

- When TOBT and TSAT differ from each other, TOBT can be delayed up to TSAT **without TSAT being changed**. With regulated flights CTOT may at most improve to TOBT + Taxi Out Time. Note: Avoidance of early boarding

AORT

- Actual Off-Block Request Time
- **At the latest 5 minutes after start-up approval**, pushback or taxi (for roll out positions) must be requested. Pushback procedure must take place **within 1 minute** after approval or taxi must commence **within 30 seconds** after clearance. Otherwise air traffic control will **delete all target times and cancel all clearances**

De-Icing

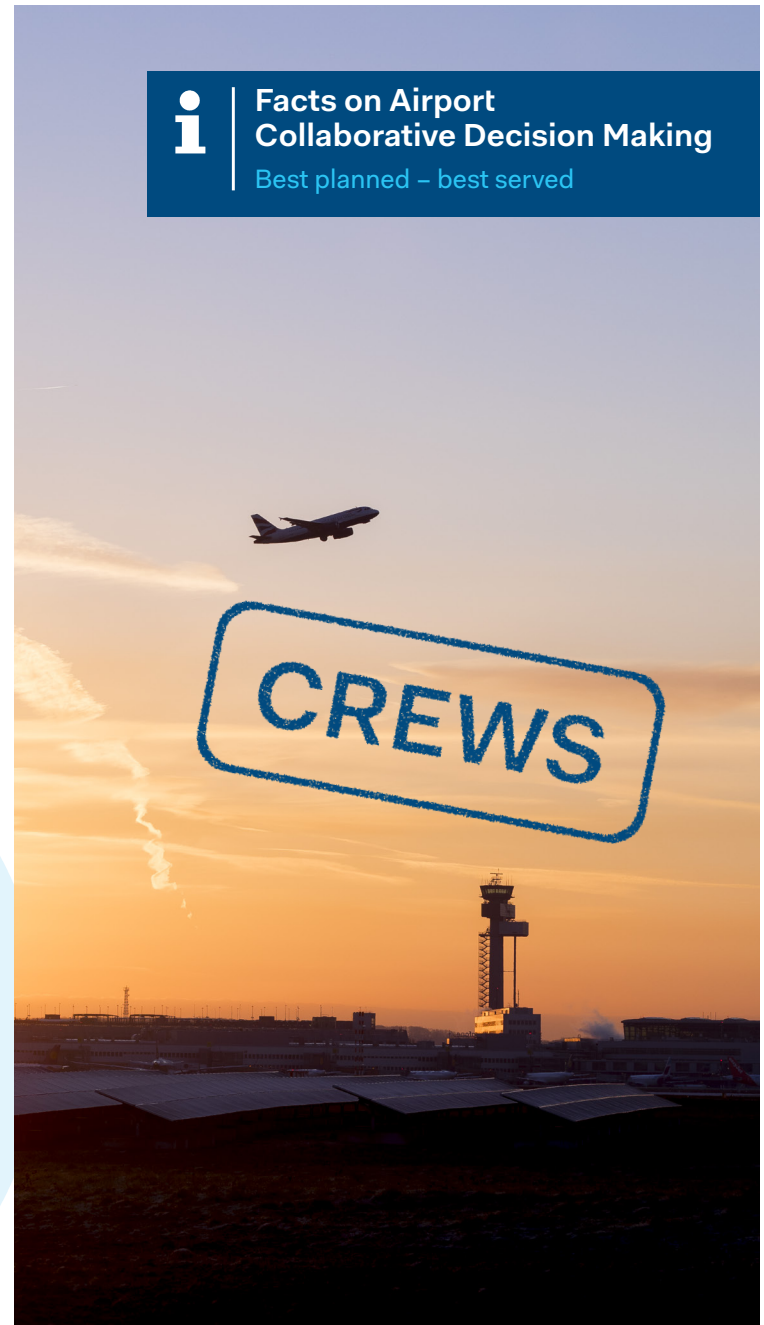
- In general: **Request as early as possible** (Early Ice Prio)
- Timely request if aircraft requires more extensive de-icing than the rest (e.g. long-term parkers). Duration of de-icing will be manually put into the system

Further information – also about other German A-CDM Airports – as well as FAQs are available on the homepage of the German A-CDM Harmonization Group www.acdm-germany.de



Facts on Airport Collaborative Decision Making

Best planned – best served



WHY ARE TOBT AND TSAT IMPORTANT?

Adherence to the A-CDM target times implies that the available and scheduled resources, such as RWY slot, parking position, gate, pusher or bus service are used optimally. Negative effects of late or non-existent TOBT updates:

- No shows at the RWY: Capacities remain unused in times of high demand, resulting in many TSAT changes and additional delays for the entire system
- Pushback vehicles and passenger buses are tied up excessively long and are missing elsewhere
- Parking positions remain occupied unexpectedly: Arriving aircraft have to wait on the apron or have to be re-located at short notice. This results in late gate changes and delays for the respective turnaround
- Fully automated data exchange with EUROCONTROL is no longer based on realistic target take-off times
- Non-compliance with CTOTs: A slot returned at short notice can no longer be used by other aircraft. As a consequence, it might result in a very late CTOT allocation afterwards

While the A-CDM team is in contact with TOBT officials, airlines and pilots in order to achieve better process compliance, the tower is required to rigorously adhere to the A-CDM procedures. This means that start-up is only granted within TSAT +/- 5 minutes. With regard to traffic growth, increased attention is paid to obtaining approval for pushback or taxi at the latest 5 minutes after start-up given. In addition, the pushback process has to start no later than one minute and taxi no later than 30 seconds after clearance. The clearances and A-CDM target times of flights that do not comply with these procedures are cancelled or deleted. The process must then be restarted with a new TOBT. On that basis a new sequencing is initiated, which will lead to a further delay of the flight.

TOBT

- Forecast of „Aircraft Ready“
- Basis for the calculation of the runway sequence (resulting in a TSAT) and the communication with EUROCONTROL (NMOC, former CFMU)
- Early coordination (latest at TOBT -15 min.) with the ramp agent, if **TOBT** is **still realistic**, and continuous adjustment, if necessary
- Communication of foreseeable delays **up to TOBT -10 min.**, so that capacity released can still be used by another outbound and oneself can later be sequenced more optimally
- Early deletion, e.g. in case of technical problems, certainly causes a TSAT deletion, but as a result releases the RWY slot for others. A new entry of the TOBT is necessary for resuming the A-CDM procedure
- TOBTs should only be brought forward (maximum EOBT -10 min.) after coordination with the pushback service provider
- In special situations (thunderstorms, snow removal, etc.) **do not adjust TOBT if you are ready for off-block.** TSATs are expiring and after the situation, air traffic control will recalculate and process the former order

TSAT

- Result of the local „pre-departure sequence“ based on TOBT + Taxi Out Time
- Start-up clearance must be given within TSAT +/-5 min.
- Influencing factors are: **Local departure capacity** (single RWY/two RWY ops, weather, inbound demand, etc.), **variable taxi times, standardized departure intervals** (MDI), **ATFM network influences**: Airspace and/or regulations at the destination airport (CTOTs), also of other flights, **TOBT update, RWY change, de-icing, prioritization rules within the sequence planner** (CTOT, TOBT nearest to SOBT, Early Ice Prio and many more)

CTOT

- Early return of CTOTs by updating TOBT if delays occur, so that they can be allocated elsewhere in the European airspace