

## Brief Description Airport CDM Procedure



# Stuttgart Airport

Version 1.6



Co-financed by the European Union  
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## 1. General

### 1.1 Purpose of the Document

This document describes the Airport Collaborative Decision Making (CDM) procedure at Stuttgart Airport and is to be understood and used as a basis for the different partners, such as ground handling agents and Airline OCCs.

Together with the publications about Airport CDM in the Aeronautical Information Publication Germany (AIP EDDS AD 2.20) and the Aerodrome Manual, this document is to ensure that Airport CDM at Stuttgart Airport is handled in an optimal way in the interest of all partners.

This version comes into effect on 01 October 2022 and replaces all preceding versions.

### 1.2 Definition and Partners

Airport CDM is an operational overall process (concept/procedure) supporting an optimized turn-round process at Stuttgart Airport. It covers the period between the estimated off-block time (EOBT) -3hrs and take-off and is a coherent process from flight planning (ATC flight plan) to landing and the subsequent turn-round process on the ground before the next take-off.



Airport CDM at Stuttgart Airport is based on European Airport CDM as defined in EUROCONTROL's *Airport CDM Implementation Manual*, the common specification ("Community Specification") for A-CDM and the "German Harmonisation Initiative Airport CDM".

### 1.3 Objectives of Airport CDM

Airport CDM aims at optimally utilising the available capacities and operational resources at Stuttgart Airport by increasing the efficiency of the individual steps of the turnaround process.

Airports can be integrated into the European ATM network through the exchange of reliable estimated arrival and departure times between Airport CDM and the Network Manager Operations Centre (NMOC).

Airport CDM optimises operational cooperation between the following partners:

- Airport Operator
- Airlines
- Handling Agents
- Ground Handling Agents
- Air Navigation Service Provider
- European Air Traffic Flow Management (NMOC)

### 1.4 Coordination with NMOC

Due to a fully automated data exchange with the Network Manager Operations Centre (NMOC), landing and take-off times can be forecasted in a timely and reliable manner and/or precisely calculated take-off times (CTOT) can be given, based on local target take-off times.

The following messages are used:

- Flight Update Message, FUM
- Early Departure Planning Information message, E-DPI
- Target Departure Planning Information message, T-DPI target
- Target Departure Planning Information message, T-DPI sequenced
- ATC Departure Planning Information message, A-DPI
- Cancel Departure Planning Information message, C-DPI

The basic procedures for cooperation between the airlines and/or DFS and NMOC remain the same.

Furthermore, all estimated departure times are automatically transmitted to NMOC during the turn-round process. In the case of delays caused by the airlines, the common CTOT allocation mechanisms apply. These allocation mechanisms are confirmed and/or refined via DPI messages. NMOC determines and allocates the CTOT based on these estimated departure times (DPI).

### 1.5 Main Characteristics of the Procedure

The main characteristics of Airport CDM are:

- **Transparency of the process**  
Common Situational Awareness is guaranteed for all partners. The right information should be available to the right units at the right time.
- **Airport CDM is a common operational process**  
It commences upon reception of the ATC Flight Plan, continues through landing of the inbound flight, the entire turnaround process and terminates at take-off.
- **Combination of Day of Operations and schedule planning**  
ATC Flight Plan, Airport Slot and airport flight data are combined, and a common dataset is created.

- **Feasibility of the Turnaround Process**

Every incoming aircraft is linked to its subsequent departure. Based on this link, the departure's target times can be checked for feasibility early and adjusted if necessary.

- **Usage of Target Off-Block Time as the target time for "Aircraft Ready"**

The TOBT is the essential contribution of the airline to the Airport CDM process. It communicates when ground handling of an aircraft is expected to be completed.

TOBT= Airline Commitment

- **Usage of Variable Taxi Times**

All Target Times are calculated taking into account a flight's parking position, runway-in-use, and de-icing duration in case of remote de-icing.

EXOT = Estimated Taxi-Out Time

- **Introduction of the Target Start-Up Approval Time**

Newly introduced with Airport CDM, the TSAT indicates when a flight can expect start-up approval. It is based up-on TOBT, EXOT, CTOT (if regulated) and the actual operational capacity. Start-up and pushback approval will always be issued in accordance with TOBT and TSAT.

TSAT = Airport CDM Commitment

- **Connecting the Airport to the Network**

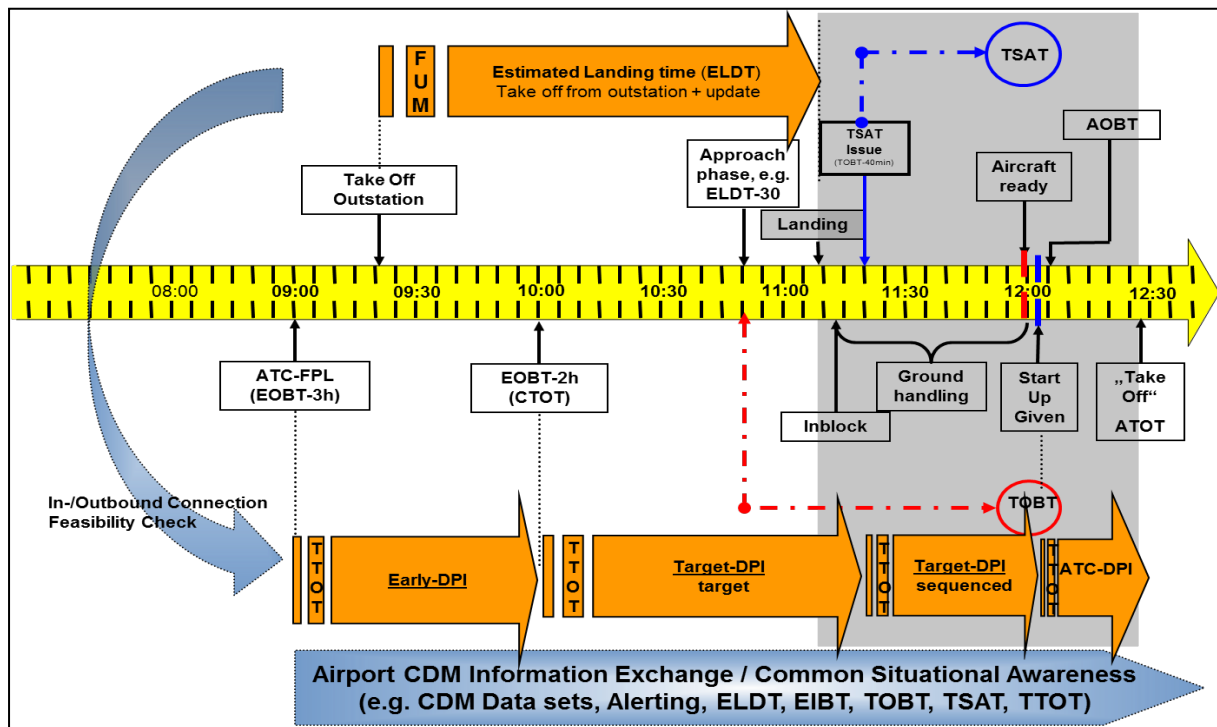
An automated data exchange with European Air Traffic Flow Management (NMOC) about the local and network situation enables high-quality forecasts for inbound and outbound traffic.

## 2. Procedure

### 2.1 Overview

The chart below depicts the scope of the Airport CDM procedure at Stuttgart Airport from the time of ATC flight plan activation (EOBT -3h) till take-off.

Orange arrows depict the data transfer with the NMOC, the blue arrow shows the exchange of information via interfaces, dialogue systems, e-mail etc. with the relevant aircraft operator and/or handling agent regarding potential adjustments which may become necessary.



The main aspects of the procedure are described in the following chapters and structured as follows:

- Correlation of Flight Information Chapter 2.2
- Target Off-Block Time Chapter 2.3
- Target Start-Up Approval Time Chapter 2.4
- Aircraft De-Icing Chapter 2.5
- Start-Up and Pushback Chapter 2.6

### 2.2 Correlation of Flight Information

The Airport CDM procedure begins with the transmission of the ATC flight plan to the Airport CDM Portal (airport operator database).

The ATC flight plan will be correlated with the flight data submitted to the airport as well as with the airport slot (SOBT) included therein. In particular, the focus is on:

- linking inbound and outbound flights
- comparing the airport slot (SOBT) for the outbound flight with the EOBT of the ATC flight plan



This comparison is usually made at EOBT -3hrs. If the ATC flight plan is filed at a later stage, the commencement of the Airport CDM procedure is postponed to this time.

### 2.2.1 Airport Slot Discrepancy

If the SOBT deviates from the Estimated Off-Block Time (EOBT), the contact person of the airline is advised by A-CDM alerting to adjust either time accordingly.

### 2.2.2 Airport Slot Missing

If no airport slot is available at the time of the expected conduct of the flight, the flight cannot be sequenced and thus neither processed nor conducted.

### 2.2.3 Points of Contact

The Airport Coordination and Data Center (ACDC) is the operational unit that oversees the activities concerning the correlation of flight information.

### 2.2.4 Early DPI – Data Exchange with NMOC

An early departure planning information message (E-DPI) is generated and transmitted to NMOC for flight plans validated in accordance with the sections mentioned above (airport slot available).

Flights with an E-DPI are marked in NMOC systems as flights from a CDM airport and are then considered accordingly during further processing (e.g. optimised CTOT allocation in accordance with the local target times).

Example:

-TITLE DPI  
-DPISTATUS EARLY  
-ARCID EWG8NP  
-ADEP EDDS  
-ADES LEPA  
-EOBT 1125  
-EOBD 201221  
-TAXITIME 0011  
-TTOT 1136  
-SOBT 1125  
-SID ROTWE5B  
-ARCTYP A320  
-REG DAEWM  
-IFPLID AA12345678

### 2.2.5 Target DPI – Data Exchange with NMOC

As a rule, a T-DPI with the status "Target" is generated two hours before the EOBT for all flights for which an E-DPI has been generated. The T-DPI is transmitted to NMOC in the same way as the E-DPI.

The T-DPI is used to transmit a Target Take-Off Time (TTOT) to NMOC. The T-DPI opens a so-called "slot adjustment window" within which the CTOT is adjusted to the relevant reported TTOT in the best possible manner.

If the TTOT is changed by five minutes or more, if taxi times are adjusted by three minutes or more or if the SID, aircraft type or registration is changed, a new T-DPI is generated and transmitted to NMOC.

Example:

-TITLE DPI  
 -DPISTATUS TARGET  
 -ARCID EWG8NP  
 -ADEP EDDS  
 -ADES LEPA  
 -EOBT 1125  
 -EOBD 201221  
 -TOBT 1125  
 -TAXITIME 0011  
 -TTOT 1136  
 -SID ROTWE5B  
 -ARCTYP A320  
 -REG DAEWM  
 -IFPLID AA12345678

**2.2.6 Flight Update Message (FUM) – Data Exchange with NMOC**

Flight update messages (FUM) are received for flights to Stuttgart Airport (inbound). The following operational events trigger the transmission of an FUM:

- Estimated Landing Time (ELDT) minus 3 hours
- Modification of ELDT by 5 minutes or more
- Changes to ETFMS status, e.g. suspension of a flight.

The FUM provides an ELDT in advance which allows the system to compare the inbound with the outbound flight plan, i.e. the EIBT with the EOBT.

If the calculated EIBT plus the Minimum Turnaround Time (MTTT) is later than the EOBT of the linked outbound flight plan, the contact person of the airline is notified accordingly. It is expected that the relevant times (Delay Message DLA) or the outbound flight plan (Change Message CHG or Flight Plan Cancellation CNL and new flight plan FPL) will be adjusted in a timely manner.

Furthermore, the ELDT of the FUM has strong effects on:

- Optimum gate and position planning as well as further resources planning
- Automatic TOBT generation
- Further use of resources (e.g. ground handling).

**2.2.7 Airport CDM Alerts**

Potential Airport CDM alerts concerning the combination of different flight information described in chapter 3.3 include:

CDM01	No Airport Slot Available or Slot Already Correlated
CDM02	SOBT vs. EOBT Discrepancy
CDM03	Aircraft Type Discrepancy
CDM04	Aircraft Registration Discrepancy
CDM05	First Destination Discrepancy

CDM06	<i>not used</i>
CDM07	EIBT + MTTT Discrepancy with EOBT
CDM07a	EIBT + MTTT Discrepancy with TOBT
CDM08	EOBT Compliance Alert
CDM09	Boarding Not Started
CDM10	TOBT Rejected or Deleted
CDM11	Flight Not Compliant with TOBT/TSAT
CDM12	<i>not used</i>
CDM13	No ATC Flight Plan Available
CDM14	<i>not used</i>
CDM17	TTOT Within Night Flying Restriction
CDM41	De-Icing Confirmation Needed
CDM42	De-Icing Not Confirmed

### 2.3 Target Off-Block Time

The TOBT is a point in time to be monitored and confirmed by the airline/handling agent at which the ground handling process is expected to be concluded, all aircraft doors closed, all passenger boarding bridges removed from the aircraft and thus start-up approval and push-back/taxi clearance can be received.

All ground-handling processes, except for pushback and remote de-icing, are based on TOBT. The TOBT is used as the optimum time for coordination.

**TOBT = Prediction of „Aircraft Ready“**

#### 2.3.1 Automatically Generated TOBT

Generally, an automatic TOBT will be generated for each outbound flight at TMO (Twelve minutes out) of the correlated inbound flight unless a TOBT has already been entered manually.

The earliest time for the publication of the automatically generated TOBT is 90 minutes before EOBT.

The Minimum Turnaround Time (MTTT) is applied when the TOBT is generated. The MTTT is a time which is stored in the airport database and depends on the airline, aircraft type and sort of flight.

Important dependencies for the automatic initial TOBT generation:

- if  $EIBT + MTTT \leq EOBT + 5'$ : TOBT = EOBT
- if  $EIBT + MTTT > EOBT + 5'$ : TOBT = EIBT + MTTT

For flights which are not subject to a direct turnaround and which already park at Stuttgart Airport, the TOBT will be generated automatically 90 minutes before EOBT.

#### 2.3.2 Person Responsible for TOBT

Airlines need to ensure:

- the nomination of one unit responsible for the TOBT,
- the communication with the relevant airline OCC (ATC flight plan/person responsible for the EOBT) and
- the coordination of internal working procedures.

The unit responsible for TOBT (generally the handling agent), the aircraft operator (for flights without handling agent) or the pilot-in-command (for general aviation flights without handling agent) is responsible for the correctness of and the adherence to the TOBT.

A wrong TOBT leads to disadvantages for further sequencing and/or CTOT allocation of regulated flights. Therefore, TOBT shall be adjusted as early as possible.

### 2.3.3 TOBT Input and Adjustment

Regarding entry and adjustment of TOBT, the following needs to be considered:

- The earliest possible input of a TOBT (before automatic generation) is EOBT-180 min.
- A manually set TOBT will never be overwritten by an automatically generated TOBT
- TOBT can be adjusted as often as necessary until TSAT has been issued
- After TSAT has been issued, TOBT can only be corrected three times until it must be deleted
- The value of the TOBT entered must differ from its previous value by at least 3 minutes
- The entered TOBT must be at least 5 minutes later than the time of entry
- The entered TOBT must not be 10 minutes earlier than the EOBT of the ATC flight plan.

As the TOBT is also the basis for further airport processes, adjustments of the TOBT (also if the process is completed more than five minutes earlier) are to be entered by the person responsible for the TOBT.

### 2.3.4 TOBT/EOBT Discrepancy

If the TOBT deviates from the EOBT of the ATC flight plan by more than 15 minutes, the aircraft operator shall initiate an additional delay message (DLA, CHG). This new EOBT should be based on the last TOBT.

### 2.3.5 TOBT Deletion

The TOBT shall be deleted in the following cases:

- the TOBT is unknown (e.g. technical problems with the aircraft)
- the permitted number of TOBT inputs (three times) after generation of the TSAT has been exceeded

If the TOBT is deleted, the TSAT is automatically deleted as well.

As soon as a new TOBT is known and the process is meant to continue, the person responsible for the TOBT shall enter a new TOBT.

### 2.3.6 Cancel-DPI – Data Exchange with NMOC

If the TOBT for a flight is deleted by the person responsible for TOBT, then a C-DPI message is transmitted after 2 minutes to NMOC. This will trigger a Flight Suspension Message (FLS) by NMOC. If the flight intends to operate, either a new EOBT needs to be provided via a DLA or CHG message, or a new DPI (triggered by a new TOBT input) is sent for the flight.

Example:

```
-TITLE DPI
-DPISTATUS CNL
-ARCID EWG8NP
-ADEP EDDS
-ADES LEPA
-EOBT 1125
-EOBD 201221
-REASON TOBTUNKOWNOREXPIRED
-IFPLID AA12345678
```

**2.3.7 TOBT in Case of Aircraft Change**

If the aircraft is changed, a change message (CHG - type/registration) shall be sent. TOBT remains valid and is allocated to the new aircraft.

**2.3.8 TOBT Reporting Channels**

TOBT is reported and/or adjusted in one of the following ways:

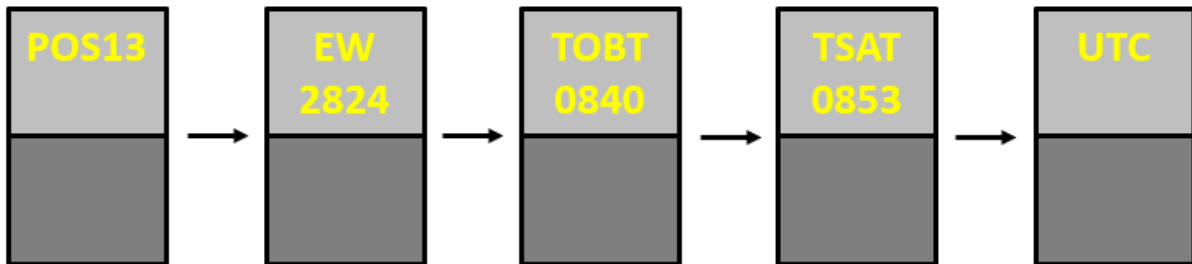
- Input by the person responsible for TOBT into the web-based Common Situational Awareness Tool / CSA-Tool "Web-CaeSAr"
- In exceptional cases: Input by the FSG Airport Coordination and Data Center upon request by the person responsible for TOBT or the airline into the CSA-Tool "CasSAr"

For General Aviation flights:

- Input by the person responsible for TOBT into the web-based Common Situational Awareness Tool / CSA-Tool "Web-CaeSAr"
- In exceptional cases: Input by the FSG Airport Coordination and Data Center upon request by the person responsible for TOBT, the airline or the pilot in command into the CSA-Tool "CasSAr"
- In exceptional cases: Input by the DFS Tower Stuttgart upon request by the pilot in command into the CSA-Tool "CasSAr" or the Tower Flight Data Processing System (TFDPS)

**2.3.9 TOBT Display on Parking Stands with Electronic Display**

On parking stands equipped with advanced visual docking guidance systems, the TOBT will be shown in UTC. Seven minutes prior TOBT the TSAT will additionally be displayed. After reaching TOBT the TSAT will be shown only.



**2.3.10 Potential Airport CDM Alerts**

Potential Airport CDM alerts concerning the TOBT are:

CDM08	EOBT Compliance Alert
CDM09	Boarding Not Started
CDM10	TOBT Rejected or Deleted
CDM11	Flight Not Compliant with TOBT/TSAT

Details on the various Airport CDM Alerts are given in chapter 3.3.

## 2.4 Target Start-Up Approval Time (TSAT)

The TSAT is the point in time calculated by the Airport CDM sequence planning system at which the start-up approval can be expected.

The pre-departure sequence is based on all flights with a calculated TSAT.

### 2.4.1 Publication

TSAT is published 40 minutes prior to the current TOBT.

After TSAT has been published, the TOBT can only be corrected another three times to ensure a stable sequence and CTOT allocation. As a rule, the TSAT remains in effect if the TOBT is changed, unless the new TOBT is later than the calculated TSAT.

Calculation of TSAT is based on the following factors:

- TOBT
- CTOT (for regulated flights)
- Operational capacity at the airport
- Minimum Departure Interval (MDI)
- Variable Taxi Time
- Parking position / area
- Runway-in-use
- Aircraft de-icing (only remote-de-icing)

### 2.4.2 TSAT Reporting Channels

TSAT can be received via the same channels as TOBT:

- CSA-Tool "Web-CaeSAr"
- Display of Advanced Visual Docking Guidance System
- Ramp Agent or Handling Agent
- Transmission via interface to systems of the airline
- In exceptional cases: DFS Tower Stuttgart

For General Aviation Flights:

- CSA-Tool "Web-CaeSAr"
- Ramp Agent or Handling Agent
- In exceptional cases: DFS Tower Stuttgart

The person responsible for the TOBT generally has to report TSAT or changes of the TSAT to the Flight Crew/Pilot.

### 2.4.3 Target-DPI „Sequenced“ – Data Exchange with NMOC

When TSAT is generated, a T-DPI message with the status "sequenced" is transmitted to NMOC for unregulated flights (flights without a CTOT).

Flights for which a T-DPI message with the status "sequenced" has been transmitted have a special status within the NMOC system.

The status "Target" (section 2.2.5) remains in effect for regulated flights. However, a T-DPI "Sequenced" can be manually generated by the control tower later; otherwise the T-DPI "Sequenced" for regulated flights is issued 10 minutes prior TSAT.

The transmission of a Ready Message (REA) is no longer required for regulated flights where a T-DPI "Sequenced" has been sent (an additional T-DPI can be generated manually if requested).

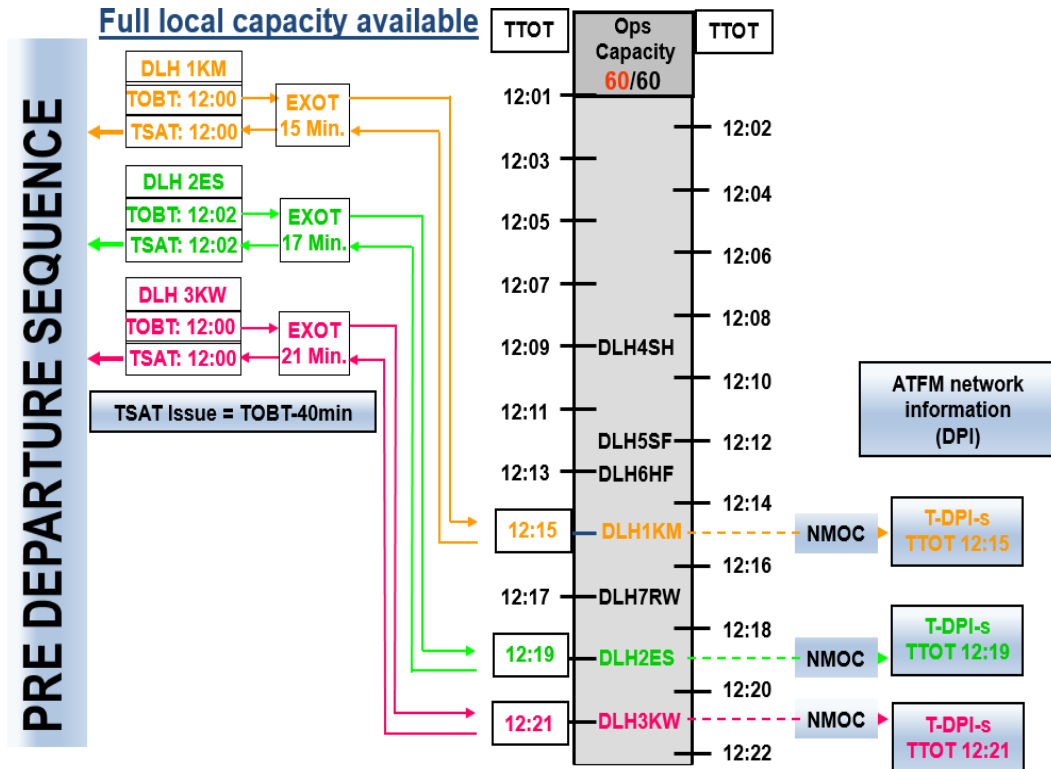
The CTOT is adjusted to the local TTOT as much as possible.

If the TTOT is changed by five minutes or more, if taxi times are adjusted by three minutes or more, or if the SID, aircraft type or registration is changed, a new T-DPI is generated and transmitted to NMOC.

Example:

- TITLE DPI
- DPISTATUS SEQ
- ARCID EWG8NP
- ADEP EDDS
- ADES LEPA
- EOBT 1125
- EOBD 201221
- TOBT 1125
- TSAT 1125
- TAXITIME 0011
- TTOT 1136
- SID ROTWE5B
- ARCTYP A320
- REG DAEWM
- IFPLID AA12345678

2.4.4 Example of TSAT and DPI Generation



#### 2.4.5 Changes Within the Sequence

In individual cases and if requested through TWR, flights with different TSATs within the same sequence and TOBT responsibility can be switched. TWR will switch the predicted take-off times of the flights. Regulated flights cannot be switched.

#### 2.4.6 TOBT and TSAT Management in High Delay Situations

In situations where CTOTs or local capacity constraints lead to a TSAT that is far from TOBT, the aircraft operator may decide to postpone boarding. In these cases, TOBT needs to be adjusted accordingly. Ideally, the new TOBT value is 10 minutes before the current TSAT.

#### 2.4.7 Potential Airport CDM Alerts

Potential Airport CDM alerts concerning TSAT include:

CDM08	EOBT Compliance Alert
CDM10	TOBT Rejected or Deleted
CDM11	Flight Not Compliant with TOBT/TSAT
CDM17	TTOT Within Night Flying Restriction

Details on the various Airport CDM Alerts are given in chapter 3.3.



## 2.5 Aircraft De-Icing

The de-icing request shall be reported to the ramp agent or the person responsible for TOBT preferably earlier than 40 minutes before TOBT however latest at 20 minutes before TOBT and has to be entered into the web-based CSA-Tool by the person responsible for TOBT.

Aircraft de-icing at Stuttgart Airport is performed explicitly on four dedicated de-icing pads.

Aircraft de-icing times must not be considered when determining TOBT, they are taken into account when calculating TSAT, based on de-icing request and approximate duration. Therefore, de-icing should be requested as early as possible.

### 2.5.1 On-Stand De-Icing

On-stand de-icing is not performed at Stuttgart Airport.

### 2.5.2 Remote De-Icing

Remote de-icing at Stuttgart Airport is carried out on four defined de-icing pads designated as DP1 – DP4.

In case of de-icing the DPI message to the NMOC will contain the additional status "DEICING"

Example:

```
-TITLE DPI
-DPISTATUS SEQ
-ARCID EWG8NP
-ADEP EDDS
-ADES LEPA
-EOBT 1125
-EOBD 201221
-TOBT 1125
-TSAT 1125
-TAXITIME 0029
-TTOT 1154
-SID ROTWE5B
-ARCTYP A320
-REG DAEWM
-DEPSTATUS DEICING
-IFPLID AA12345678
```

### 2.5.3 Potential Airport CDM Alerts

Potential Airport CDM alerts concerning de-icing do not exist.

Details on the various Airport CDM Alerts are given in chapter 3.3.

## 2.6 Start-Up and Pushback

### 2.6.1 Start-Up Procedure via radio

Start-up (ASAT) and pushback (AOBT) clearances are issued exclusively based on TOBT and TSAT. The following rules apply:

- The aircraft shall be ready for start-up and/or remote de-icing at TOBT.
- Generally, the timeframe for start-up approval and en-route clearance is TSAT  $\pm$  5 minutes.
  - The pilot shall request start-up approval and en-route clearance within TSAT  $\pm$  5 minutes.
  - Clearance Delivery will issue start-up approval and en-route clearance depending on TSAT and the current traffic situation.
- Pushback/taxi clearance shall be requested no later than five minutes after the start-up approval has been issued.

In case of delays, Clearance Delivery shall be informed. Otherwise TOBT will be deleted and has to be re-entered.

### 2.6.2 Start-Up Procedure via Datalink Departure Clearance (DCL)

The published procedures and time parameters published in AIP AD 2 EDDS continue to apply to datalink departure clearances (DCL).

TSAT is transmitted via CLD (Departure Clearance Uplink Message – issuance of start-up approval and en-route clearance by Clearance Delivery).

„Start Up approved according TSAT“

Pushback/taxi clearance shall be requested within TSAT  $\pm$  5 minutes (TSAT window).

If start-up is requested too early before TSAT or the operational situation does not allow it, Clearance Delivery will issue the en-route clearance only. Start-up approval then needs to be requested separately via radio within the TSAT window.

#### Examples:

*DCL including start-up approval and enroute clearance:*

```

QU QXSXMXS
. STRDFYA 120507
CLD
FI LH65M/AN D-AEWU
- / STRDFYA.DC1/CLD 0501 210112 EDDS PDC 650
EWG65M CLRD TO EDDH OFF 25 VIA OKIBA4B
SQUAWK 5004 ADT MDI NEXT FREQ 118.605 ATIS H
STARTUP APPROVED ACCORDING TSATBF3E
149
  
```

*DCL including enroute clearance only:*

```

QU QXSXMXS
. STRDFYA 120525
CLD
FI KL042A/AN PH-EXS
- / STRDFYA.DC1/CLD 0525 210112 EDDS PDC 651
KLM42A CLRD TO EHAM OFF 25 VIA OKIBA4B
SQUAWK 4126 ADT MDI NEXT FREQ 121.915 ATIS I
REPORT READY ON 121.915 FOR STARTUP ACCORDING TSAT1F4D
152
  
```

### 2.6.3 ATC-DPI – Data Exchange with NMOC

At Actual Off-Block Time (AOBT), an A-DPI will be sent to NMOC. The Slot Adjustment Window is closed and CTOT can no longer be changed automatically by NMOC unless exceptional conditions apply.

Example:

-TITLE DPI  
-DPISTATUS ATC  
-ARCID EWG8NP  
-ADEP EDDS  
-ADES LEPA  
-EOBT 1125  
-EOBD 201221  
-TAXITIME 0011  
-TTOT 1136  
-SID ROTWE5B  
-ARCTYP A320  
-REG DAEWM  
-IFPLID AA12345678

### 3. Common Situation Awareness / Information Sharing

Transparency for all partners involved is the basis for conducting the Airport CDM process. This Common Situational Awareness is ensured through IT interfaces, dialogue systems, alert messages, data exchange with NMOC, telephone coordination, etc.

#### 3.1 CSA Tool

The CSA Tool "Web-CaeSar" serves as the Common Situational Awareness Tool (CSA Tool) at Stuttgart Airport. There, all relevant information is displayed and maintained in a user-specific manner. Inputs (e.g. TOBT) are made via CSA Tool and detailed information on the flights displayed can be obtained. CSA Tool access can be requested from Flughafen Stuttgart GmbH by handling agents and airlines.

CDM alert messages can also be displayed and viewed using the CSA Tool.

#### 3.2 NMOC Display System – CHMI

Information on the Airport CDM data exchange with the NMOC can be obtained via the available NMOC reporting channels (CHMI) and its various display options.

Access to NMOC CHMI can be requested online from Eurocontrol:

[www.eurocontrol.int/network-operations](http://www.eurocontrol.int/network-operations)

#### 3.2.1 NMOC CHMI Flight List

The Flight List view contains information on:

- TTOT
- transmitted DPI type
- IFPS inconsistencies
- EOBT inconsistencies
- „Ready“ status

The screenshot shows the 'AD EDDL Flight List at 07:12:21 / ATFCM' window. It features a filter panel on the left with options for 'TFC Type' (Traffic Load), 'Where' (Aerodrome), and 'Compare' (Regulated Demand). The main area displays a large table of flight data with columns for flight ID, STA, ARCID, ATYP, ADEP, ADES, D, RM, T, ARF, TOBT, LV, U, E/CTOT, X, F, S, CL, AT, TOBT, TSAAT, IT, A/TTOT, Delay, E/C/ATA, R, Opp, M, MSG, RESUL+, O, IT, SPL, TO, CCAMS. The table lists numerous flights with their respective details, such as flight numbers (e.g., 12:21A, 12:24A), routes (e.g., IO, LWBH), and various time and status indicators.

### 3.2.2 NMOC CHMI Flight Data

When selecting an individual flight's "Flight Data" (directly or from the flight list), details about the Airport CDM data exchange are displayed.

AC AFR15MR Flight Data at 07-12:26 / ATFCM

IOBD: Thu 07 Sep 2017 IOBT: 12:40

ARCID: AFR15MR ADEP: EDDL ADES: LFPG

Details | Point Profile | Airspace Profile | Restriction Profile

---

AO <b>AFR</b>	Aircraft Type <b>E170</b>	Registration Mark	CCAMS Code
OPR AO <b>HOP</b>	Initial RFL <b>240</b>	RVR <b>200</b>	CEQPT <b>DE2E3FGIORSWY</b>

Last MSG From

---

<b>Time</b>	<b>Status</b>
Last EOBT <b>07-12:40</b>	Flight Type <b>TACT ACTIVATED</b>
ETOT <b>12:54</b>	Exempt Flight <b>N</b>
CTOT	RFI <b>Y</b>
ATOT <b>12:54</b>	Ready To Depart <b>N</b>
Last Validity <b>+16:40</b>	Late Filer <b>N</b>
	Late Updater <b>N</b>
	TIS <b>5</b>
	TRS <b>10</b>

---

<b>Airport (CDM)</b>	<b>Status (Pre)Sequenced</b>	<b>Sequenced Target TOT 12:54</b>	<b>Aircraft Type E170</b>
SID <b>MODRU1T</b>			<b>Registration Mark FHBXN (!)</b>
No Slot Before <b>12:54</b>	TOBT <b>12:40</b>	TSAT <b>12:40</b>	
C-DPI Reason <b>None</b>			

---

**Route**

N0435F240 MODRU1H MODRU Z717 GOBNO UZ717 MAS UM617 SISGA UZ319 MOPIL MOPIL8W

---

**Regulation**

**Reroute TRY and Apply NOT allowed**

	Regulation	FCM	Ref Location
FLS Resp By			
Rerouting Ref			
REGUL+			
Regcause			
Delay			
TTO Fix			
RRP Resp By			
Slot Tol Viol			
Last MSG Received			
Last MSG From			
ATT			

Flight Data query finished with success

3.2.3 NMOCHMI Operational Log

All exchanged (transmitted and received) messages can be retraced in the "Operational Log" option of selected flights.

AC AFR15MR Operational Log at 07-12:29 / ATFCM

IOBD: Thu 07 Sep 2017 IOBT: 12:40 From: Wed 06 Sep 2017 at 00:00

ARCID: AFR15MR ADEP: EDDL Until: Fri 08 Sep 2017 at 00:00

11 log lines

T	Stamp	Oplog Type
A	06-16:40:04	IM FPL
A	07-08:06:51	HI REROUTE
A	07-09:52:18	IM DPI
A	07-09:52:18	HI SID INFO CHANGE
A	07-10:15:17	IM DPI
A	07-10:15:17	HI DISCREPANCY
A	07-10:40:04	IM DPI
A	07-11:52:55	IM DPI
A	07-12:00:23	IM DPI
A	07-12:23:43	IM DPI
A	07-12:26:12	IM DPI

TACT\_ID: 519411 Correspondent: EDDLIDYX @AFTN

IFPS\_ID: AA67712151 OPLOG\_ID:  Wrap Text

```

Received from: EDDLIDYX @AFTN. Est. Xmit at: 17/09/07 12:23:00. Message
description:-TITLE DPI
-DPISTATUS SEQ
-ARCID AFR15MR
-ADEP EDDL
-ADES LFPG
-EOBT 1240
-EOBD 170907
-TOBT 1240
-TSAT 1246
-TAXITIME 0014
-TTOT 1300
-SID MODRU1T
-ARCTYP E170
-REG FHBXN
    
```

Flight Operational Log query finished with success

### 3.3 Airport CDM Alerting

Due to European harmonisation/standardisation, Airport CDM alerts bear the same code all over Europe. A further harmonisation of the A-CDM alerts is effected via the *German Harmonization Initiative Airport CDM* to reach a common alerting procedure all over Germany.

#### 3.3.1 Contact Address and Informationen

In order to receive Airport CDM alert messages, all airlines/handling agents shall provide a valid contact address (e-mail) to the Airport operator.

It is also possible to provide several contact addresses for one airline (e.g. separate ones for specific alerts), if necessary.

In order to ensure optimal process handling and sequencing, it is highly recommended to provide this address (or several addresses) as well as information on necessary changes.

#### 3.3.2 General Aviation Flights

The preceding does not apply to general aviation flights without handling agents as the messages from the Airport CDM procedure are transmitted to the counter of the General Aviation Terminal (GAT).

#### 3.3.3 Airport CDM Alert Messages (Examples)

##### CDM01 "No Airport Slot Available, or Slot Already Correlated"

DLH1AB/LH123  
CDM01  
2012211200UTC  
STR/EDDS  
AIRPORT SLOT SOBT 1200 UTC NOT AVAILABLE OR SLOT ALREADY CORRELATED.  
IMMEDIATE UPDATE OF ATC FLIGHT PLAN EOBT 1100 OR REQUEST NEW AIRPORT SLOT.

NOTE: THE AIRPORT CDM PROCESS WILL BE SUSPENDED UNTIL RECEPTION OF YOUR RECTIFICATION.

##### CDM02 "SOBT vs. EOBT Discrepancy"

DLH1AB/LH123  
CDM02  
2012211200UTC  
STR/EDDS  
ATC FLIGHT PLAN EOBT 1200 IS NOT CONSISTENT WITH AIRPORT SLOT SOBT 1100 UTC.  
PLEASE VERIFY.

##### CDM03 "Aircraft Type Discrepancy"

DLH1AB/LH123  
CDM03  
2012211200UTC  
STR/EDDS  
AIRCRAFT TYPE INCONSISTENCY BETWEEN ATC FLIGHT PLAN A320 AND AIRPORT DATABASE A32N.  
IMMEDIATE UPDATE OF ATC FLIGHT PLAN OR AIRPORT DATABASE NEEDED.

NOTE: THE AIRPORT CDM PROCESS WILL NOT BE SUSPENDED BUT START UP / PUSHBACK CLEARANCE WILL NOT BE GRANTED UNTIL DISCREPANCY IS RESOLVED.



CDM04 "Aircraft Registration Discrepancy"

DLH1AB/LH123  
CDM04  
2012211200UTC  
STR/EDDS

AIRCRAFT REGISTRATION INCONSISTENCY BETWEEN ATC FLIGHT PLAN DABCD AND AIRPORT DATABASE DZYXW.

IMMEDIATE UPDATE OF ATC FLIGHT PLAN OR AIRPORT DATABASE NEEDED.

NOTE: THE AIRPORT CDM PROCESS WILL NOT BE SUSPENDED BUT START UP / PUSHBACK CLEARANCE WILL NOT BE GRANTED UNTIL DISCREPANCY IS RESOLVED.

CDM05 "First Destination Discrepancy"

DLH1AB/LH123  
CDM05  
2012211200UTC  
STR/EDDS

DESTINATION INCONSISTENCY BETWEEN ATC FLIGHT PLAN <ADES> AND AIRPORT DATABASE <DEST>.

IMMEDIATE UPDATE OF ATC FLIGHT PLAN OR AIRPORT DATABASE NEEDED.

NOTE: PLEASE CLARIFY WITH AIRPORT TRAFFIC OPERATION CENTER

CDM07 "EIBT + MTTT Discrepancy with EOBT"

DLH1AB/LH123  
CDM07  
2012211200UTC  
STR/EDDS

EIBT 1300 OF INBOUND DLH1AX/LH122 + MTTT 0030 IS NOT CONSISTENT WITH OUTBOUND ATC FLIGHT PLAN EOBT 1300.

CHECK OUTBOUND FLIGHT AND ATC FLIGHT PLAN AND UPDATE IF REQUIRED.

NOTE: THIS IS AN ADVISORY ALERT ONLY AND THIS FLIGHT REQUIRES MONITORING AS THE OUTBOUND FLIGHT MAYBE DELAYED.

CDM07a "EIBT + MTTT Discrepancy with TOBT"

DLH1AB/LH123  
CDM07a  
2012211200UTC  
STR/EDDS

EIBT 1300 OF INBOUND DLH1AX/LH122 + MTTT 0030 IS NOT CONSISTENT WITH OUTBOUND TOBT 1300.

CHECK OUTBOUND FLIGHT AND TOBT AND UPDATE IF REQUIRED.

NOTE: THIS IS AN ADVISORY ALERT ONLY AND THIS FLIGHT REQUIRES MONITORING AS THE OUTBOUND FLIGHT MAYBE DELAYED.

CDM08 "EOBT Compliance Alert"

DLH1AB/LH123  
CDM08  
2012211200UTC  
STR/EDDS

RECEIVED TOBT 1300 IS OUT OF ATC FLIGHT PLAN EOBT 1230 TOLERANCE WINDOW. IMMEDIATE UPDATE OF ATC FLIGHT PLAN EOBT NEEDED.

NOTE: EOBT AND TOBT SHALL NOT DIFFER BY MORE THAN 15 MINUTES. THE AIRPORT CDM PROCESS WILL NOT BE SUSPENDED BUT START UP / PUSHBACK CLEARANCE MAY NOT BE GRANTED UNTIL DISCREPANCY IS RESOLVED.

CDM09 "Boarding Not Started"

DLH1AB/LH123  
CDM09  
2012211200UTC  
STR/EDDS

AT TOBT 1300 - 10 MINUTES BOARDING WAS NOT INITIATED.  
UPDATE TOBT IF NEEDED.

NOTE: THE AIRPORT CDM PROCESS WILL NOT BE SUSPENDED BUT START UP / PUSHBACK CLEARANCE MAY NOT BE GRANTED.

CDM10 "TOBT Rejected or Deleted"

DLH1AB/LH123  
CDM10  
2012211200UTC  
STR/EDDS

TOBT 1300 WAS REJECTED OR DELETED.  
NEW TOBT REQUIRED.

NOTE: THE AIRPORT CDM PROCESS IS SUSPENDED UNTIL RECEPTION OF YOUR RECTIFICATION.

CDM11 "Flight not compliant with TOBT / TSAT"

DLH1AB/LH123  
CDM11  
2012211200UTC  
STR/EDDS

FLIGHT NOT COMPLIANT WITH TOBT 1300 / TSAT 1300.  
THIS FLIGHT WILL BE RE-SEQUENCED ON RECEIPT OF NEW TOBT.

NOTE: THE AIRPORT CDM PROCESS MAY BE SUSPENDED UNTIL RECEPTION OF YOUR NEW TOBT.

CDM13 "No ATC Flight Plan Available"

NO ARCID/LH123  
CDM13  
2012211200UTC  
STR/EDDS

THE ATC FLIGHT PLAN IS NOT AVAILABLE.  
SUBMISSION OF NEW ATC FLIGHT PLAN NEEDED.

NOTE: ATC FPL DLH1AB HAS BEEN CANCELLED AND THE AIRPORT CDM PROCESS IS SUSPENDED.

CDM17 "TTOT within Night Flying Restriction"

DLH1AB/LH123

CDM17

2012211200UTC

STR/EDDS

TTOT 2230 UTC BEYOND 2200 LOCAL.

BE AWARE OF NIGHT FLYING RESTRICTION.

NOTE: THE AIRPORT CDM PROCESS WILL NOT BE SUSPENDED BUT START-UP AND / OR TAKE-OFF WILL NOT BE GRANTED WITHOUT NIGHT FLYING PERMISSION.

## 4. Publications

### 4.1 Aeronautical Information Publication (AIP)

The Airport CDM procedure at Stuttgart Airport is published in the German Aeronautical Information Publication, Volume II, AD2 EDDS, AD 2.20 "Local Traffic Regulations".

### 4.2 Airport User Regulations

The requirement to report a confirmed TOBT and thus to participate in the Airport CDM process at Stuttgart Airport is published in the Airport User Regulations in Chapter 2.1.7.

## 5. Persons in Charge of the Process / Points of Contact

### Flughafen Stuttgart GmbH (Airport Operator):

Nico Ruwe

Local Airport CDM Manager

Phone: +49 711 948 3028

E-Mail: [airport-cdm@stuttgart-airport.com](mailto:airport-cdm@stuttgart-airport.com)

Airport Coordination and Data Center (ACDC)

Phone: +49 711 948 3666

E-Mail: [acdc@stuttgart-airport.com](mailto:acdc@stuttgart-airport.com)

### Deutsche Flugsicherung GmbH (German ANSP):

Lukas Weber

Person responsible for A-CDM

Phone: +49 711 722 57 111

E-Mail: [airport-cdm@stuttgart-airport.com](mailto:airport-cdm@stuttgart-airport.com)

Tower Stuttgart

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