

Facts and Figures

Preparations for winter 2012/2013

Optimising the processes, systems and infrastructure

Improved communication / Shorter decision paths

- Since June 2012, representatives of the airport company, GlobeGround Berlin, Lufthansa¹, airberlin and Deutsche Flugsicherung (German Air Traffic Control) have been meeting regularly within the framework of a workgroup to identify optimisation possibilities concerning the pending winter and to implement realisable measures.
- Improving decision and co-ordination processes by means of the following measures:
 - The GlobeGround Berlin De-Icing Co-ordinator is now based directly in the Airport Control Center (ACC) from where all handling processes are controlled and monitored.
 - The Winter Services Headquarters have also been relocated to the ACC.
 - Daily briefing with all companies involved
- Specification of time monitoring for the estimated time of departure (ETD)
 - Realisation of IT interfaces between air traffic control and airport systems
 - This permits automatic incorporation of the EOBT (Estimated Off Block Time or the time at which the cleared aircraft is likely to leave its parking position) and CTOT (Calculated Take Off Time or the time slot assigned by air traffic control for take-off) in the central flight information display systems to which all partners have access during the handling process.
 - This enables everyone involved in the process to plan and avail of the resources and processes more efficiently, e.g. towing and de-icing processes.

¹ Lufthansa also represents the interests of other airlines operating at Tegel Airport.

- These measures enable information to be exchanged faster between all of the partners involved in the process and decisions made which facilitate even more efficient handling and de-icing processes.

Parking spaces / Apron

- Vehicle parking spaces and three parking positions for aircraft have been readied in the civilian section of TXL North which can be used for nightstop parking.
- An equipment storage area was set up near Terminal C3.
- An additional taxiway crossing was also realised, thereby relieving the two crossings already available. The travel times between outer positions, operation buildings / service areas and positions at the terminals are shorter.

Passenger service

- Increased traffic volumes since June have led to the deployment of additional internal employees for handling and providing information to flight passengers.
- Support is also provided by external service-providers in the form of:
 - Mobile passenger service
 - Queue control at the security checkpoints and in transfer areas
 - Improved passenger orientation and guidance

Winter services at Tegel and Schönefeld

- Provided by the airport company at both airports
- Support provided by seasonal staff and external service-providers
- The winter services cover the entire range: clearing the runways, taxiways, aprons, service roads as well as all land-side roads, paths and car parks.

Movement area to be cleared:

- Tegel: 130 hectares (≅ approx. 180 football pitches)
- Schönefeld: 140 hectares (≅ approx. 195 football pitches)

Personnel

- Up to 200 personnel will be deployed for winter services at Schönefeld and Tegel.
- 30 special vehicle operators per airport are deployed in two-shift operation; an emergency service is on call at night; employees are notified by the fire service.

Fleet

- Around 80 winter service vehicles are deployed at Schönefeld and Tegel, including 45 airport-specific large snow ploughs (e.g. spreaders with a 24-metre working width and jet sweepers with a clearing width of 3.5 metres).
- The availability of technology is ensured by the vehicle service in a two-shift system.

Gritting material

- The following materials are used:
 - Calcium formate / Granulate
 - Potassium formate / Liquid
 - Expanded shale / Sand
- Chemical agents (formates) based on formic acid
- Stand-by service provided by two suppliers
- Reorders possible 24/7
- Reorders delivered within max. 48 hours
- Average consumption of supplies in winter: 600 tonnes of solid materials and 1000 tonnes of liquid
- Duration of a de-icing process (one runway incl. taxiways): approx. 30 minutes (very much dependent on weather conditions)

Aircraft de-icing by GlobeGround Berlin

- Designated space or remote de-icing depending on weather conditions
- 5 de-icing positions per approach path (remote)
- Responsible at Berlin's Schönefeld and Tegel Airports: GlobeGround Berlin GmbH (GGB)
- The use of aircraft de-icing fluid (ADF) depends on the size of the area to be treated, the prevailing intensity of precipitation and temperature.
- De-icing is not automatically necessary during periods of dry cold below zero degrees.
- At temperatures above zero degrees (to 15 °C), high air humidity can cause ice on undercooled wings, for example.

- The duration of the de-icing operation depends on the aircraft size, weather conditions and type of de-icing involved. On average, standard aircraft de-icing takes between 10 and 20 minutes.
- Depending on the weather, precipitation and type of aircraft, approx. 150 litres of ADF can suffice. In the case of heavy snow however, several thousand litres of de-icing fluid may be required.

De-icing vehicles, personnel and training

- TXL: total of 15 vehicles, SXF: total of 6 vehicles
- TXL: 105 employees, SXF: 40 employees
- Vestergaard Elephant Beta and Gamma de-icing vehicles are maintained and kept ready for operation by specially trained employees in GGB workshops.
- The scope of training for new employees comprises a total of seven days, broken down into two theoretical and five practical days; the refresher courses for aircraft de-icing cover a total of two days.
- What's more, a de-icing simulator is to be used for the first time during the practical training modules and for refresher courses.

Operative ADF storage capacity (nominal volume of storage and vehicle tanks)

- TXL: total of 274,300 litres ADF (of which 208,000 litres in the tank depot and 66,300 litres in the actual vehicles)
- SXF: total of 330,000 litres ADF (of which 300,000 litres in the tank depot and 30,000 litres in the actual vehicles)
- The emergency store in Berlin has a capacity of 500,000 litres.
- Considerable volumes of ADF are stored at the interim store in Schkopau.

Changes in winter 2012/2013

As a purely precautionary measure, the following measures have been initiated in preparation for the 2012/2013 winter season:

- Vehicle fleet expanded by a total of five new de-icing vehicles
- Increase in the tank depot capacity
- Increase in personnel capacity
- Modification of the training concept, e.g. deployment of a de-icing simulator and more extensive training as required during the winter season

Comparison of data between winter 2011/2012 and 2012/2013

1. Personnel figures

<i>Personnel</i>	Winter 2011/2012	Winter 2012/2013
TXL	80	105
SXF	40	40

2. De-icing vehicles

<i>De-icing vehicles</i>	Winter 2011/2012	Winter 2012/2013
TXL	11	15
SXF	5	6

3. Storage capacity

<i>Storage capacity</i>	Winter 2011/2012	Winter 2012/2013
TXL	274,300 litres of ADF (of which 228,000 litres in the tank depot and 46,300 litres in the vehicles)	274,300 litres of ADF (of which 208,000 litres in the tank depot and 66,300 litres in the vehicles)
SXF	187,000 litres of ADF (of which 159,000 litres in the tank depot and 28,000 litres in the vehicles)	330,000 litres of ADF (of which 300,000 litres in tank depots and 30,000 litres in the vehicles)
Emergency store in Behala Westhafen	500,000 litres	500,000 litres

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