

Frankfurt

IATA/ICAO CODE: FRA/EDDF
 CITY: Frankfurt
 COUNTRY: Germany

AIRPORT CONTACT

Information updated by the airport 3/2011

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ELEVATION: 364 ft.

RUNWAY INFORMATION				
Orientation	Length (m)	Displaced Threshold (m)	Glide Slope(deg)	Width (m)
07L/25R	4000	-	-	60
07R/25L	4000	-	-	45
18	4000	-	-	45

NOISE ABATEMENT PROCEDURES

2. Noise abatement

Night flying restrictions as well as operational restrictions for civil aviation outside night hours

2.1 Aircraft without a noise certificate in accordance with ICAO Annex 16 are not permitted to take off or land during the entire hours of operation of Frankfurt/Main Airport.

2.2 Aircraft only with a noise certificate in accordance with ICAO Annex 16, Volume 1, Part II, Chapter 2 are not permitted to take off or land during the entire hours of operation of Frankfurt/Main Airport unless, in compliance with Article 11c, paragraph 7 of the German Aviation Regulation (LuftVO), the Federal Office of Civil Aviation (LBA) has issued a certificate of exemption for the aircraft concerned according to Article 11c, paragraphs 4 - 6 of the LuftVO, or a Member State of the European Union has granted an exemption in compliance with Article 11c, paragraph 8 of the applicable version of the LuftVO.

2.3 The following operational provisions shall apply to aircraft only marginally complying with ICAO Annex 16, Volume 1, Part II, Chapter 3 pursuant to Article 48a No. 4 of the Regulation on Certification and Licensing (LuftVZO):

2.3.1 Take-offs and landings are not permitted between 1900 (1800) and 0700 (0600) unless aircraft have been granted an exemption in accordance with Article 48 f paragraph 1 of the LuftVZO or an individual exemption in compliance with paragraph 2 of the regulation.

2.3.2 Aircraft arriving late or early, the landing of which is planned after the Slot allocated by the Airport Coordinator outside the times in which operational restrictions apply up to 1900 (1800) or from 0700 (0600) may land up until 2100 (2000) and from 0500 (0400) provided that the late or early arrival was not envisaged as such in the flight plan (Article 25 of the LuftVO).

2.4 The following restrictions shall apply to aircraft that do not only marginally comply with ICAO Annex 16, Volume 1, Part II, Chapter 3 pursuant to Article 48a No. 4 of the LuftVZO, and to aircraft fulfilling the provisions of ICAO Annex 16, Volume 1, Part II, Chapter 4:

2.4.1 Take-offs and landings of flights which have not been coordinated by the Airport Coordinator at least one day in advance (ad-hoc charter, in particular individual flights on specific grounds without public interest) are not permitted between 2100 (2000) and 0500 (0400).

2.4.2 Take-offs and landings to carry out practice, check and training flights are not permitted between 2200 (2100) and 0500 (0400).

2.4.3 Landings of all kinds of flights are not permitted between 2300 (2200), and 0400 (0300).

2.5 Delayed take-offs to be conducted in a period of restricted operations by an aircraft complying with the restrictions require individual permission by the local aviation supervision office. This permission may be granted only if the delay is due to reasons beyond the control of the airline concerned. Delayed take-offs are not permitted between 2300 (2200) and 0400 (0300) unless they comply with the condition stated in section 2.6.2.

2.6 Exemptions

2.6.1 The following flights are exempt from the operational restrictions according to clauses

2.1 to 2.5:

2.6.1.1 Landings of aircraft approaching Frankfurt/Main Airport as alternate aerodrome for meteorological, technical or other safety reasons as well as take-offs and landings of aircraft rendering medical assistance or on missions in disasters, as well as evacuation flights.

2.6.1.2 Flights for reasons of special of public interest.

2.6.2 The following flights are exempt from the operational restrictions according to clause 2.4:

2.6.2.1 Take-offs and landings of aircraft conducting flight checks on radio and radar as well as airport facilities.

2.6.2.2 Aircraft, the operators of which are air carriers who have proved to the approving authority that their main base and maintenance facilities are located at Frankfurt. However, such aircraft are not permitted to land between 0000 (2300) and 0300 (0200).

2.6.3 In addition, the approving authority may grant exemptions from the operational restrictions only in cases of particular hardship and upon application. There is no particular hardship involved if the operational restriction makes the planning of aircraft in circulation more difficult for the air carrier or if it requires arrangements for passenger transfer and/or accommodation.

Hessisches Ministerium für Wirtschaft, Verkehr und Landesentwicklung
– Referat V 1 –
Kaiser-Friedrich-Ring 75
65185 Wiesbaden – Germany
Fax: 0611 815 2223

The application shall contain:

- Name and address of the air carrier and the aircraft operator,
- Aerodrome of departure or destination,
- Radio call sign of the aircraft,
- Type, year of construction, and noise certificate of the aircraft in compliance with Article 11c of the LuftVO,
- Time of departure or landing for which the exemption has been requested.

The reasons for the application shall be specified; in particular, the applicant shall confirm that the aircraft will be flown by a pilot who is familiar with the noise abatement procedures at Frankfurt/Main Airport.

If detailed reasons cannot be given due to urgency, these reasons shall be submitted subsequently in writing within 24 hours to the "Hessisches Ministerium für Wirtschaft, Verkehr und Landesentwicklung" or to the local aviation supervision office at Frankfurt/Main Airport.

2.7 Take-off or landing clearances issued by ATC as well as other clearances do not automatically include the necessary exemption by the approving authority. ATC will not issue exemptions via radiotelephony.

The pilot shall report landings of aircraft outside the times permitted, which have not previously been approved, and justify them in writing to the local aviation supervision office

after landing.

2.8 Reverse thrust may not be used on the entire runway system of Frankfurt/Main Airport except for safety reasons in unavoidable cases. This does not apply to idle reverse thrust.

2.9 On the entire operating areas of Frankfurt/Main Airport including aircraft hangars and their aprons, taxi processes which do not take place prior to take-off or after the landing of an aircraft may be carried out using airplane tractors only and not by means of engine power.

Intensification of Noise Regulations at Frankfurt

Airline customers received notice of new noise regulation at the airport as part of the realization of the new landing runway. The first stage of the noise regulation was implemented on October 25th 2009. The second phase of the new noise regulations will be effective with the opening of the new runway on October 30th 2011.

CONTINUOUS DESCENT ARRIVAL (CDA)

CDA is applied from 11 pm until 5 am regularly. If possible (capacity) it begins earlier than 11 pm and ends later than 5 pm, but due to capacity-constraints it is not possible in FRA to operate CDA during daytime (in Germany: 6 am to 10 pm).

AIRPORT CURFEWS

See Noise Abatement Procedures above.

PREFERENTIAL RUNWAYS

1.1 Preferred Landing Direction Landing direction 25 will preferably be assigned to landing aircraft provided the tail wind component does not exceed 5 kt. However, the landing direction will be changed, even if the tail wind component is less than 5 kt if braking action on the runways is impaired by ice, snow, slush, etc.

OPERATING QUOTA

Noise quota system

A noise quota system has been used at Frankfurt Airport since the 2002 summer timetable as an active step toward reducing noise from nighttime flying between 23:00 and 05:00.

The quota count is related to the seven aircraft noise classification categories (See information under noise surcharges below). For example, a flight movement of a category 1 aircraft uses up one point of the quota count allowance. The number of points doubles with each higher noise category – i.e., each flight movement in category 2 uses up two points, in category 3 as many as four points, and so on. Quota limits have been set on a seasonal basis; i.e., different quotas apply during the summer timetable than during the winter timetable. The permissible total number of points for all movements scheduled (coordinated quota count points) was reduced by 5 percent compared to the summer 2000 and winter 2000/2001 timetable period. The noise quota regime tightened effective with the 2006/2007 winter timetable, when the quotas were reduced by another 5 points.

At the end of each timetable period the airport reviews the situation and shows the extent to which the quota count allowance has been used. If the quota count allowance has not been used in full in the current season, one third of the unused points can be carried over. Any overrun correspondingly reduces the quota for the next timetable period.

ENGINE RUN-UP RESTRICTIONS

3.1.4 Engine test runs and run-ups as well as extensive maintenance work on aircraft at the positions are not permitted. Apron control may grant exceptions in justified cases.

3.1.5 Ground and test run-ups of engines with a performance level greater than IDLE may be carried out only in the noise suppression facilities intended for this or on the authorized areas (run-up positions) on the manoeuvring area. During these engine test run-ups, continuous radio contact with ATC shall be ensured. The personnel employed for the purpose shall have the necessary qualifications (licences).

APU OPERATING RESTRICTIONS - NONE

NOISE BUDGET RESTRICTIONS - NONE

EMISSIONS SURCHARGE

[**Airport Charges including Emissions Charges effective April 1 - Oct 1, 2011**](#)

NOISE SURCHARGE

[**Airport Charges including Emissions Charges effective April 1 - Oct 1, 2011**](#)

NOISE MITIGATION/LAND USE PLANNING PROGRAM INFORMATION

Type of Program	Date Implemented	Status
Sound Insulation (Residences and Public Buildings)	2001-2006 (Applications)	80% completed
Purchase Assurance for Homeowners Located Within the Airport Noise Contours	-	-
Avigation Easements	-	-
Zoning Laws	-	-
Real Estate/Property Disclosure Laws	-	-
Acquire Land for Noise Compatibility to date	-	-
Population within each noise contour level relative to aircraft operations	-	-
Airport Noise Contour Overlay Maps	-	-
Total Cost of Noise Mitigation Programs to Date	-	-
Source of Noise Mitigation Program Funding for Aircraft Noise	-	Surcharge on Landing Charges

NOISE MONITORING SYSTEM

[Map of Noise Monitor Locations provided by the airport 3/2011](#)

Noise monitoring has taken place at Frankfurt Airport since 1964. The actual Noise Monitoring System was set into operation in 1988. It meets the requirements laid down in the Air Traffic Act (LVG).

One of the most important system requirements is the automatic correlation of noise data with aircraft movements and weather conditions to identify the source of noise impact.

The Noise Monitoring System (NMS) incorporates the following functions:

- continuous monitoring of noise pollution in the vicinity of the cities, towns and settlements
- separation of aircraft noise and other noise
- processing aircraft noise data
- correlation of aircraft noise to the flight movements concerned
- compilation of evaluations and statistics
- maintenance of configuration parameter data and base data

The Noise Monitoring System comprises:

- 26 measuring points in the vicinity of the airport
- 5 measuring points located at the runways (to configure time-windows)
- a mobile monitoring station
- the central unit, consisting of
 - a real-time computer to
 - display current noise and aircraft data, also weather and frequency data
 - correlate this data automatically and/or with user interaction
 - fill in missing data - correct data
 - a database computer
 - to display and store maintenance and base data (10 years available)
 - for statistical distribution of noise levels and flight movements, weather conditions
 - for aircraft type and airline noise levels, standard aircraft-specific noise levels
 - to generate a Noise Report and special reports (i.e. for single and different purposes)

The implementation of a local area network (LAN) offers a possibility to expand the system by computers and peripheral equipment with existing and future systems at the airport.

The data (reports and calculations) obtained by this system are used for:

- the calculation of the landing charges at Frankfurt airport (partly),
- forecast data of noise and air-traffic development
- information for the noise abatement officer and the airline representatives
- testing and monitoring flight procedures
- dealing with complaints from the residents of the airport's vicinity

Noise values are calculated in accordance to DIN 45643 (3.1.1) in terms of L_{AZ} expressed in units of dB(A). This unit of effective noise takes into account, first the actual sound energy received on the ground, second an approximation of the ear's response to that sound energy, and third a time duration value of the noise. If the noise does not exceed L_{ASmax} = 70 dB(A) a standard value is used for calculation.

Aircraft are assessed and collected according to their take-off weight, to the number of engines and to their ICAO Annex 16 certification.

Approach noise caused by approaches on Runway 25 is measured at Monitoring Point 1 (MP 1) located approximately 6.5 nm before threshold, on Runway 07 at MP 5 (4 nm).

Departure noise is measured in approximately 6.5 nm after break release at a gate of 2 monitoring points located half a mile left and right of the route.

Type Level

The Type Level is an average noise level of all companies using a similar type of aircraft. The sum of all (minus 5% of the quietest and minus 5% of the noisiest flights) L_{AZ} caused by this type of aircraft is divided by the number of approaches or departures. The Type Level allows to differentiate between avoidable and unavoidable noise. It is the measure used for all further comparison.

Fleet Noise Level

Each company (recorded and identified by flight number) has its own Fleet Noise Level. This is the sum of all L_{AZ}'s recorded from each individual company with a similar type of aircraft and divided by the number of measured approaches or departures.

Rank Order

The Rank Order of each company depends on its Fleet Noise Level. The company with the lowest average noise level on arrival or departure is ranked number 1 with the other companies following in order of their noise levels produced.

Excesses

Flights producing sound levels double the Type Level are considered to have produced excessive noise i.e. when the sound level is even more than 4 dB(A) above the Type Level. These flights were reported immediately to the company involved via the Larmschutz-Beauftragten of the Hessischen Ministers Fur Wirtschaft und Technik. These are especially emphasized, since they could have been avoided, except in special cases.

Exceptions

When special instructions from ATC to the Pilot or emergencies are the cause for excessive noise levels, then these cases should be reported immediately to the Larmschutz-

Beaufragten who will determine if these were unavoidable noise levels and should be removed from the calculations for that company.

Meteorological Influences

Noise impact is to some extent influenced by the weather. Therefore the calculation of Type Level and Fleet Noise Level is made with out periods of extreme weather conditions.

Extreme weather conditions are relative humidity (<30%), wind component (>20 KT), and temperature (>25 degrees C), measured at the airport.

FLIGHT TRACK MONITORING SYSTEM

Yes

NOISE LEVEL LIMITS

See noise monitoring system for details.

CHAPTER 2 RESTRICTIONS

Note: Information is shown below regarding special permit landings or other special movements for Chapter 2 airplanes. Generally speaking, Chapter 2 airplanes are not permitted to operate at the airport.

2.2 Aircraft with a noise certificate in accordance with ICAO Annex 16 Volume 1, Part II, Chapter 2 are not permitted to take off or land as follows:

from 1 NOV 99 1900-0700(1800-0600) on all weekdays

from 1 APR 2000 in addition Sat 1900 (1800) - Mon 0700 (0600)

from 1 APR 2001 in addition Fri 1900 (1800) - Mon 0700 (0600)

Chapter 2 airplanes >75,000 lbs are banned from operating at airports in EU Member States as of April 1, 2002.

CHAPTER 2 PHASEOUT

From April 1, 2002 all civil subsonic jet aeroplanes >75,000 lbs operating at airports in EU Member States must comply with the standards specified in Part II, Chapter 3, Volume 1 of Annex 16 in accordance with EU Council Directive 92/14/EEC.

CHAPTER 3 RESTRICTIONS

See information under Noise Abatement Procedures