

Winter Services at Frankfurt Airport

Staffing



2019/20

1,359
people



- Theoretical training (year-round)
- Practical training (starts in summer)
- 4 full rehearsals (November)

De-icing agents



2019/20

3.3 mil
liters



- Supply at the airport:
- 2,200,000 liters of ground surface de-icing (fluid)
 - 200 metric tons of granulated de-icing (agent)
 - 750 metric tons of salt, 160 metric tons of sand
- ... sufficient for 14 days without resupply
- 1,700,000 liters of aircraft de-icing (fluid)
- ... sufficient up to 3 days at full operation.

Expenditures for Winter Services



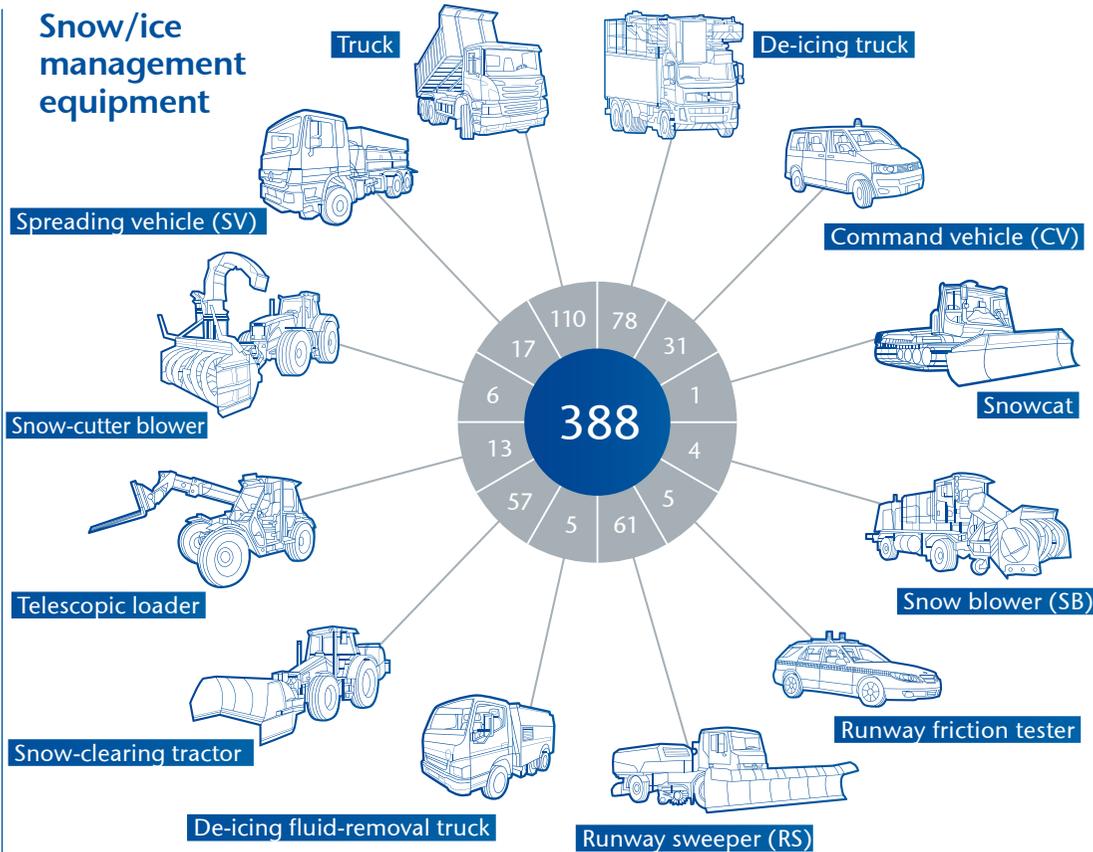
2019/20

21 mil



- Expenditures for:
- Staff
 - Surface de-icing agents
 - Vehicles
 - Maintenance

Snow/ice management equipment



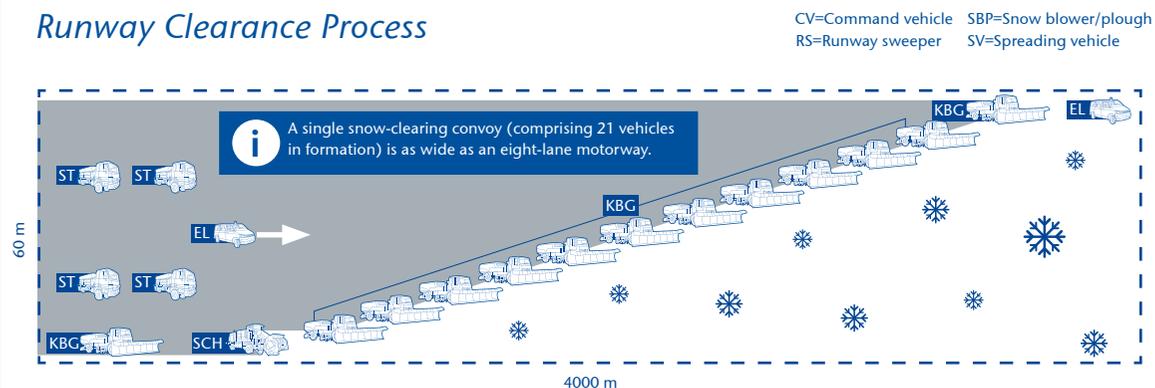
Airside operational areas m²



Runway Center	250,000 m ²
Runway South	250,000 m ²
Runway 18 West	245,000 m ²
Runway Northwest	115,000 m ²
Taxiways	2,330,000 m ²
Apron areas	4,900,000 m ²
Public operational areas:	
Roads	622,000 m ²
Walkways	135,000 m ²
Parking areas	180,000 m ²

9,027,000 m²
Total

Runway Clearance Process



10 cm =
114,000 metric tons*
approx. 6,000 loads

Lined up end-to-end, these trucks would stretch some 60 kilometers (= distance from Frankfurt to Mannheim.)

* The amount of snow on the runways, apron areas and taxiways, by heavy snowfall.

Why can there still be flight delays and cancellations?

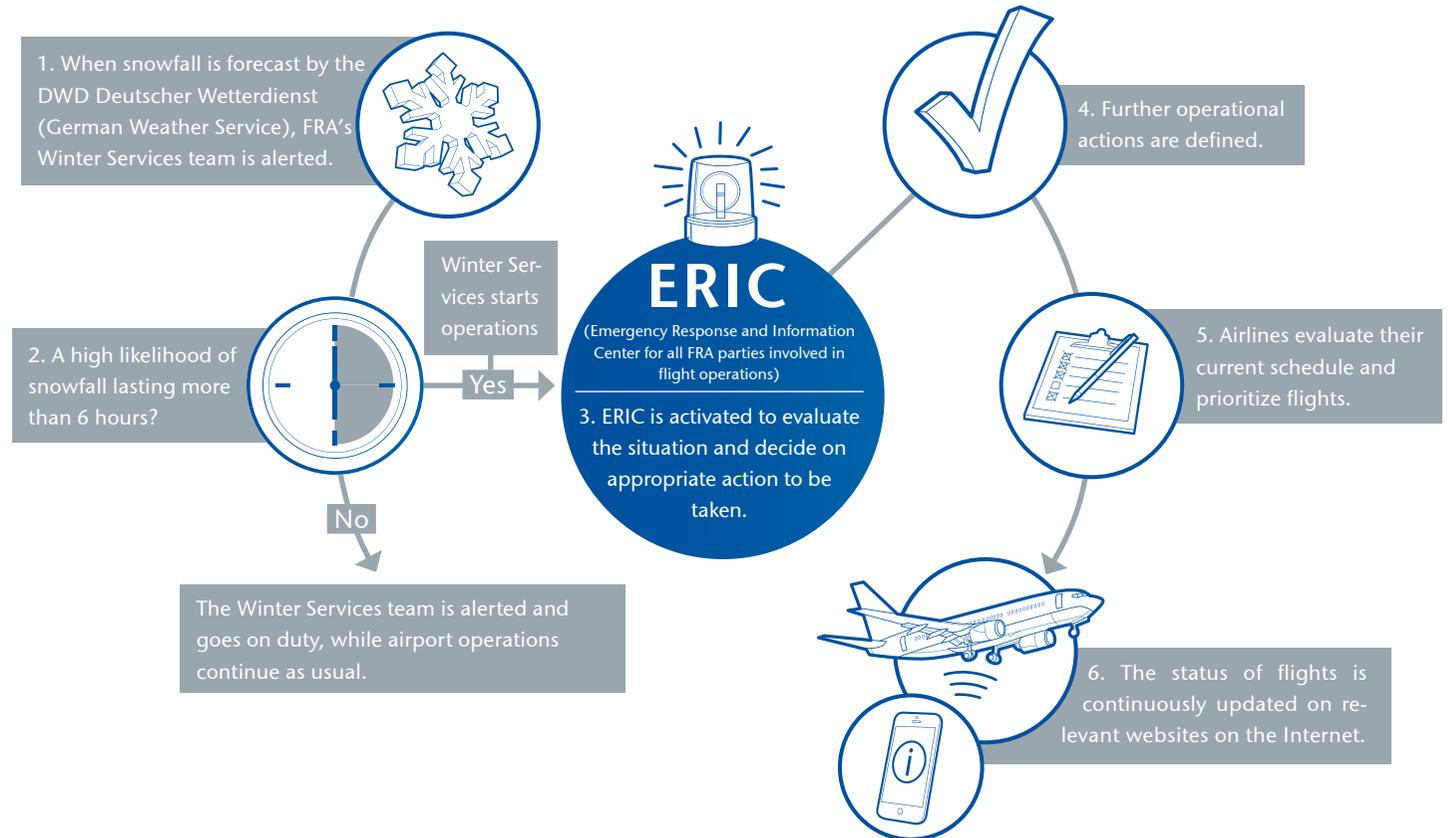
Safety First!

- An average of 1,400 aircraft – carrying more than 200,000 passengers on peak days – take off and land at the Frankfurt Airport global hub every day.
- Winter weather striking this dense schedule of flights may “significantly” affect smooth-running interdependent processes.
- When visibility is impaired, the distances (separation) between individual planes must be increased during take-offs and landings. All of these factors result in delays that may build up throughout the day, causing short-term flight cancellations.
- **Clearing of apron areas:** When “heavy” snowfall conditions occur, Frankfurt Airport’s Winter Services team has to make sure (first and foremost) that the runways are free from ice and snow. Why? Unlike cars on snow-affected roads, aircraft cannot take off or land more slowly. Furthermore, taxiways and operational areas on the apron must remain operational at all times.
- **De-icing of aircraft:** Snow and ice also have to be removed from the aircraft wings before take-off.
- The overriding principle in air transportation is: **safety first!** All parties involved are also bound to comply with international safety standards.
- **Prioritization of flights:** When there is enough advance notice about impending severe weather conditions, airlines may decide to take pre-emptive measures by prioritizing their flights and re-booking passengers. Yet, weather conditions can never be precisely forecast and may change quickly.
- We always strive to provide on-time and smooth flight operations. However, our top priority is safety first, so that passengers reach their destinations safely.

Average clearing times per runway

Snowfall up to 6 hours	30 min
Continuous snowfall beyond 6 hours	45-60 min
Continuous snowfall beyond 6 hours with formation of frost, snow and ice > 3 cm	> 60 min

What happens when it snows?



Service information for passengers

- 1) Despite numerous efforts to provide smooth flight operations, weather-related factors may still cause disruptions and flight delays.
- 2) During severe weather conditions travel advisories are issued, advising passengers to allow **extra time to reach the airport** and to check in as early as possible on the day of the departure. Passengers are also encouraged to check the flight status on the **website** of their airline and to take advantage of **online or evening-before** check-in services offered by many airlines.
- 3) Should flight operations be affected, extra service staff will be on duty in the terminals to provide information and assist passengers accordingly.
- 4) If possible, airlines will change bookings and reserve seats on other flights with available capacity or on trains of Deutsche Bahn (German Railways). In addition, airlines have reserved a contingent of hotel rooms for passengers unable to get a flight on the same day.
- 5) On occasion, a substantially lower number of flights might have to be cancelled at short notice or some passengers may not be able to leave the transit area of the terminal (no transit visa). For such contingencies, the airport provides sleeping cots, blankets and other amenities, when overnight stays at the airport terminal cannot be avoided.
- 6) Flight information and updates are available on the **airlines' websites** or from the Frankfurt Airport Communication Center by calling 01806-FRAINFO (01806-3724636 – landline price: 0.20/phone call) as well as at <http://frankfurt-airport.com> or via the FRA Airport App.