

## **AIRPORT COLLABORATIVE DECISION MAKING**



### **AIRPORT CDM at STUTTGART AIRPORT**

#### **Flight Crew Briefing English**



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## 1. General

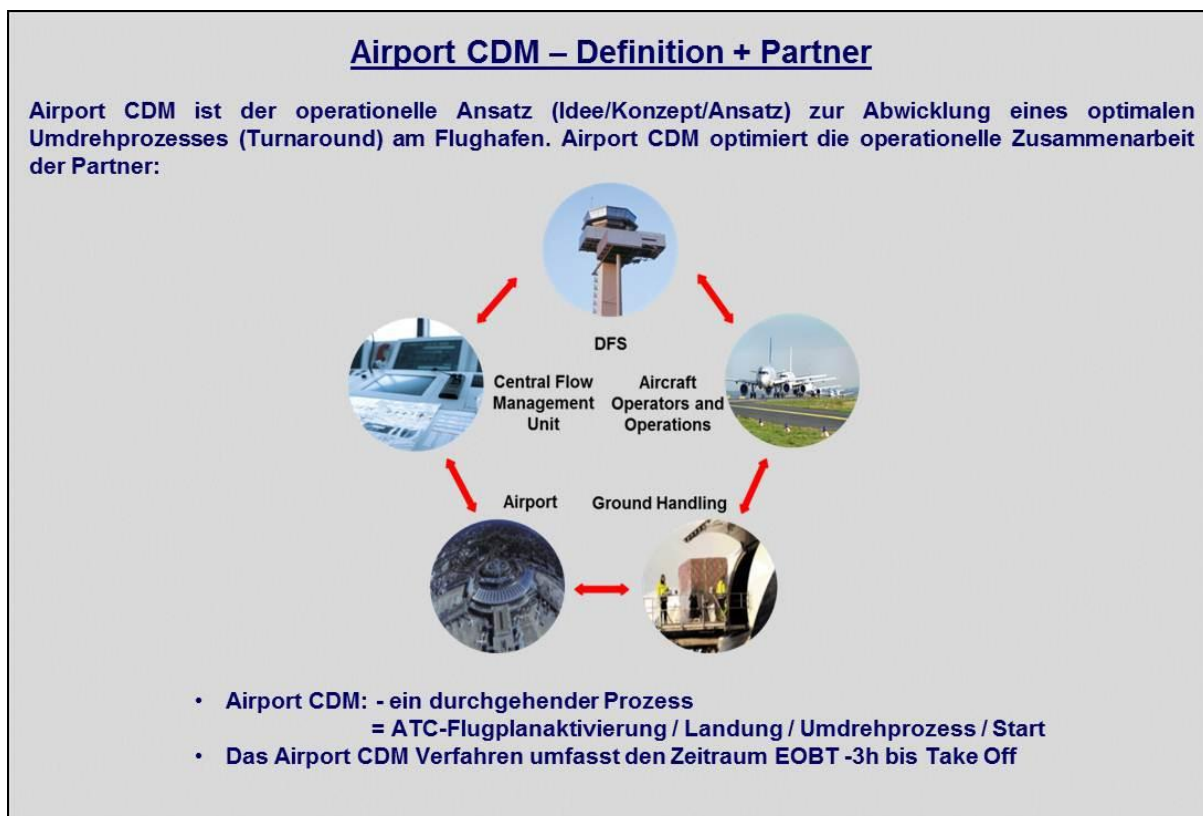
This document describes the Airport Collaborative Decision Making (CDM) process at Stuttgart International Airport. It is to be understood and used as information material for flight crews.

Together with the publications about Airport CDM (AIP Germany – AIP ED2 EDDS – and the airport user regulations – FBO –) this document is to ensure that Airport CDM at Stuttgart Airport is handled in an optimum way in the interest of all partners. A detailed description of the process is also available as a „brief description / process description“.

This document will enter into effect on May 2014 and supersedes any and all previous versions.

### 1.1 Definition and Partners

Airport CDM facilitates the optimal handling of a turn round process at Stuttgart Airport. It covers the period of time between the Estimated Off Block Time (EOBT) minus 3hr until Take Off and is a coherent process from flight planning (ATC Flightplan) to landing and the subsequent turn round on the ground until the take-off.



Airport CDM at Stuttgart Airport is based on the European standard for Airport CDM, the common specification for Airport CDM („Community Specification“) and the initiative „Deutsche Harmonisierung von Airport CDM“ (German harmonization of Airport CDM).

## **2. Target Off-Block Time (TOBT)**

The TOBT is a reference time used for all ground handling processes except for push back and remote de-icing. This time is used as best available time for coordination purposes.

- **TOBT = prediction of „aircraft ready“**

The calculation of the Target Start-Up Approval Time (TSAT) is based on the TOBT.

### **2.1 Automatically generated TOBT**

At a fixed time, a TOBT will be generated automatically for every linked outbound flight.

For outbound flights linked with an inbound flight the TOBT will be generated at time TMO (Twelve Minutes Out, 12 minute before the estimated landing time of the linked inbound).

For flights not linked with an inbound or for which the TOBT at time TMO is more than 90 minutes in the future, the TOBT will be automatically generated 90 minutes before the EOBT of the ATC flight plan.

An automatically generated TOBT will be published 90 minutes before EOBT in case the aircraft is already at the airport, in all other cases at time TMO.

The automatically generated TOBT will be overwritten by a manual input of a TOBT. If a TOBT can not be generated automatically, it must be entered by the person responsible for the TOBT.

### **2.2 Person responsible for TOBT**

The airlines have to ensure that a person responsible for the TOBT is nominated. The airline may delegate the responsibility for input and adjustment of the TOBT to a ground handling agent. The responsibility has to be clearly determined.

The person responsible for the TOBT (the handling agent, the airline for flights without handling agent or the pilot in command/flight crew for general aviation flights without handling agent) is responsible for correctness of and adherence to the TOBT. A wrong TOBT leads to disadvantages for further sequencing and/or CTOT allocation of regulated flights. It is mandatory to make necessary adjustments of the TOBT as early as possible.

### **2.3 TOBT input and adjustment**

The following facts have to be taken into account for the input and/or adjustment of the TOBT:

- The earliest possible time for the input of a TOBT (before automatic generation) is after completion of milestone 1, correlation of flight information, depending on the filing time earliest possible time EOBT minus 180 minutes.
- The time frame for a TOBT is EOBT-10 min up to EOBT+120 min.
- A manual input of a TOBT will not be overwritten by an automatically generated TOBT.
- The TOBT can be adjusted as often as necessary until a TSAT has been issued.
- After a TSAT has been issued, the TOBT can only be corrected three times.
- The TOBT adjustment must be different from the previous time by at least 5 minutes.
- The entered TOBT has to be at least 5 minutes later than the actual time.

As the TOBT is also basis for further airport processes, adjustments of the TOBT (also if the process is completed more than 5 minutes in advance) are to be entered by the person responsible for the TOBT.

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## 2.4 TOBT deletion

The TOBT has to be deleted in the following cases:

- The TOBT cannot be met, a new TOBT is unknown (e.g. technical problems with the aircraft)
- The permitted number of TOBT inputs (3 times) after TSAT issue has been exceeded.

If the TOBT is deleted, the TSAT is automatically deleted as well and the A-CDM process is stopped.

If a new TOBT is known and the process shall continue, the person responsible for the TOBT has to enter a new TOBT.

## 2.5 TOBT reporting channels

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

- Input into the Common Situational Awareness Tool (WebCaeSAr)
- Input into an own system of the person responsible for the TOBT and transmission by interface
- Exceptionally by input into CaeSAr by FSG Traffic Operational Center (Tel.:+49 711 948 2615) after request by phone
- Exceptionally by input into TFDPS or CaeSAr by DFS (Tel.:+49 711 72257 131, Freq: 121,900 MHz) after request.

For General Aviation Flights:

- Input by the handling agent of General Aviation (Kurz Aviation Service, Tel.: +49 711 948 3482, Funk: 131,425 MHz)
- Exceptionally by input into TFDPS or CaeSAr by DFS (Tel.:+49 711 72257 131, Freq: 121,900 MHz) after request.

The TOBT will be displayed on the Docking-Guidance-System APIS from time TOBT minus 60 minutes, as soon as the aircraft has reached the position.

## 3. Target Start-Up Approval Time (TSAT)

The TSAT is a target time calculated by the Airport CDM System at which a flight may expect start-up and ATC clearance. The pre-departure sequence is based on the flights with calculated TSAT. The TSAT is published 40 minutes prior to the TOBT valid at the time of the TSAT publication.

The TSAT is reported in one of the following ways:

- Display of TSAT in WebCaeSAr
- Display of TSAT in the docking guidance system APIS as soon as the TOBT is reached
- Transmission via interface to a system of the AO / GH
- Exceptionally transmission via radio by ATC

As a rule the TSAT and changes of the TSAT have to be reported by the person responsible for the TOBT to the pilot/ Flight crew. When the datalink procedure (DCL) is used for clearances, the TSAT will be transmitted into the cockpit additionally. The received TSAT is valid at the time of transmission and will not be updated by datalink.

### 3.1 TOBT and TSAT handling in extreme situations

If TOBT and TSAT vary significantly, the person responsible for the TOBT may shift the TOBT towards the TSAT in order to prevent an early boarding. It has to make sure that every ground handling process including boarding has to be completed at TOBT. Therefore a sequencing of the flight before the shifted TOBT is not feasible anymore.

## 4. Start-Up and Push Back / Taxi

Start-up (ASAT) and push back / taxi (AOBT) clearances are issued taking into account the TOBT and TSAT. The following rules shall apply:

- The aircraft has to be ready for start-up at time TOBT.
- The timeframe for start-up approval and en-route clearance is TSAT +/-5 minutes.
  - The pilot should request start-up approval and en-route clearance at time TSAT +/- 5 minutes.
  - Clearance Delivery issues the start-up approval and en-route clearance depending on TSAT and the current traffic situation.
- The push back/taxi clearance has to be requested not later than 5 minutes after the start-up approval has been issued.
- In case of delays Clearance Delivery has to be informed, otherwise the TOBT will be deleted and has to be re-entered.
- After the start-up approval has been issued a change of the TOBT is no longer possible.

### 4.1 Datalink Clearance (DCL)

The published procedures and the time parameters published in AIP AD2 EDDS for datalink departure clearances (DCL) continue to apply.

The TSAT is transmitted via CLD (Departure Clearance Uplink Message – issue of the start-up approval and en-route clearance by Clearance Delivery). The TSAT contained in the CLD is the TSAT valid at the time of transmission and will not be updated by datalink. Also if the TSAT changes the datalink clearance is still valid, changes of the TSAT will be reported by the person responsible for the TOBT. At time TSAT minus 5 minutes a change of the TOBT is no longer possible.

**„Start Up approved TSAT <hh:mm>“**

The push back/taxi clearance has to be requested TSAT+5 minutes.

#### Example

DCL with start-up approval and en-route clearance	DCL with en-route clearance only
CLD AN DLH2HH/MA 005A - / STRDFYA.DC1/DCL 1905 120312 EDDS PC 001 DLH2HH CLRD TO EDDH OFF 25 VIA OKIBA2B SQUAWK 2346 ADT MDI NEXT FREQ 118.600 ATIS M STARTUP APPROVED TSAT 19:20	CLD AN DLH2HH/MA 005A - / STRDFYA.DC1/DCL 1905 120312 EDDS PC 001 DLH2HH CLRD TO EDDH OFF 25 VIA OKIBA2B SQUAWK 2346 ADT MDI NEXT FREQ 118.600 ATIS M STAND BY ON 121.900 FOR STARTUP TSAT 19:20



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## 4.2 Change within the sequence

After the TSAT has been issued, the sequence of flights can be changed within the area of responsibility of the person responsible for the TOBT. Such changes have to be coordinated directly with the Air traffic Control Tower (Tel.: +49 711 72257 131).

## 4.3 De-icing

Aircraft de-icing times must not be taken into account for the calculation of the TOBT. The de-icing request and the approximate duration of the de-icing will be taken into account for the calculation of the TSAT. Therefore, the de-icing should be requested as early as possible. In addition the request for de-icing has to be acknowledged by a de-icing service provider if no contract with a provider exists.

De-icing has to be requested not later than the time start-up given. A de-icing request thereafter leads to a cancelation of the start-up approval and a new calculation of the TSAT taking into account the de-icing times.

## 4.4 Coordination with the Network Manager (NMOC)

The general coordination procedures with the Network Manager (NMOC) remain the same. In addition, during the turn round process local Target Take-Off Times (TTOT) will be calculated automatically and transmitted to the Network Manager. Generally, the Network Manager will take the TTOT into consideration for CTOT calculation and will try to adjust accordingly. The transmission of „Ready-Messages“ is not longer necessary.

## 5. Luftfahrthandbuch (AIP)

The Airport CDM procedures at Stuttgart Airport will be published in Aeronautical Information Publication Germany, AIP AD2-EDDS section AD 2.20 „Local Traffic Regulations“.

## 6. Persons responsible for the process / contact persons

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