

# Aircraft De-icing Plan Stuttgart Airport



Winter season 2015/2016

Effective as of 1 October 2015

# Contents

1. Introduction .....	3
2. Responsibilities .....	4
3. De-icing Pads.....	5
4. De-icing Vehicles and De-icing Fluids .....	6
5. Communication .....	7
6. De-icing Sequence.....	8
7. De-icing Request .....	9
9. De-icing Operation.....	12
10. Transfer of Information .....	13
11. Taxiing Traffic .....	14
12. Vehicle and Passenger Traffic .....	15
13. Lighting of the De-icing Pads .....	15
14. Pre-de-icing and other De-icing Procedures.....	16
15. Overview Maps .....	17
16. Glossary .....	18

**The German version of the de-icing plan is the only binding version. Translations of the de-icing plan have been produced with the greatest possible accuracy; however, no liability can be assumed.**

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# 1. Introduction

This document describes the operational procedure of the de-icing process at Stuttgart Airport for the current winter season. The objective of this procedure is to regulate safe, correct and efficient aircraft de-icing services at Stuttgart Airport.

All regulations and procedures pertaining to the de-icing process have been defined within the scope of the Airport CDM procedure by the airport operations department of the airport operating company Flughafen Stuttgart GmbH (hereafter referred to as FSG) and Deutsche Flugsicherung GmbH (hereinafter referred to as DFS) with the agreement of the de-icing providers at Stuttgart Airport. It applies to all parties involved in the de-icing process. This de-icing plan does not replace the official releases in the Aeronautical Information Publication for the Federal Republic of Germany (AIP EDDA AD 2.20), but rather describes in detail the procedures to be followed by the organisation units involved.

The de-icing plan for Stuttgart Airport is revised every year and enters into force at the beginning of October before the start of the new de-icing season.

Should significant changes to the de-icing process be required during the winter season, FSG Airport Operations department should be informed in writing immediately. Any changes to the de-icing process will be defined and then published under the collective agreement of the FSG and the DFS.

## 2. Responsibilities

Aircraft de-icing operations at Stuttgart Airport are carried out by two freely contracted independent de-icing providers.

The de-icing providers are responsible for de-icing aircraft in a professional manner at the assigned times. To this end, they conclude contracts with airline companies or aircraft operators or accept individual aircraft de-icing assignments for single flights. De-icing providers must provide a sufficient number of deployable vehicles, qualified staff and the appropriate de-icing fluids for the de-icing pads to which they have been assigned.

Estimated de-icing times are determined according to the Target Off-Block Time (TOBT) of the aircraft to be de-iced, local capacities, potential network influences (CTOT) and the availability of a de-icing pad from the chosen provider. According to the Airport CDM procedure, the airline companies or their handling agents (persons responsible for TOBT) must provide a TOBT for each departure. The airline companies or their handling agents must request the necessary aircraft de-icing at the latest 20 minutes before TOBT. The de-icing request is made by the persons responsible for TOBT in Web-CaeSAr (CSA tool) or by the cockpit crew at DFS (STUTTGART DELIVERY). If the aircraft operator has not concluded a contract with one of the two de-icing providers, it must come to an independent agreement on the provision of the required service.

The aircraft to be de-iced are included in the pre-departure sequence according to the Airport CDM procedure and scheduled to a de-icing pad for the earliest possible time. This de-icing schedule is based on the TOBT and is continually monitored by the DFS and the FSG Traffic Operations Center. When de-icing requests for departing aircraft are received by the DFS and no de-icing pad from the selected provider is available, the DFS informs the FSG Traffic Operations Centre, which immediately notifies the de-icing provider that the de-icing pad is occupied.

The FSG, together with the DFS, assigns the de-icing pads to both de-icing providers, monitors the assignment of the departures to the available de-icing pads, arranges for assistance in the event of process malfunctions and informs the de-icing providers about completed and scheduled de-icing events. In addition, it performs ongoing quality monitoring for the entire Airport CDM process.

Any significant deviations in the de-icing process from the procedure described in this de-icing plan due to exceptional circumstances must be approved by the Airside Operations Manager at Stuttgart Airport GmbH (Tel.: +49 711 948 3586). Specific incidents in the de-icing operation must be documented by the relevant individual parties and forwarded to FSG Airport Operations department.

### 3. De-icing Pads

For environmental reasons, special sections of the manoeuvring area at Stuttgart Airport are designated for aircraft de-icing. These areas, along with the individual de-icing pads, appear in the Aeronautical Information Publication for Germany (AIP) on maps AD 2 EDDS 2-5 and 2-7 and can be found in chapter 15 of this de-icing plan. The de-icing of aircraft is only permitted on these de-icing pads with the exception of the special procedures described in chapter 14.

Up to four de-icing pads are operated at the same time during de-icing and are designated DP1, DP2, DP3 and DP4. The de-icing pads are assigned to the de-icing providers according to need by the DFS in agreement with the FSG. In exceptional cases, a de-icing pad can also be assigned to both de-icing providers. The aircraft is positioned on the de-icing pads in such a way as to avoid obstacles with the nose of the aircraft facing either southeast or southwest, depending on the de-icing pad.

Due to height restrictions and the required safety distance from the positioning area of the de-icing vehicles and light towers, a maximum permitted aircraft wingspan is imposed on each individual de-icing pad.

**DP1:** ICAO Code Letter E (note: max. 60.50 m WSPAN)

**DP2:** ICAO Code Letter E (note: max. 60.50 m WSPAN)

**DP3:** ICAO Code Letter C (max. 36 m WSPAN)

**DP4:** ICAO Code Letter C (max. 36 m WSPAN)

The following air band radio frequencies are used on the individual de-icing pads:

De-icing pad	Call sign	Air band radio frequency
DP1	Stuttgart De-icing Pad 1	132.250 MHz
DP2	Stuttgart De-icing Pad 2	121.950 MHz
DP3	Stuttgart De-icing Pad 3	122.775 MHz
DP4	Stuttgart De-icing Pad 4	121.850 MHz

The de-icing pads are equipped with yellow, non-directional centreline lights. Because there are no marked guidelines, the centreline lights of the respective de-icing pads must be switched on at all times during operation to clearly guide the taxi traffic. The centreline lights are switched on by the DFS.

Positioning areas have been marked on the de-icing pads for up to four de-icing vehicles and two light towers. The positioning areas for the de-icing vehicles are marked with the numbers 1 and 2. The first de-icing team always takes the positioning areas with the number 1. Only these areas are to be used for preparing the de-icing vehicles and light towers. If de-icing pads DP1 and DP2 are occupied by aircraft with a wingspan of over 60.50 m, the de-icing vehicles must maintain a greater distance from the centreline of the de-icing pad or TWY S when the aircraft taxis in and out.

## 4. De-icing Vehicles and De-icing Fluids

Lufthansa Technik uses de-icing vehicles with closed baskets containing the following de-icing fluids:

- Type I de-icing fluid (Safewing MP I 1938 ECO)
- Type II de-icing fluid (100% / Safewing MP II Flight)

In addition, two de-icing vehicles with open baskets are used for pre-de-icing and other de-icing measures.

AGS uses de-icing vehicles with closed baskets containing the following de-icing fluids:

- Type I de-icing fluid (Kilfrost DF Plus / Safewing MP I 1938 ECO)
- Type IV de-icing fluid (Kilfrost ABC-S Plus / Safewing MP IV Launch)

These vehicles are also used for pre-de-icing and other de-icing measures.

The vehicles with closed baskets function as a one-man operation, i.e. they are operated completely from the basket during de-icing. As a result, these vehicles advance at a low speed and have little manoeuvrability. For this reason, it is advisable to operate them on a well-maintained ground surface. It is specified in the winter service manual for Stuttgart Airport that priority should be given to winter services on the de-icing surfaces. Two de-icing vehicles with closed baskets are used per de-icing pad (de-icing team), operating on either side of the aircraft fuselage. Insofar as necessary, a maximum of four de-icing vehicles from one de-icing provider may be used on one de-icing pad. De-icing vehicles with open baskets can only be operated with the engine off and are only used for pre-de-icing and other de-icing measures.

## 5. Communication

A de-icing coordinator from the de-icing provider is available at all times during the operating hours of Stuttgart Airport to answer any questions and to handle spontaneous requests. These de-icing coordinators can be reached at the following numbers:

### **Airport Ground Service (AGS)**

Team leader / De-icing coordinator

Tel.: +49 151 64 90 41 81

### **Lufthansa Technik AG**

De-icing coordinator

Tel.: +49 151 58 91 50 33

The de-icing vehicles are equipped with a mobile phone, airport service radio and air band radio. Each de-icing provider has an individual call group on the airport service radio. All call groups of the airport service radio can be used centrally only by the DFS and by FSG Airport Operations department.

The de-icing vehicles, the DFS and FSG Airport Operations department communicate mainly via airport service radio. Irrespective of this, de-icing vehicles should always contact the DFS by telephone. If individual vehicles malfunction on the de-icing pads or de-icing pads need to be closed due to the technical malfunctioning of individual vehicles, the FSG Traffic Operations Center must be informed immediately.

The aircraft to be de-iced and the de-icing team on the respective de-icing pad communicate on the air band radio frequency assigned to the pad. To do so, the controller at Stuttgart ground control (STUTTGART GROUND) instructs the aircrew to switch to the assigned de-icing frequency before reaching the de-icing pad. During the de-icing process, the aircrew should remain alert on the Stuttgart ground control (STUTTGART GROUND) frequency at all times so that they can be informed of any changes in operational procedure. The call sign of the de-icing team is 'Stuttgart De-icing' and is extended to the de-icing pad in use.

After de-icing has been completed, the team leader of the de-icing pad will ask the aircrew to announce that the aircraft is prepared for taxi again on the Stuttgart ground control (STUTTGART GROUND) frequency.

## 6. De-icing Sequence

The aircraft de-icing sequence is determined on the basis of the pre-departure sequencing of the Airport CDM procedure. The following factors are taken into account when determining the de-icing sequence and the calculation of the Estimated Commencement of De-icing Time (ECZT):

- Local capacity at the airport (runway / de-icing pads)
- Network influences by NMOC (CTOT – Calculated Take-off Time)
- Taxi times
- TOBT
- TSAT (Target Start-up Approval Time)
- Time of the de-icing request

Ideally, the ECZT is the same time as TOBT + EXOT 1 (expected taxi time to the designated de-icing pad).

If a given TOBT cannot be maintained for technical or other reasons, the airline or the aircraft operator must adjust it accordingly.

The EDIT (Estimated Duration of De-icing Time) is not part of the TOBT. For this reason, the TOBT should never be changed for a subsequent aircraft de-icing.

The CTOT is assigned via automated data exchange (Departure Planning Information – DPI) with NMOC based on the local situation (Airport CDM Pre-Departure Sequence). In order not to destabilise the pre-departure sequence, there should be no additional coordination from the aircraft operator with NMOC. In addition, the usual adjustment of the EOBT (Estimated Off-Block Time) of the ATC flight plan to the actual situation due to necessary aircraft de-icing is not required.



## 7. De-icing Request

It is important for aircraft de-icing requests to be made in a timely manner in order to ensure an organised turnaround process, particularly in cases where there are no deployable de-icing vehicles on the de-icing pads.

Because of the influence of aircraft de-icing on the pre-departure sequencing, it is strongly recommended that any necessary de-icing should be requested up to TOBT - 40 min. (time when the TSAT is issued). If this is not possible due to shorter turnaround times or for other reasons, the de-icing should be requested by TOBT - 20 min. at the latest.

A submitted request for de-icing is indicated with an asterisk (\*) in Web-CaeSAr for the relevant flight.

If an aircrew submits its de-icing request after start-up approval, the start-up clearance will be cancelled and a new TSAT will be calculated for the required de-icing. If the de-icing request is submitted by the aircrew after leaving the parking position, the RTS (return to stand) procedures should always be followed. The start-up clearance will be cancelled and the departure will be sequenced again, taking the required de-icing into account.

A de-icing request can be:

- entered in Web-CaeSAr by the person responsible for TOBT
- reported to DFS (STUTTGART DELIVERY) by the aircrew

Airline companies with a contracted de-icing provider are not obligated to inform the provider directly about a de-icing request. Airline companies with no contracted providers must conclude an agreement in advance with a de-icing provider before any required aircraft de-icing operation. The local handling agent (person responsible for TOBT) can take over the necessary coordination. To conclude an ad hoc agreement with a de-icing provider, the person responsible for TOBT, after prior coordination with the provider, enters the selected de-icing provider in Web-CaeSAr. Once the de-icing request is confirmed by the selected de-icing provider in Web-CaeSAr, the ad hoc agreement is concluded.

If there is no contractual agreement with a de-icing provider or confirmation of an ad hoc agreement at the time of the de-icing request, A-CDM alert 41 will be sent to the person responsible for TOBT and displayed in Web-CaeSAr:

### **CDM41 – Missing confirmation by de-icing provider**

*FLT ID/CDM41/TIMESTAMP/EDDS*

*CONFIRMATION BY DE-ICING PROVIDER IS MISSING.*

*CONTACT SELECTED DE-ICING PROVIDER IMMEDIATELY.*

*NOTE: THE AIRPORT CDM PROCESS WILL BE SUSPENDED AT <TIME>.*

The TSAT and TTOT will be deleted locally until the de-icing request is confirmed by the selected de-icing provider. The flight will not be included in the pre-departure sequence until the selected de-icing provider is confirmed.

If no confirmation is received from the selected de-icing provider 10 minutes after a de-icing request has been submitted, a C-DPI will be sent to NMOC and the Airport CDM process for this flight will be interrupted. A-CDM alert 42 will be sent to the person responsible for TOBT and displayed in Web-CaeSAr:

**CDM42 – No confirmation by de-icing provider**

*FLT ID/CDM42/TIMESTAMP/EDDS*

*NO CONFIRMATION BY DE-ICING PROVIDER.*

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

If the de-icing request is then accepted by the selected de-icing provider, the Airport CDM process will continue, the flight will be included in the pre-departure sequence and the data will be transferred again to NMOC.

If the selected de-icing provider has no de-icing pads or an insufficient number of de-icing pads ready for deployment when a de-icing request is submitted, the DFS notifies the FSG Traffic Operations Center immediately, which then forwards the request for de-icing capacity to the de-icing provider in question. As soon as an aircraft to be de-iced is ready to start up its engines, the aircrew must report this on the STUTTGART DELIVERY frequency. In case of deviations between TOBT and TSAT the aircrew must remain listening watch on the respected ATC frequency.

If aircraft de-icing has been requested but is no longer needed by the airline company or the aircraft operator, the de-icing request must be cancelled in Web-CaeSAr or by informing the DFS. The cancellation of a de-icing request will immediately be considered in the pre-departure sequencing.

## 8. Cooperation with the De-icing Provider

The de-icing providers use the web-based CSA tool Web-CaeSAr to plan their own capacities and communicate relevant information. It displays for the respective de-icing provider all departures for which a de-icing request has been submitted including their key information.

The de-icing providers enter the de-icing category they are currently using and planning to use in Web-CaeSAr. The de-icing category depends on the given type of precipitation and the de-icing procedure to be followed, and determines the estimated duration of de-icing time (EDIT).

The EDIT includes the taxi time for the aircraft to enter the de-icing pad, the actual aircraft de-icing, post-de-icing, and the time until leaving the de-icing pad.

The following diagram shows how the estimated duration of de-icing time (EDIT) and the actual duration of de-icing time (ADIT) are defined. The DFS communicates the actual commencement of de-icing time (ACZT) and actual end of de-icing time (AEZT) for any given de-icing operation.

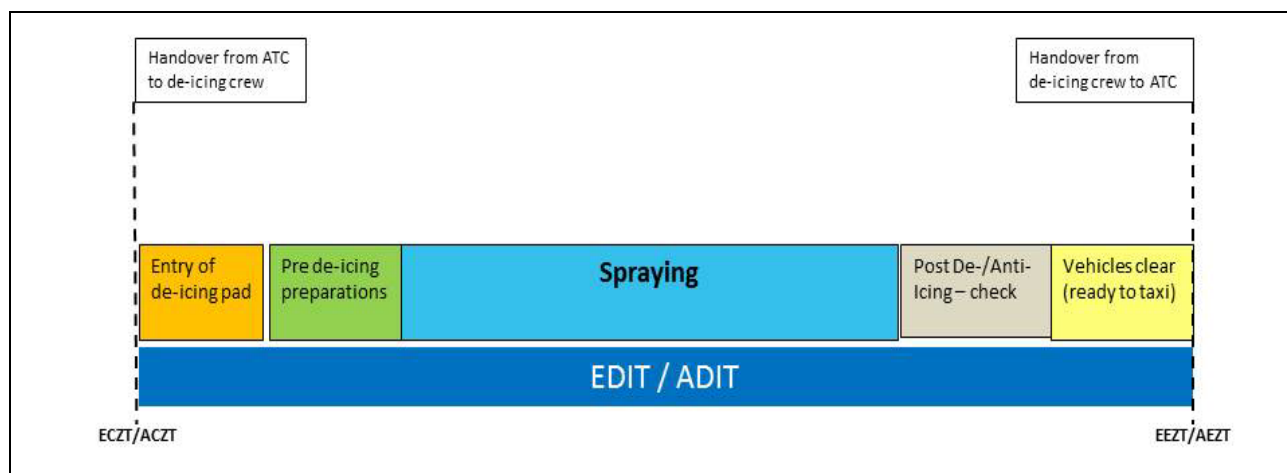


Diagram of duration of de-icing time (EDIT/ADIT)

## 9. De-icing Operation

The DFS assigns the de-icing pads to be used by the de-icing providers in agreement with the FSG Traffic Operations Center as needed. The de-icing providers are responsible for ensuring that de-icing vehicles are ready to be deployed on the assigned de-icing pads at the scheduled times. The team leader of the de-icing team notifies the DFS that the de-icing vehicles are ready on the corresponding de-icing pad. The DFS forwards this information to the FSG Traffic Operations Center. Once the centreline lights on the de-icing pad are switched on resp. the mobile light towers on at least one de-icing pad have been positioned, taxiway S in the corresponding area is automatically closed. The de-icing providers deploy a minimum of two and a maximum of four de-icing vehicles with closed baskets on each de-icing pad; these operate on either side of the aircraft to be de-iced. Positioning areas have been marked for these devices, ensuring sufficient safety clearance up to the maximum determined wingspan (see chapter 3, De-icing Pads) for aircraft taxiing to and from the pad. For the de-icing of aircraft with a larger wingspan, the de-icing vehicles have to be positioned with sufficient safety clearance. DFS (STUTTGART GROUND) informs the drivers of the respective de-icing vehicles in advance.

De-icing can be performed with running engines on jet aircraft and aircraft types ATR42/72 with working propeller brakes. The so-called 'crossover procedure' for propeller-driven aircraft in which one or the other engine is alternately switched off is also permitted. In this case, the de-icing provider must ensure by his own means that a de-icing operation of the wings is only performed on the side of the aircraft on which the engine has been switched off. If de-icing vehicles with open baskets are deployed on the de-icing pads, the aircraft engines must be switched off. Additional restrictions may apply for the individual airline companies due to special internal security requirements.

If the assigned de-icing pad is still occupied when an aircraft approaches, parking positions and individual sections of the taxiway in the proximity of the de-icing pad can be used as a temporary waiting position in certain cases.

Before reaching the de-icing pad, the aircrew is instructed by Stuttgart ground control (STUTTGART GROUND) to contact the de-icing team on the applicable air band radio frequency. Aircraft may only taxi onto the de-icing pad with the approval of the de-icing teams. The de-icing team reports the correct positioning for the aircraft to be de-iced via radio to the aircrew. During de-icing of aircraft types with a fuselage length of over 50 m (e.g. Boeing 757-300, Boeing 767-300) Taxiway N is no longer available without restrictions (see also chapter 11. Ground Traffic).

Before each de-icing operation, the de-icing team must ensure that the aircrew has set the parking brake and all other de-icing preparations on the aircraft side have been completed. After the aircrew has communicated which parts of the aircraft are to be de-iced, the de-icing team starts the de-icing operation and indicates which de-icing fluid is being used.

Once de-icing is completed, the de-icing team confirms that the aircraft parts for de-icing are free from ice and snow and the de-icing pad has been cleared of all vehicles. The aircrew is instructed to contact Stuttgart ground control (STUTTGART GROUND) again for start-up clearance (if necessary) and taxi instructions.

## 10. Transfer of Information

The FSG provides de-icing providers with the web-based CSA tool Web-CaeSAr, which contains an overview of all of the respective provider's departures that have submitted a de-icing request. De-icing providers can use this overview to plan their human and equipment resources as needed.

The de-icing providers send an overview of all executed pre-de-icing operations by fax or email in accordance with the concluded agreement before 06:30 hours to the DFS, the FSG Traffic Operations Center and the Security and Maintenance Operations Centre.

Communication between the partners involved in the operative de-icing process is described in detail in other sections of this document.

## 11. Taxiing Traffic

While the de-icing areas are occupied by de-icing vehicles and/or light towers, taxiway S in the respective section cannot be used for taxiing traffic. In this case the corresponding part of taxiway S is automatically put out of service by the Airside Operations Manager.

Since taxiway S is not available, aircraft positioned with the nose facing southeast cannot taxi out westbound, nor can aircraft facing southwest taxi out eastbound from the respective de-icing pad.

Taxiway N is generally used to taxi onto the de-icing pads. Taxiway S is always used to taxi out. A diagram can be found in chapter 15.

When de-icing operations have been finished and all of the vehicles have left, the area of the de-icing pad including the adjacent section of taxiway S can only be used by taxiing aircraft after an inspection has been performed by the Airside Operations Manager.

When aircraft with a fuselage length of over 50 m occupy the de-icing pads, restrictions apply to the use of taxiway N in the corresponding area.

The following restrictions apply to the availability of taxiway N:

ACFT on de-icing pad	Examples	Limit TWY N
Fuselage length up to 55 m	C17, A306, B753, B763	WSPAN up to 52 m
Fuselage length up to 60 m	DC10, IL96, B74S, A332, A342	WSPAN up to 45 m
Fuselage length up to 65 m	B764, B772, MD11, A333, A343	WSPAN up to 38 m
Fuselage length up to 71 m	B747, A345, A124	WSPAN up to 29 m
Fuselage length over 71 m	B773, B77W, A346, C5	n/a

When an aircraft with a fuselage length of over 65 m occupies a de-icing pad, a FSG follow-me vehicle must be used to guide ground traffic on taxiway N. Depending on the traffic situation, it must be checked whether an aircraft on taxiway N can pass along the de-icing pad by guidance of a follow-me vehicle and taxiing north of the taxiway centreline.

## 12. Vehicle and Passenger Traffic

Only authorised vehicles may be operated on the de-icing areas during de-icing operations. This includes de-icing vehicles and the light towers provided for lighting. No other vehicles may drive on the de-icing areas, nor are persons permitted on the de-icing areas outside of the authorised vehicles during de-icing operations. If this is necessary for operational reasons, authorisation to drive a vehicle on the de-icing pads must be obtained from FSG Airside Operations prior contacting DFS aerodrome control. The traffic and safety rules for restricted areas at Stuttgart Airport apply to such other vehicles and persons on the de-icing areas.

Before a de-icing pad can be occupied, the de-icing vehicles must report to the DFS via mobile phone or service radio to obtain clearance to drive onto the respective de-icing pad. During de-icing, vehicles and devices that need to be brought onto the de-icing pads for operational purposes may only cross taxiway N in the area of the given de-icing pad from the road if clearance has been obtained from the DFS and by taking a direct path. Likewise, all vehicles must obtain express clearance from the DFS before crossing taxiway H. In individual cases, vehicles may be exempt from taking a direct path under special circumstances (e.g. poor road surface conditions).

Unobstructed, short-term parking for vehicles and devices is available nearby on the areas marked for de-icing devices south of the centreline of taxiway S. Ground handling equipment required for use by ground handling services (e.g. ground power units) are provided on the nearest equipment parking area.

During de-icing operations, vehicles and devices must be completely disconnected from the aircraft, with the exception of any required ground power unit.

When closing a de-icing pad, the last de-icing vehicle must contact the DFS by mobile phone or service radio to sign out after leaving the de-icing pad.

## 13. Lighting of the De-icing Pads

Lighting for the de-icing pads is provided by two mobile light towers on each side of the positioning area for de-icing vehicles. Provision of the light towers is requested immediately by the FSG Traffic Operations Center from the shift management of the FSG ground handling service as soon as de-icing is foreseen or specifically requested by the de-icing provider. The FSG ground handling service always equips all four de-icing pads with light towers, regardless of the de-icing capacity actually required. The light towers are set up by FSG ground handling service staff. The maximum height restrictions must be observed when moving the light towers. FSG ground handling service staff, the marshalls or the de-icing teams switch the light towers on and off and adjust their position as needed. If there are already de-icing vehicles on the respective de-icing pad, the light towers are switched on by FSG ground handling service staff. Any technical malfunctions that occur during operation of the light towers must immediately be reported by the team leader of the respective de-icing pad to the FSG Traffic Operations Center. The shift management of the FSG ground handling service will arrange for the malfunctioning device to be replaced.

## 14. Pre-de-icing and other De-icing Procedures

De-icing providers can conduct a pre-de-icing procedure with a contractual partner on aircraft parked at Stuttgart Airport. All pre-de-icing operations must be completed before 06:00 hours and may only be performed on aircraft parked overnight with a scheduled off-block time (SOBT) of 07:30 hours local time at the latest. Pre-de-icing operations can also be performed on individual aircraft with long turnaround times with the approval of FSG Airport Operations department.

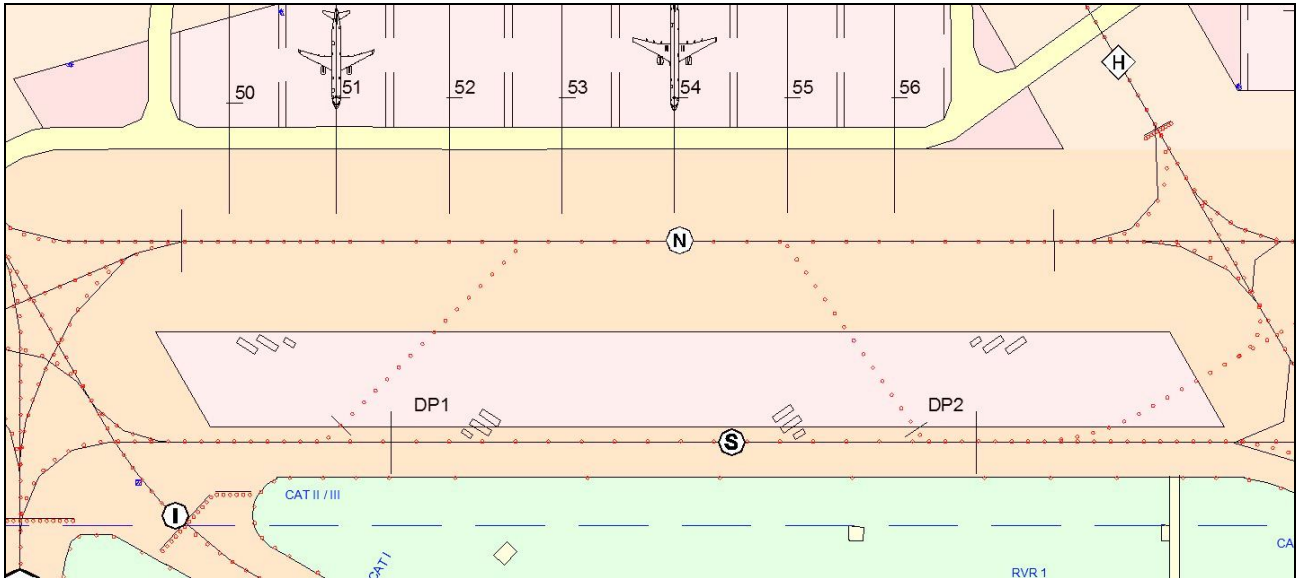
An overview of all aircraft on which pre-de-icing has been performed, specifying the applicable amount of de-icing fluid, must be submitted by the de-icing providers by 06:30 hours to the DFS, the FSG Traffic Operations Center and the Security and Maintenance Operations Centre by fax or by email. The FSG Traffic Operations Center will then request the service of a special vehicle from the Security and Maintenance Operations Centre to collect the de-icing fluid remaining on the relevant parking positions.

De-icing providers may perform propeller de-icing and under-wing de-icing on the parking positions after notifying the FSG Traffic Operations Center in advance. Any de-icing fluid remaining on the apron must also be collected immediately by a special vehicle. This must likewise be requested by the FSG Traffic Operations Center from the FSG Security and Maintenance Operations Centre by telephone.

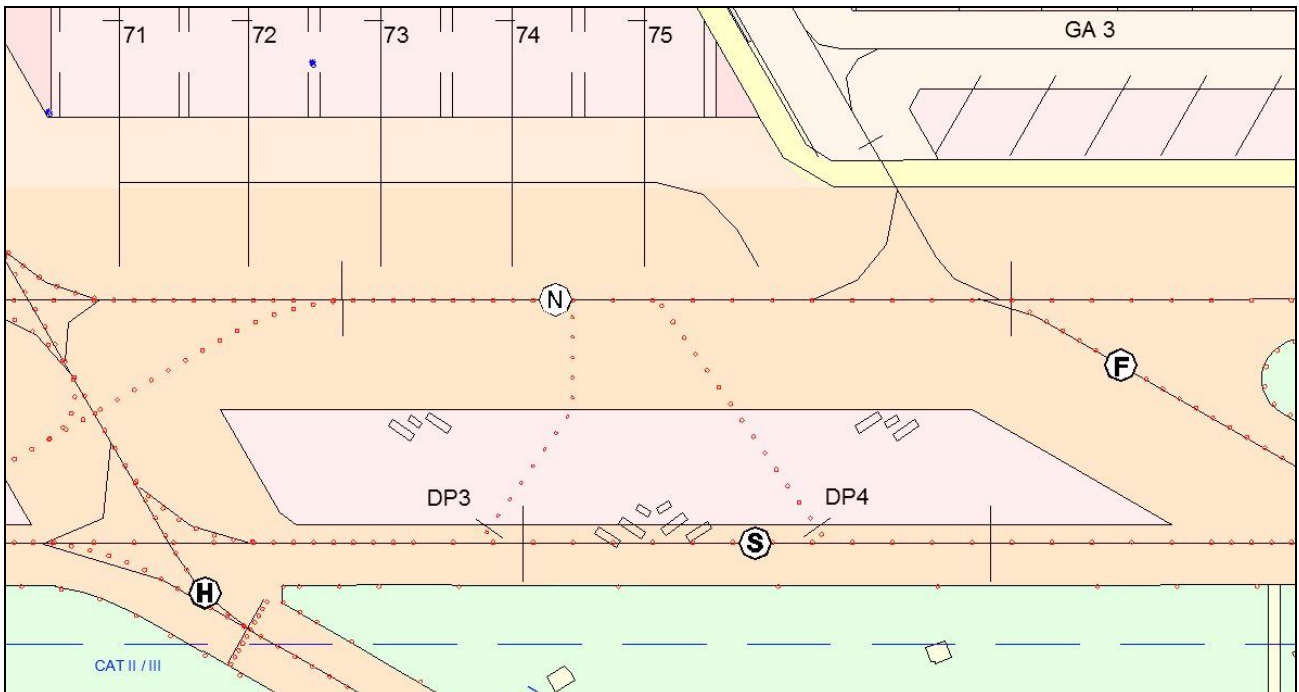
Fan blade de-icing using hot air may only be performed by authorised technical staff and must undergo inspection afterwards. The required heating devices are provided by FSG ground handling service on request.



## 15. Overview Maps



De-icing pads DP1 and DP2



De-icing pads DP3 and DP4

## 16. Glossary

Abbreviations and definitions from the Stuttgart Airport aircraft de-icing plan:

ACFT	Aircraft
ACZT	Actual Commencement of De-icing Time
ADIT	Actual Duration of De-icing Time
AEZT	Actual End of De-icing Time
Airport CDM (A-CDM)	Airport Collaborative Decision Making
AIP	Aeronautical Information Publication
ATC	Air Traffic Control
ATC flight plan	Flight plan for conducting a flight according to instrument flight rules
CSA-Tool	Common Situational Awareness Tool
CTOT	Calculated Take-off Time (ATC)
De-icing	Application of aircraft de-icing fluids for removing frost, snow, slush and/or ice on aircraft
DFS	Deutsche Flugsicherung GmbH
DP	De-icing Pad
DPI	Departure Planning Information
ECZT	Estimated Commencement of De-icing Time
EDDS	Stuttgart Airport (ICAO-Code)
EDIT	Estimated Duration of De-icing Time
EEZT	Estimated End of De-icing Time
EOBT	Estimated Off Block Time (ATC)
EXOT	Estimated Taxi-Out Time
FSG	Flughafen Stuttgart GmbH
ICAO	International Civil Aviation Organization
MHz	Megahertz
NMOC	Network Manager Operations Centre (EUROCONTROL)
Person responsible for TOBT	The organisation unit appointed according to A-CDM procedures responsible for TOBT maintenance.
Pre-Departure Sequencing	Following A-CDM procedure based on the sequence determined by local and network capacities for issuing start-up clearance
RTS	Return to stand

Glossary (continued):

SOBT	Scheduled Off-Block Time
TOBT	Target Off-Block Time
TSAT	Target Start-up Approval Time
TTOT	Target Take-off Time
TWY	Taxiway
Web-CaeSAr	Web-based CSA tool for persons responsible for TOBT and the de-icing provider
WSPAN	Wingspan