



Noise passive measures at Prague airport

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Balanced approach

Noise management

- Reduction of noise at source
 - Noise Charges – motivation for quieter planes
- Land Use Planning and Management
 - Noise protection zone - specific rules for construction + Window replacement program
- Operational Procedures
 - ARR/DEP procedures, RWY preference, engine run up, reverse thrust, APU, GPU...
- Operating Restrictions
 - 40 slots at night, AC with more than 10 dB of cumulative difference from the ICAO limit



Noise at night

- 2018 - an increase in **delayed flights** that fell into the **night time**



- Coordination measures - use of CDM (ATS, airlines)
 - Avoiding earlier departures
 - Prevention of night landings without a coordinated night slot
 - Avoiding earlier landings with day time slot at night
 - Limit the number of slots at night to 40, (before 48)
- Increase in charges for breach of coordination rules



- improvement in 2019... Covid and fatal drop in traffic



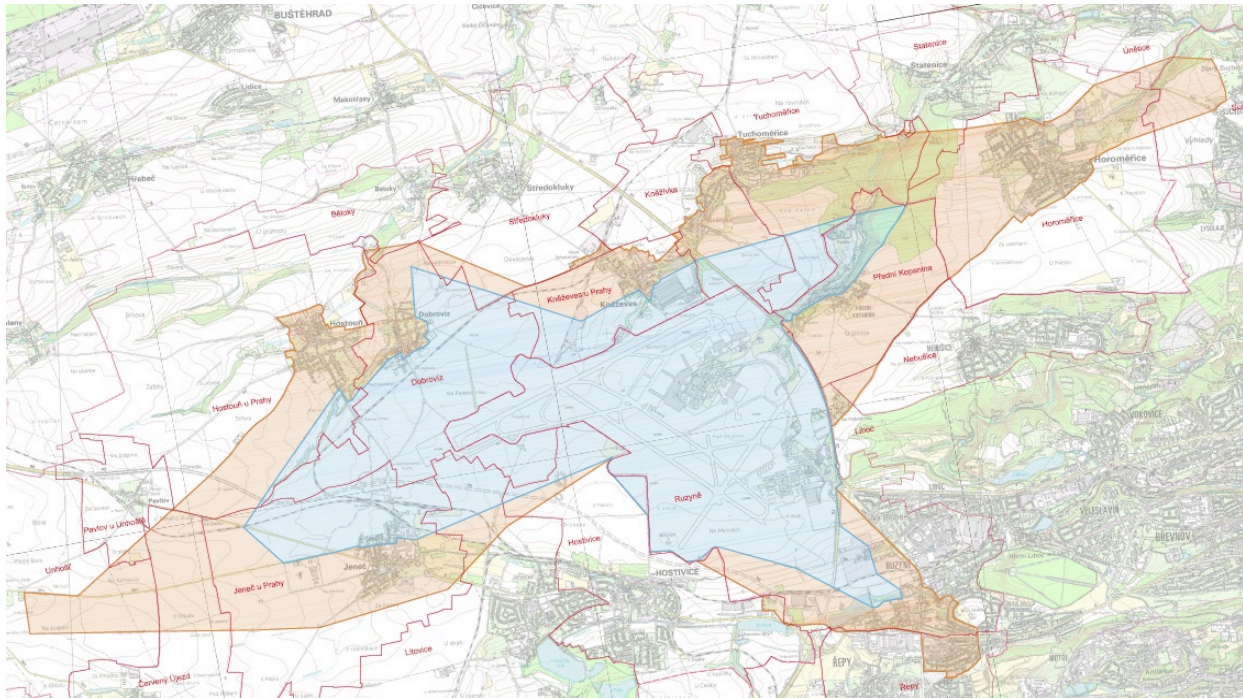
Noise passive measures at Prague airport

- Window replacement program (1998 – 2010)
- Ventilation systém Program (2019 -)



Window replacement

- In order to meet the limit of noise from air traffic for the protected indoor room, windows and balcony doors were replaced on the territory of the noise protection zone.



Indoor noise limits

- $L_{AeqD} = 50$ dB
- $L_{AeqN} = 40$ dB



Window replacement

- The airport decided for a complete exchange and not to assess the compliance with the noise limits for each objects - some compensation for the surrounding municipalities
- The exchange program has already been completed (1998 – 2010), with total costs reaching more than CZK 600 million (15 million €).



Program ventilace



The aim of this program is to reduce the impact of noise from air traffic in the interior protected area of specific property (schools, .

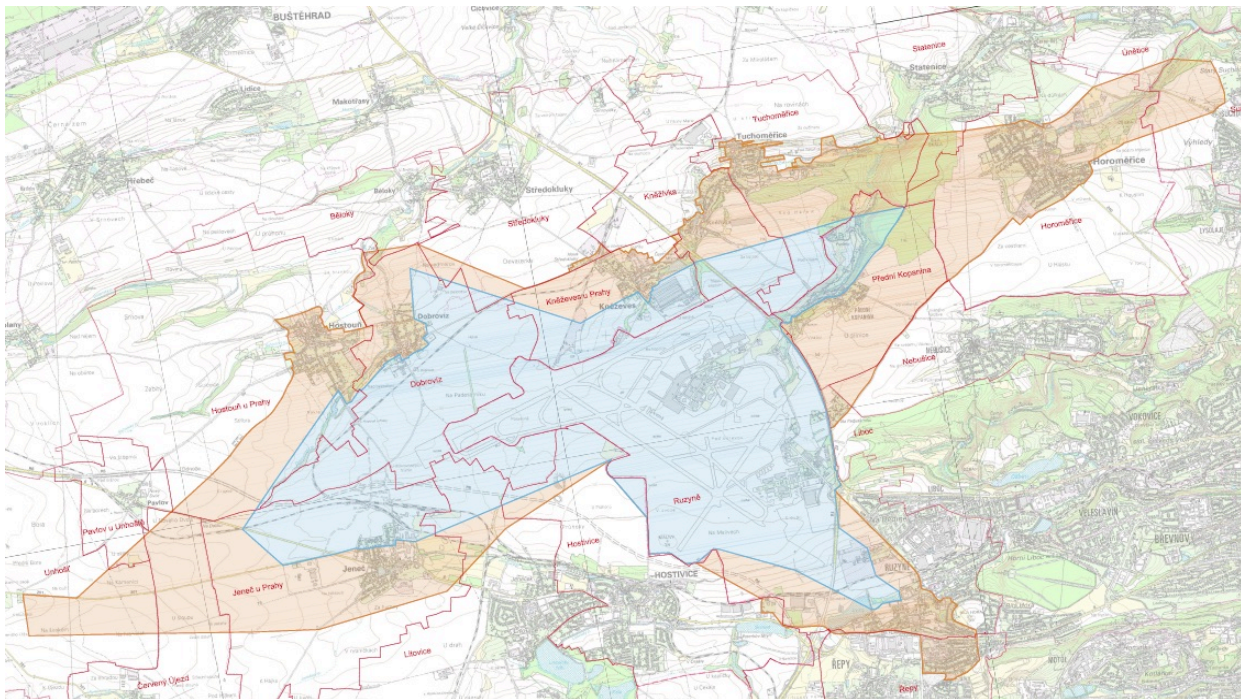
- The technical solution is the installation of forced ventilation systems with heat recovery (recuperation) – not air condition (cooling/heating).
- The device must meet the specified technical requirements
- The airport contributes to the installation of ventilation up to 100% of the cost with the following limits:
 - Flats or family houses according to the disposition: 60 – 245 thousand CZK (1.500 – 9.800€)
 - Schools: 500 thousand CZK per class (21.000 €)
- The financial contribution is paid only after the proper completion of the installation - the applicant must first pay for the equipment himself
- The costs are covered by noise charges



Noise protection zones of Prague / Ruzyně Airport

Program determination

- Educational institution – whole noise protection zone
- Properties, which are intended for permanent living - the most noisy affected localities



Ongoing program info



- Public research showed that 33% of citizens are being interested
- The program is expected to be divided into 5 phases (2021 - 2024)
- The overall target is furnishing of 600 properties for living and almost all schools
- The program started at 2019 - first phase - 5 schools registred
- 2020 – second phase: 150 properties for living succesfully registred - 50% properties already done
- Covid may change our plans a bit, but we are sure that the program will be completed successfully!





Thanks for your attention!

**Do you have questions? Do not hesitate
to contact us.**

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