Airport
Collaborative Decision Making
(A-CDM)

Flight Cew Briefing

English

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1   General

1.1   Purpose of the document

This document describes the content of the Airport Collaborative Decision-Making (A-CDM) procedure at Berlin Brandenburg Airport and is intended to be understood and used as a basis for information for flight crews.

Together with the publications on Airport CDM in the German Aviation Handbook (AIP EDDB AD 2.20) and the Airfield Handbook (FPH), it should enable the best possible handling of Airport CDM at Berlin Brandenburg Airport.

A detailed description of the process as a "Brief Descripiton / Process Description" is also available.

1.2   Definition and partners

Airport CDM is an operational overall process (concept/procedure) supporting an optimized turn-round process at Berlin Brandenburg 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 BERLIN BRANDENBURG AIRPORT is based on the European Airport CDM, the common specification ("Community Specification") for A-CDM and the "German initiative on the harmonisation of Airport CDM".

2   Target Off Block Time (TOBT)

The TOBT is a point in time to be monitored and confirmed by the airline/handling agent at which the ground handling process is concluded, all aircraft doors are closed, all passenger boarding bridges have been 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 the TOBT. The TOBT is used as the optimum time for coordination.

$$TOBT = forecast\ of\ "Aircraft\ ready"$$

2.1   Automatically generated TOBT

At fixed times, a TOBT for the linked outbound flight is generated automatically.

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

The Minimum Turn-round 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 destination airport.

Important dependencies for the automatic initial TOBT generation:

- TOBT = EOBT   if: EIBT + MTTT ≤ EOBT

- TOBT = EIBT + MTTT   if: EIBT + MTTT > EOBT

Flights which are not subject to a direct turn-round and which do not park on their outgoing position, the TOBT will be generated automatically at EOBT-90 or ELDT-10 minutes.

2.2   Person responsible for the TOBT

Airlines have to ensure:

- the nomination of one person 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 person responsible for the TOBT (generally the handling agent), the airline (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, the TOBT has to be adjusted 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 input of a TOBT (before automatic generation) is EOBT-100 min.
- a manually set TOBT will never be overwritten by an automatically generated TOBT
- the TOBT can be adjusted as often as necessary until the TSAT has been issued
- after the TSAT has been issued, the TOBT can only be corrected three times
- the entered TOBT has to be at least 5 minutes later than the actual time
- The value of the TOBT entered must differ from the previous value by at least 5 minutes

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 in advance) are to be entered by the person responsible for the TOBT.

2.4 Deviations between TOBT and EOBT

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

2.5 TOBT deletion

The TOBT has to 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 the generation of   the TSAT has been exceeded

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

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

2.6 TOBT reporting channels

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

- Airport operational Extranet AOE
- AODB Airport Operational Data Base (FARMS)
- internal system of AO/GH (via interface)
- Clearance Delivery
- via phone Airport control centre +49 30 6091 10136

For general aviation flights:

- GAT – Provider (BAS) +49 30 6091 78000

3 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 the flights with a calculated TSAT.

The TSAT is published 40 minutes before the TOBT valid at that time.

The TSAT is generally reported back via the same reporting channels as the TOBT.

3.1 TOBT and TSAT handling in extreme situations

If the TOBT and the TSAT significant deviate from each other, the ground handling process has to be completed before the TOBT. The airline can decide to postpone boarding. In these cases, the TOBT must be postponed in any case. The new TOBT value is ideally 10 minutes before the current TSAT

4 Start-Up and Push-Back

Start-up (ASAT) and pushback (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 and/or remote de-icing at TOBT.
- in principle the timeframe for start-up approval and en-route clearance is TSAT +/- five minutes
  - The pilot should request start-up approval and en-route clearance **TSAT** +/- five 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 five 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.

4.1   Datalink Clearance - DCL

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

The TSAT is transmitted via CLD (departure clearance uplink message – issue of the start-up approval and en-route clearance by Clearance Delivery).

> „**Start Up** approved **TSAT <hh:mm>**"

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

Example:

DCL including Start Up Approval and en route clearance:	DCL only with en route clearance:
QU QXSXMXS	QU QXSXMXS
. EDDBYDYA 270754	. EDDBYDYA 270852
CLD	CLD
FI DY3303/AN SE-RRI	FI DY03QJ/AN SE-RPH
- / EDDBYDYA.DC1/CLD 0754 200927 EDDB PDC 196	- / EDDBYDYA.DC1/CLD 0852 200927 EDDB PDC 197
NAX3303 CLRD TO EKCH OFF 25R VIA GERGA1X	NAX3QJ CLRD TO ENGM OFF 25R VIA GERGA1X
SQUAWK 7264 ADT MDI NEXT FREQ 129.605 ATIS L	SQUAWK 7263 ADT MDI NEXT FREQ 121.605 ATIS N
STARTUP APPROVED ACCORDING TSATC6C2 553	REQ STARTUP ACC TSAT ON 121.6050122 556

4.2   Changes within the sequence

After the TSAT has been calculated, flights within the area of responsibility of a person responsible for the TOBT can be switched. Flights with CTOT cannot be switched. If flights have a CTOT, it must be assured that these flights can still stick to the slot after the sequence change.

In exceptional cases, the changes within the sequence can also be coordinated with the DFS control tower.

4.3   De-icing

The de-icing request must be sent to the de-icing coordinator at the earliest possible time via the ground handler.

Two different methods are used to perform aircraft de-icing, decentralized aircraft de-icing and central aircraft de-icing. The decentralized aircraft de-icing takes place exclusively in the parking positions, the central aircraft de-icing is carried out on defined de-icing areas.

Aircraft de-icing times must not be taken into account for the calculation of the TOBT, because de-icing request and the approximately de-icing period will be the basis for the calculation of the TSAT. Therefore de-icing should be requested as early as possible.

4.3.1   De-icing on position

In the case of an apron de-icing, the aircraft has to be ready for de-icing at TOBT. It must have been de-iced at TSAT.

4.3.2   Remote de-icing

Remote de-icing is carried out on defined areas on aprons and near the runway thresholds.

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

4.4   Coordination with the NMOC

Due to a fully automated data exchange with the Central Flow Management Unit (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 basic procedures for cooperation between the airlines and/or DFS and the NMOC remain the same.

Furthermore, all estimated departure times are automatically transmitted to the 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. The NMOC determines and allocates the CTOT on the basis of these estimated departure times (DPI).

4.5 Remote Holding

Remote holding can be requested via the TOBT reporting channels.

The requirements for a remote holding procedure are:

- TOBT and TSAT differ from each other by more than 15 minutes (operational parameters)

and

- The parking position used is required for an arriving aircraft

and

- The handling process (except de-icing) has been completed (current time> = TOBT)

5 Publication

The Airport CDM procedure at BERLIN BRANDENBURG AIRPORT will be published in the German Aeronautical Information Publication, volume II, AD2-EDDB, AD 2.20 "Local Traffic Regulations".

5.1 Airport User Regulations

The Airport CDM procedure at BERLIN BRANDENBURG AIRPORT will be published in the Aerodrome Manual, section E7 attachment 4.

6 Persons in charge of the process/points of contact

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