	1	1
-IOBD	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
-IOBT	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
-CTOT (calculatedTakeOffTime)	1			1			(1)	(1)		1				
-NEWCTOT (calculatedTakeOffTime)		1		1			(1)	(1)			1			

PRIMARY FIELD COMPOSITION OF TACTICAL ATFCM MESSAGES EXCHANGE (1)

Message Field	SAM	SRM	SLC	SIP	FLS	DES	RRP	RRN	ERR	SMM SlotMissedRequest	SPA SlotProposalFeedbackRequest	SRJ SlotProposalFeedbackRequest	FCM FlightConfirmationRequest	RJT ReroutingProposalRejectedRequest
-NEWPTOT (proposedCTOT)							(1)	(1)						
-REJCTOT (proposalCalculatedTakeOffTime)												1		
-REASON	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)					
-ADES (aerodromeOfDestination)	1	1	1	1	1	1	1	1	(1)	1	1	1	1	1
-REGUL (mostPenalisingRegulation)	1<	1<		1<	0<								0<	
-ORGRTE (icaoRoute)							1	1						

PRIMARY FIELD COMPOSITION OF TACTICAL ATFCM MESSAGES EXCHANGE (1)

Message Field	SAM	SRM	SLC	SIP	FLS	DES	RRP	RRN	ERR	SMM SlotMissedRequest	SPA SlotProposalFeedbackRequest	SRJ SlotProposalFeedbackRequest	FCM FlightConfirmationRequest	RJT ReroutingProposalRejectedRequest
-PTOT (calculatedTakeOffTime)					(1)		(1)	(1)						
-NEWRTE							1	1						
-RRTEREF (routeId)							(1)	1						(1)
-RVR (runwayVisualRange)	(1)	(1)			(1)								(1)	
-RESPBY (responseBy)				1	(1)		1	1						
-ORGMSG									(1)					

PRIMARY FIELD COMPOSITION OF TACTICAL ATFCM MESSAGES EXCHANGE (1)

Message Field	SAM	SRM	SLC	SIP	FLS	DES	RRP	RRN	ERR	SMM SlotMissedRequest	SPA SlotProposalFeedbackRequest	SRJ SlotProposalFeedbackRequest	FCM FlightConfirmationRequest	RJT ReroutingProposalRejectedRequest
-FILTIM									1					
-ERRFIELD														
-MINLINEUP (minLineup)														
-COMMENT	0<	0<	0<	0<	0<	0<	0<	0<	0<					
-TAXITIME (currentDepartureTaxiTimeAndProcedure)	1	1	1	1	1	1	1	1	(1)					
-REGCAUSE (iataDelayCode)	1	1			(1)									

PRIMARY FIELD COMPOSITION OF TACTICAL ATFCM MESSAGES EXCHANGE (1)

Message Field	SAM	SRM	SLC	SIP	FLS	DES	RRP	RRN	ERR	SMM SlotMissedRequest	SPA SlotProposalFeedbackRequest	SRJ SlotProposalFeedbackRequest	FCM FlightConfirmationRequest	RJT ReroutingProposalRejectedRequest
-OBTLIMIT – VALPERIOD profileValidity							1	1						
-TTO targetTimeOverFix	1	1												

'1' means: exactly one field of the specified type is required a 'blank cell' means: this field is not in a message

'(1)' means : a single optional field of the specified type is allowed 'n<' means: n or more occurrences of this field can appear in a message

Note: Refer to the IFPS Users Manual for the format of FLS message used in flight plan.

PRIMARY FIELD COMPOSITION OF TACTICAL ATFCM MESSAGES EXCHANGE (2)								
Message Field	**SWM** SlotImprovementModeRequest	**RFI** SlotImprovementModeRequest	**REA** ReadyToDepartRequest					
-TITLE	1	1	1					
-ADDR								
-ADEP (aerodromeOfDeparture)	1	1	1					
-ADES (aerodromeOfDestination)	1	1	1					
-ARCID (aircraftId)	1	1	1					
-COMMENT								
-CTOT (calculatedTakeOffTime)								
-EOBD (estimatedOffBlockTime)	(1)	(1)	(1)					
-EOBT (estimatedOffBlockTime)	1	1	1					
-ERRFIELD								
-FILTIM								
-IFPLID (flightId)	(1)	(1)	(1)					
-IOBD	(1)	(1)						
-IOBT	(1)	(1)						
-MINLINEUP (minLineup)			(1)					
-NEWCTOT (calculatedTakeOffTime)								
-NEWPTOT (proposedCTOT)								
-NEWRTE								
-ORGMSG								
-ORGRTE (icaoRoute)								
-PTOT (calculatedTakeOffTime)								
-REASON								
-REGCAUSE (iataDelayCode)								
-REGUL (mostPenalisingRegulation)								
-REJCTOT (proposalCalculatedTakeOffTime								
-RESPBY (responseBy)								
-RRTEREF (routeId)								
-RVR (runwayVisualRange)								

‘1’ means: exactly one field of the specified type is required

a ‘blank cell’ means: this field is not in a message

‘(1)’ means : a single optional field of the specified type is allowed
‘n<‘ means: n or more occurrences of this field can appear in a message

D. CORRELATION BETWEEN IATA DELAY CODES AND NM REGULATION CAUSES

Correlation between IATA Delay Codes and the NM Regulation Reasons					
NM				IATA	
Regulation cause	**CODE**	**Regulation Location**	***GUIDELINES***	**Code**	**Delay Cause**
ATC capacity	**C**	D	En Route: Demand exceeds or complexity reduces declared or expected ATC capacity Airport: Demand exceeds declared or expected ATC capacity.	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		81	ATFM due to ATC ENROUTE DEMAND / CAPACITY
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
ATC industrial action	**I**	D	Reduction in any capacity due to industrial action by ATC staff	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		82	ATFM due to ATC STAFF / EQUIPMENT ENROUTE
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
ATC routeings	**R**	E	Network solutions / scenarios used to balance demand and capacity	81	ATFM due to ATC ENROUTE DEMAND / CAPACITY
ATC staffing	**S**	D	Unplanned staff shortage reducing expected capacity.	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		82	ATFM due to ATC STAFF / EQUIPMENT ENROUTE
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
ATC equipment	**T**	D		89	RESTRICTIONS AT AIRPORT OF DEPARTURE

Correlation between IATA Delay Codes and the NM Regulation Reasons					
NM				**IATA**	
Regulation cause	**CODE**	**Regulation Location**	***GUIDELINES***	**Code**	**Delay Cause**
		E	Reduction of expected or declared capacity due to the non-availability or degradation of equipment used to provide an ATC service.	82	ATFM due to ATC STAFF / EQUIPMENT ENROUTE
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
Accident / incident	**A**	D	Reduction of expected ATC capacity due to an aircraft accident / incident.	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
Aerodrome capacity	**G**	D	Reduction in declared or expected capacity due to the degradation or non-availability of infrastructure at an airport. e.g. Work in Progress, shortage of aircraft stands etc. Or when demand exceeds expected aerodrome capacity.	89	RESTRICTIONS AT AIRPORT OF DEPARTURE’
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
Aerodrome Services	**E**	D	Reduced capacity due to the degradation or non-availability of support equipment at an airport e.g. Fire Service, De-icing / snow removal equipment or other ground handling equipment.	99	OTHER
		A		99	OTHER
Industrial action NON-ATC	**N**	D	A reduction in expected / planned capacity due to industrial action by non ATC personnel.	98	INDUSTRIAL ACTION OUTSIDE OWN AIRLINE
		A		98	INDUSTRIAL ACTION OUTSIDE OWN AIRLINE
	M	D		89	RESTRICTIONS AT AIRPORT OF DEPARTURE

Correlation between IATA Delay Codes and the NM Regulation Reasons					
NM				**IATA**	
Regulation cause	**CODE**	**Regulation Location**	***GUIDELINES***	**Code**	**Delay Cause**
Airspace management		E	Reduction in declared or expected capacity following changes in airspace / route availability due to small scale military activity	82	ATFM due to ATC STAFF/EQUIPMENT ENROUTE
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
Special event	**P**	D	Reduction in planned, declared or expected capacity or when demand exceeds the above capacities as a result of a major sporting, governmental or social event. It may also be used for ATM system upgrades and transitions. Large multinational military exercises may also use this reason. This category should only be used with prior approval during the planning process.	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		82	ATFM due to ATC STAFF / EQUIPMENT ENROUTE
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
Weather	**W**	D	Reduction in expected capacity due to any weather phenomena. This includes where weather impacts airport infrastructure capacity, but where aerodrome services are operating as planned / expected.	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		81	ATFM due to ATC ENROUTE DEMAND / CAPACITY
		A		84	ATFM due to WEATHER AT DESTINATION
Environmental issue	**V**	D	Reduction in any capacity or when demand exceeds any capacity due to agreed local noise, runway usage or similar procedures. This category should only be used with prior agreement in the planning process.	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		81	ATFM due to ATC ENROUTE DEMAND / CAPACITY
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
Other	**O**	D		89	RESTRICTIONS AT AIRPORT OF DEPARTURE

Correlation between IATA Delay Codes and the NM Regulation Reasons					
NM				IATA	
Regulation cause	CODE	Regulation Location	*GUIDELINES*	Code	Delay Cause
		E	This should only be used in exceptional circumstances when no other category is sufficient. An explanatory ANM remark MUST be given to allow post ops analysis.	81	ATFM due to ATC ENROUTE DEMAND / CAPACITY
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT

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E. ATFCM RTF PHRASEOLOGY

	CIRCUMSTANCES	PHRASEOLOGY
SLOT	Calculated Take-Off Time (**CTOT**) delivery resulting from a Slot Allocation Message (SAM). (The CTOT shall be communicated to the pilot on first contact with ATC).	SLOT (*time*)
	Change to CTOT [resulting from a Slot Revision Message (**SRM**)].	REVISED SLOT (*time)*
	CTOT cancellation (resulting from a Slot Cancellation Message **(SLC**)).	SLOT CANCELLED, REPORT READY
SUSPENSION	Flight suspension until further notice (resulting from an FLS).	FLIGHT SUSPENDED UNTIL FURTHER NOTICE, DUE (*reason*)
	Flight de-suspension (resulting from a De-Suspension Message (**DES**)).	SUSPENSION CANCELLED, REPORT READY
DENIAL	Denying start-up when requested too late to comply with the given CTOT.	UNABLE TO APPROVE START-UP CLEARANCE DUE SLOT EXPIRED, REQUEST A NEW SLOT
	Denying start-up when requested too early to comply with the given CTOT.	UNABLE TO APPROVE START-UP CLEARANCE DUE SLOT (time), REQUEST START-UP AT (time)

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F. SUMMARY OF CASA PARAMETERS

PARAMETER	BASIC DEFINITION	VALUE
Filing Time	The minimum time before EOBT for flight plan filing when a flight may be subject to ATFCM.	At least 3 hours before EOBT
Slot Issue Time (SIT1)	The time at which the NM issues the SAM to the AO and ATC at the aerodrome of departure.	2 hours before EOBT
Slot Window	A slot is issued as a Calculated Take-Off Time (**CTOT**). The CTOT is defined as a time when the aircraft must take-off. The slot tolerance (-5' to +10') is available only to ATC and only to organise the departure sequence. If there is no departure sequence, the CTOT shall be strictly adhered to.	-5' to +10' around CTOT
Minimum Revision for SIP (min REV)	This parameter is the minimum improvement that can trigger a Slot Improvement Proposal (**SIP**).	15 minutes
SIP Time-Out	A SIP expires if no response is received from an AO by the respond by (**RESPBY**) time included in the message.	15 minutes after the SIP issue time
Minimum Revision for Direct Improvement	This parameter is the minimum improvement that will trigger a revision to the previous slot of a flight in RFI or REA situation.	5 minutes
Ready (REA) MINLINEUP	The —MINLINEUP is the minimum time needed for that flight, which has declared itself ready to depart, to get from its position to take-off.	**0** minutes (minimum) **90** minutes (maximum)
RRP Time-Out	A RRP expires if no response is received from an AO by the 'Respond by Time' (**RESPBY**) included in the message.	30 minutes
RVR response time	If a flight with a CTOT becomes suspended due to an RVR requirement, the current CTOT will be booked for the RVR response time parameter. The RVR capability must be confirmed (with an FCM) within the time-out period.	20 minutes

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G. ANI AND AIRPORT CDM (A-CDM) SUMMARY

Message summary for ANI airports

Message	P-DPI	E-DPI	T-DPI-t	T-DPI-s	A-DPI	C-DPI
Timing from OBT	From FPL in ETFMS until EOBT – 3 hrs (first E-DPI)	From EOBT - 3 hrs	From EOBT - 2 hrs	From TOBT – 40 min	At AOBT	At any time after FPL in ETFMS
Received Data (some of these fields are optional)	TT SID turnaroundTTOT earliestTTOT SOBT	TT SID turnaroundTTOT earliestTTOT TOBT SOBT	TT SID turnaroundTTOT earliestTTOT consolidatedTTOT TOBT TSAT	TT SID turnaroundTTOT earliestTTOT consolidatedTTOT TOBT TSAT	TT SID TTOT AOBT	
Derived Data	CDM status = p	CDM status = e	CDM status = t	CDM status = s	CDM status = a	CDM status = e
Effect on ETFMS →						
FTFM	Updated with turnaroundTTOT	Same effect	Same effect	Same effect	No impact	Recomputed based on EOBT and REA
RTFM	Updated in accordance with Network assessment outcome	Same effect	Same effect	Same effect	No impact	Deleted
CTFM	**For Non Regulated Flight** When earliestTTOT inside or after DTW ⇨ CTFM created based on earliestTTOT	**For Non Regulated Flight** Same effect	**For Non Regulated Flight** Same effect	**For Non Regulated Flight** Same effect	**For Non Regulated Flight** ⇨ CTFM created based on TTOT	Deleted
	For Regulated Flight earliestTTOT = No slot before When earliestTTOT inside STW ⇨ CTFM created based on earliestTTOT	**For Regulated Flight** Same effect	**For Regulated Flight** Same effect **+** CTFM updated based on consolidatedTTOT	**For Regulated Flight** Same effect as for T-DPI-t **+** When earliestTTOT before or inside STW	**For Non Regulated Flight** ⇨ CTFM created based on TTOT ⇨ **For Regulated Flight** CTOT frozen	

			consolidatedTTOT ≠ No slot before	⇨ Flight gets REA status (if clock time > TOBT -5)	When TTOT before STW ⇨ CTFM created based on STW_LowerBound When TTOT inside or after STW CTFM created based on TTOT	
Network assessment triggers	When FTFM updated When earliestTTOT outside DTW **Before SIT1** When earliestTTOT after CTOT	Same	When FTFM updated When earliestTTOT outside DTW **After SIT1** When earliestTTOT after STW	Same	Never	Never
Other					tac activated	Flight suspended (FLS)

Outcome of Network assessment

When Flight non-regulated / de-suspended:

⇨ CTFM re / computed or removed

⇨ SLC / DES sent appropriately

When Flight assessed regulated:

⇨ SAM / SRM sent only after SIT1

⇨ CTOT improvement possible

When Flight assessed suspended:

⇨ FLS sent

Message summary for A-CDM and for Advanced ATC TWR Airports

Message	E-DPI	T-DPI-t	T-DPI-s	A-DPI	C-DPI
Timing from OBT	From EOBT - 3 hrs	From EOBT - 2 hrs	From TOBT – 40 min	At AOBT	At any time (after FPL in ETFMS)
Received from	A-CDM or Adv ATC TWR	A-CDM	A-CDM	A-CDM or Adv ATC TWR	A-CDM or Adv ATC TWR
Received Data (some of	TT SID	TT SID	TT SID	TT SID	

these fields are optional)	TTOT SOBT	TTOT TOBT TSAT	TTOT TOBT TSAT	TTOT AOBT	
Derived Data	CDM status = e	CDM status = t	CDM status = s	CDM status = a	CDM status = e
Effect on ETFMS →					
FTFM	Updated with TTOT	Updated with TTOT	**For Regulated Flight** Updated when TTOT before ETOT ⇨ Same processing as REA	No impact	Recomputed
RTFM	Updated in accordance with Network assessment outcome	Same effect	Same effect	No impact	Deleted
CTFM	No impact	No impact	**For Non regulated Flight** ⇨ CTFM is always created **For Regulated Flight** When TTOT after ETOT and before STW ⇨ CTFM deleted ⇨ TTOT = No slot before ⇨ CTOT improvement possible When TTOT inside STW ⇨ CTFM created ⇨ No CTOT improvement	**For Non Regulated Flight** ⇨ CTFM created based on TTOT **For Regulated Flight** CTOT frozen When TTOT before STW ⇨ CTFM created based on STW_LowerBound When TTOT inside or after STW ⇨ CTFM created based on TTOT	Deleted
Network assessment triggers	When FTFM updated	When FTFM updated	**For Non regulated Flight** When TTOT outside DTW **For regulated Flight** When TTOT after STW	Never	Never
Other				tac activated	Flight suspended (FLS)

Outcome of Network assessment

When Flight non-regulated / de-suspended:

⇨ CTFM re / computed or removed

⇨ SLC / DES sent appropriately

When Flight assessed regulated:

⇨ SAM / SRM sent only after SIT1

⇨ CTOT improvement possible

When Flight assessed suspended:

⇨ FLS sent

For further details, refer to the DPI Implementation Guide and the Flight Progress Messages document.

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Abbreviations

Abbreviations and acronyms used in this document are available in the EUROCONTROL Air Navigation Inter-site Acronym List (AIRIAL) which may be found online:

http://www.eurocontrol.int/airial/definitionListInit.do?skipLogon=true&glossaryUid=AIRIAL.

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