

Quick reference

Aircraft De-icing at ZRH

OVERVIEW AIRCRAFT DE-ICING CONDITIONS

De-icing on Request

- less than 50% of traffic is expected for de-icing
- De-icing on request is generally valid all year round, especially from 1. October until 30. April
- Flight Crews shall request de-icing at "De-icing Coordination" on FREQ 121.810 MHz according AIP
- ATC Slot adherence is compulsory

General De-icing

- more than 50% of traffic is expected for de-icing
- this de-icing status is reflected within the DPI message exchange with NMOC
- published in AOS headerline / broadcasted on DEP ATIS
- Flight Crews shall request de-icing at "De-icing Coordination" on FREQ 121.810 MHz according to AIP
- ATC slot adherence is compulsory

General De-icing with extended Slot Tolerance Window

- ATC slot adherence is no longer assured due to long de-icing time, RWY cleaning, or other reasons
- ATC slot tolerance window (STW) can be increased up to max -15 MIN CTOT +30 MIN (Decision by NMOC on request of FMP in coordination with snow committee)
- Published on AOS headerline, broadcasted on DEP ATIS
- this de-icing status is reflected within the DPI message exchange with NMOC
- Flight Crews shall request de-icing at "De-icing Coordination" on FREQ 121.810 MHz according to AIP
- ATC slot adherence (within extended STW) is compulsory

TOBT MANAGEMENT / TSAT GENERATION FOR FLIGHTS WITH ON-STAND DE-ICING

An accurate TOBT is key for a functional A-CDM process. All further departure planning, especially the allocation of de-icing facilities as well the calculation of TSAT will rely on the quality and accuracy of the TOBT.

The TOBT represents the time, when all handling activities are completed and shall be maintained by the responsible organization.

The de-icing process times (EDIT) both for on stand de-icing and remote de-icing are considered in the TSAT calculation, based on the TOBT from the ground handling process.

Flight crews shall only report "aircraft ready" to "Zurich Delivery" when all handling activities except de-icing are completed and within TOBT +/- 5 MIN Regardless whether the flight needs to be de-iced or not.

The de-icing tool together with the DMAN (departure management system) calculates the TSAT respecting any de-icing related factors. The following events are used to update the TSAT according the actual situation:

- Allocation of the de-icing truck (de-icing task) to a flight by the responsible de-icing company
- The actual start time of the de-icing (ACZT) process (normally when truck begins to spray)
- The actual end time of the de-icing (AEZT) process (normally when truck has finished spraying / is in safe position)
- Any other input such as RWY closures due to snow cleaning, manual sequence updates and RWY changes.

REPOSITIONING

At Zurich Airport not all stands/areas are allowed for on-stand de-icing. Therefore the aircraft must be repositioned to another stand.

- When the Flight Crew requests de-icing on the "De-icing Coordination" frequency, they will be informed if a prior repositioning of the aircraft is required.
- "De-icing Coordination" instructs the Flight Crew about the repositioning procedure on the frequency.
- Afterwards the Flight Crew has to request start-up clearance for repositioning on "Apron" frequency and reports ready for taxi.
- On the de-icing parking position, prior de-icing process starts, the Flight Crew shall request the Departure Clearance and report ready to "Zurich Delivery" within TOBT +/-5 MIN tolerance window.
- The duration of the de-icing process on-stand is reflected in the TSAT.
- When the de-icing activities are completed, standard start-up/ push-back and taxi procedures shall be followed.

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IMPORTANT FACTORS

For Flight Crews

Request de-icing as early as possible: Early de-icing requests contribute to a steady de-icing planning and therefore help to allocate de-icing resources in an optimized way. Note that de-icing has to be requested latest 15 MIN prior TOBT according to the AIP. A late request may cause additional delay for the flight due to poor allocation of de-icing resources.

Requesting non-standard departure RWY: State early, when a non-standard RWY for departure is required. This has a major impact on the departure (and de-icing) planning process and therefore, an early indication helps to ease the planning.

Report “aircraft ready”: Regardless whether the flight is being de-iced on remote pad or on-stand, flight crew shall always report “aircraft ready” to “Zurich Delivery”, when all handling activities are completed and within TOBT +/- 5 MIN tolerance window, irrespective of de-icing, pushback vehicle availability and TSAT.

For Handling Agents/Airlines

Accurate TOBT Management: Set TOBTs as early and accurate as possible, especially during de-icing period. Note that an accumulation of TOBTs at the same time should be avoided whenever possible.

Truck refueling: Enter/update de-icing truck refueling time as early and as accurate as possible so that the de-icing tool and the DMAN (departure management system) can take them into account for the planning process.

For on-stand de-icing: Input/update de-icing relevant process times early and accurate. This includes an early allocation of the de-icing truck to a flight foreseen for on-stand de-icing, input of actual de-icing start time (ACZT) as TSAT will be adjusted to this timestamp as well an immediate input of actual de-icing end time (AEZT). It is important that the de-icing end time (AEZT) is set immediately after the de-icing process is finished. Otherwise, the TSAT gets not updated and the flight is affected with additional delay as Apron Control issuing the start-up clearance based on the de-icing end time (AEZT) timestamp. Furthermore, the de-icing resource (truck) is still blocked for the planning process leading to later TSATs than necessary for other flights with de-icing.

For Apron Control

Early allocation of non-standard de-icing pad: If the intention exists to guide a flight to a non-standard de-icing pad (e.g. pad F for a departure planned for RWY28) then this manual allocation in the de-icing tool should be done as early as possible.

For Clearance Delivery

Aircraft with de-icing: Only flights reported “aircraft ready” or “ready for on stand de-icing” within TOBT +/- 5 MIN shall be transferred to Apron Control.

For all Stakeholders

Planning of 6th outbound wave evening (widebody aircraft only): It is agreed amongst the partners, that for the last outbound wave in the evening, the de-icing request should be made 30 MIN prior SOBT/TOBT. This allows Apron Control to manually allocate the flights on the de-icing pads or even lanes at a very early stage. This increases the situational awareness for the pad coordinators/ allocation of resources and contributes to an optimized de-icing process for night ban critical flights.