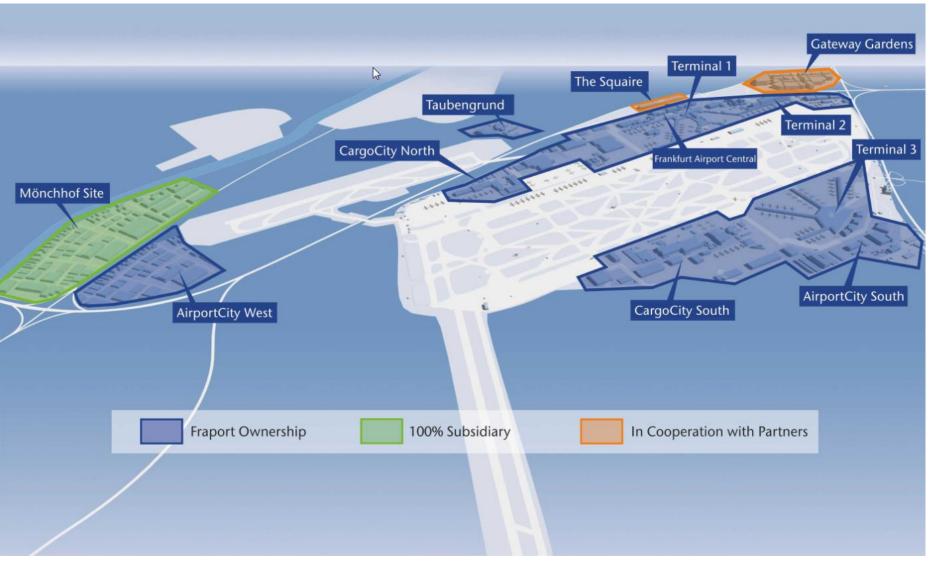


## Frankfurt Airport – an Airport in discussion with the neighbourhood

U. Felscher-Suhr AVN-AL Environmental Impact Noise and Air Quality

Fraport

## In an ongoing process we are developing Frankfurt Airport into an attractive airport city

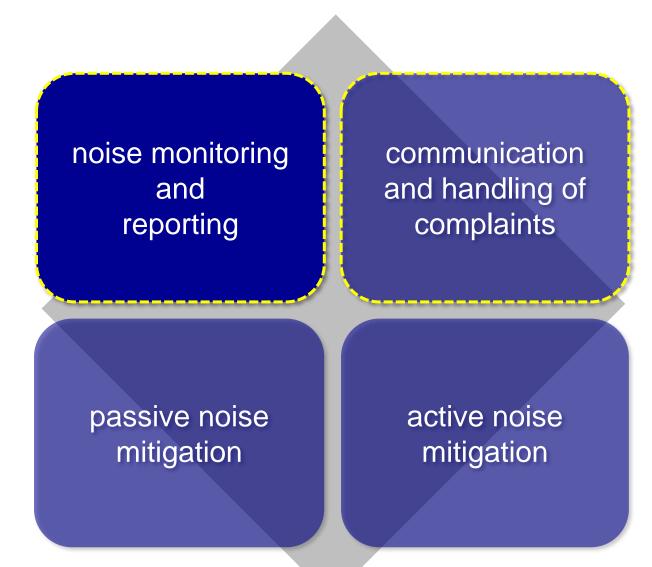


# Therefore we have a long tradition of discussion with our stakeholders on the airport expansion

1998-2000 Mediation	<ul> <li>Discussion if Frankfurt Airport should be expanded with representatives of aeronautical economy, government, communities, civil society</li> <li>Result: Mediation Package: Optimisation of existing airport, expansion of airport, night curfew, anti-noise-pact, regional dialogue forum</li> </ul>
2000-2007 Legal procedures	<ul> <li>Regional planning procedure defines new runway north west as preferred solution</li> <li>Planning approval procedure gives right to construct new runway and expand the airport (e.g. by terminal 3)</li> <li>Afterwards high administrative court confirm the approval</li> </ul>
2000 - 2007 RDF	<ul> <li>Regional Dialogue Forum (RDF) accompanies the legal procedures</li> <li>Discussions about new noise abatement procedures and noise limitations</li> </ul>
Since 2007 FFR	<ul> <li>Forum Flughafen und Region (FFR) as new dialogue platform with the communities and the aeronautical industry</li> <li>Discussion on noise reduction with the expert group active noise abatement</li> <li>Creation of the "ecology and neighbourhood house" as a communication platform</li> <li>Signing of the anti noise package by government and aeronautical industry (2012)</li> </ul>
2011	<ul> <li>Entry into service of new runway north-west on October 20th</li> <li>Night curfew, noise insulation programme</li> </ul>

3

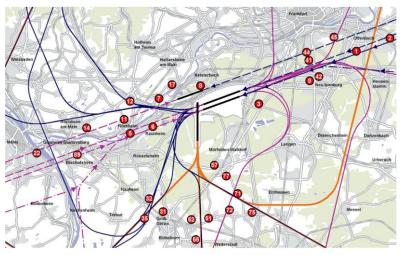
#### Our Community Engagement Strategy - Noise



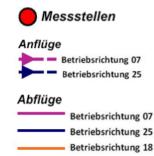
## Noise Monitoring System at FRA

The aircraft noise measuring system at Frankfurt Airport continuously analyses the extent of noise disturbance by aircraft

29 fixed and 3 mobile noise measuring stations along the major arrival and departure flightpaths

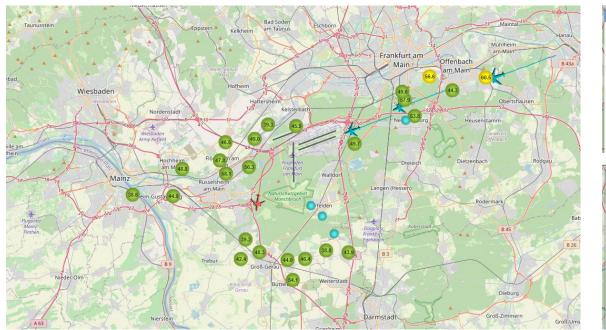






#### Additionally we publish our data visually by Fraport Noise Monitoring FRA.NoM: Transport display poor real time on the Internet

Transparent display near real time on the Internet

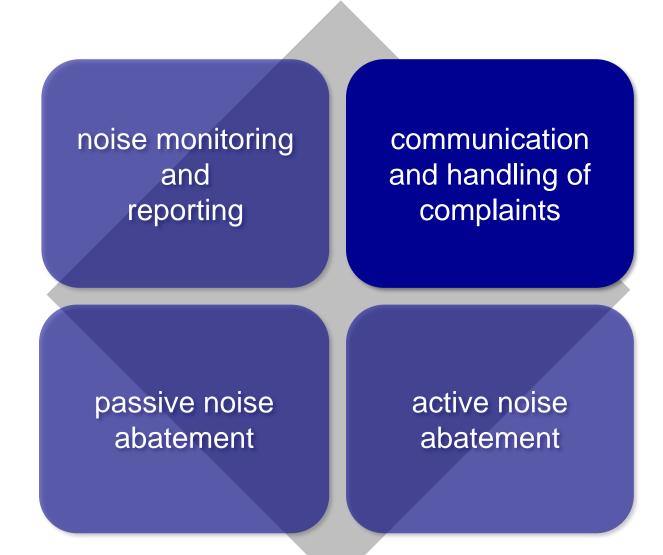




Flug: AA 070			
Flugzeugtyp:	B789		
Fluggesellschaft:	American Airlines		
Runway: Von:	25C Dallas-Fort Worth International		
Höhe über NN:	3370 ft (1030 m)		
Geschwindigkeit:	169 KN (313 km/h)		
15,000			
12,500			
10,000			
≠ 7,500			
5,000			
2,500			
0			
51000	36000 21000		

#### https://franom.fraport.de/franom.php

#### Community Engagement Strategy



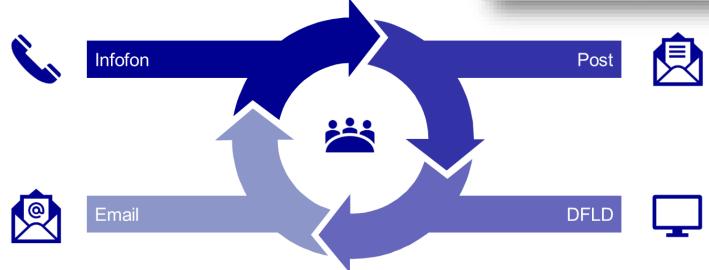
Communication and Handling of Complaints: we offer a dialogue to (nearly) everybody...

Our aim is a high level of transparency by offering facts and figures

- via internet, print media, telephone
- by dating citizen groups and individuals
- answering letters & emails

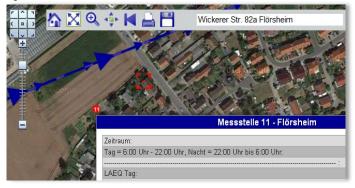
Fraport offers different channels to place requests and complaints on the issue of air traffic noise



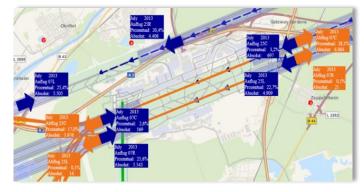


# FRA Map: we offer all information about the airports impact in one single GIS-tool

locate your home and the nearest NMP



learn about the different usage of the runways

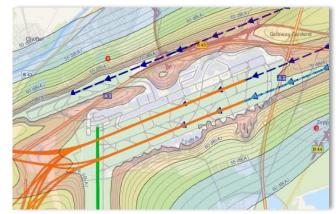


#### https://framap.fraport.de

get a general picture about the flight routes



get information on calculated noise load



# Personal Aircraft Noise Profile – Part of the interactive information portal FRA Map

An individual report on the aircraft noise situation at your own place of residence can be created with just one click.

The report contains:

- detailed information on approach and departure routes and the calculated noise pollution within a 5 km radius around a user specified location.
- Flight activity data per route for the current month and six busiest months of the year
- If applicable, information on possible funding opportunities for soundproofing and / or roof protection measures.

The Personal Aircraft Noise Profile complements the already existing, extensive Fraport information offering around the topics of noise protection and aircraft noise.



#### https://framap.fraport.de

## When additional offer to dialogue with citizens is needed: Info-Mobile in the surrounding areas of the airport

We want the people in the region to enter into direct dialogue. We show that we take their concerns serious. The Fraport Info-Mobile is on its way in the region and particularly in communities where the noise load has increased or will increase due to the expansion of our airport.

#### Focus:

- Airport expansion
- New routes
- Noise abatement programme
- Job opportunities



# FFR initiates research activities concerning community noise effects: The NORAH Study



**Quality of life and annoyance:** The residents of the Frankfurt airport felt more disturbed by noise then in earlier studies. Quality of life is influenced by aircraft noise for those residents who felt strongly annoyed by the noise.



**Health risks:** statistical correlation was identified between aircraft noise and the occurrence of heart insufficiency and depression. Causality still remains unclear.



**Sleep:** Since night flight ban in 2011, residents wake up less frequently at night. People with a rather critical attitude towards flight traffic generally sleep less well than those supporting it.

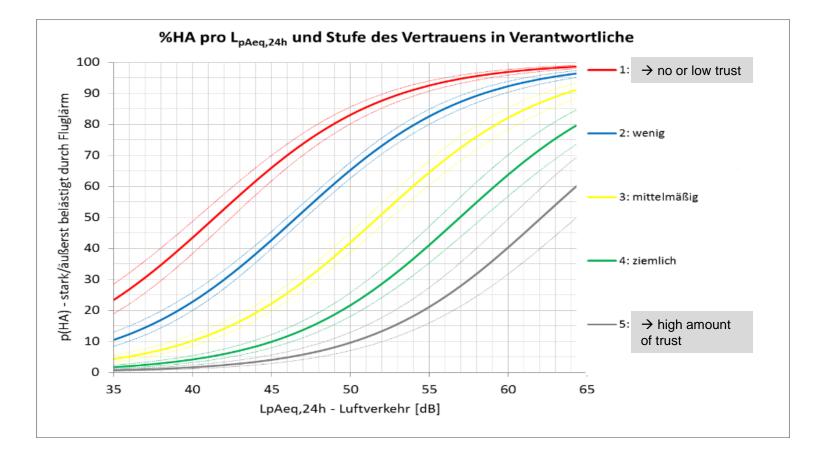


**Blood pressure:** The study did not detect any reliable connection between aircraft noise and blood pressure.



**Children's cognition:** Primary school children learn to read more slowly in areas subject to strong flight noise than in more quiet areas. A noise increase by 10 dB(A) delays learning to read by one month.

If trust in the "noise responsible institutions" rises, the amount of people being highly annoyed by noise can be lowered by up to 40%!



Source: Re-Analysis of data of the NORAH-Study by ZEUS GmbH

#### New ways beyond classical noise abatement



- Noise nuisance is not only perceived exposure to aircraft noise, but an indicator for the acceptance of the major airport by the residents. This is shown by many of the results of noise impact research.
- Measures to reduce aircraft noise have already been exhausted to a very large extent and will only bring further progress in the future at great expense.
- A further key to reduce noise annoyance lies in increasing the basic acceptance of the airport as part of the living environment. This basic acceptance can be promoted through emotional attachment.

#### "Whom I like, his impositions I bear better"

## Building up trust



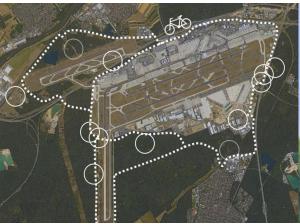
Attractive leisure activities for different user groups (excursionists, families, athletes, children...) combine the fascination of the airport with innovative, environmentally friendly and healthy leisure activities.



Personal experiences create a strengthened relationship with the airport as a neighbor. This increases acceptance for the effects of air traffic. In the long term, increased acceptance leads to a decrease in the perceived nuisance caused by flight operations. The emotionalized debate about the benefits and burdens of the airport can be brought back to a more factual level

#### Airport Adventure Park





Core element of the "Airport Adventure Park" is the already existing bicycle path around the airport. This path is upgraded through structural changes. Leisure activities are placed and signposted along the cycle path. So they can be reached in an environmentally friendly manner and promote sporting activity.

## Last not least: Recommendations from Frankfurt Airport

Type of contact	What is required to establish a good relationship with municipal contacts?	What "rules of the game" are there or can be recommended for mutual interaction?	General recommendations
Politicians	Make contact when people are new to the office to build a relationship in good times. Then, when there's a concern, it's more easy to address it.	Talk to all democratically legitimate parties/people.	Appreciating employees always pays off. It is advisable to seek contact with associations and chambers. If others stand up for you, this can have advantages.
Members of Dialogue Forum	Involve the mayors from all surrounding communities.	All committees should always have equal representation between the neighboring communities and the aviation industry.	A working group "Active Noise Abatement" should be established so that the surrounding communities realize that serious work is being done on the issues.
Communities, residents	The same people should act over a longer period of time so that trust can be built up.	There must be a recognizable benefit for all those involved.	In addition to representative figures, technical experts should also be given authority to act.
Critical partners, members of citizens' initiatives	Bilateral meetings facilitate confidence building	Critical partners do not want to be "bought off", but with understanding for the other position, the dispute is less "hostile"	If the demands of the critical partners are too extreme, they should not be included in a dialogue forum, as no common framework of acceptance can be reached.



# Gute Reise!

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## We make it happen