

Noise in Europe

2017 overview of policy-related data



Czech Republic 

April 2017



The Environmental Noise Directive (END) requires EU member states to assess exposure to noise from key transport and industrial sources with two initial reporting phases: 2007 and 2012. Where the recommended thresholds for day and night indicators are exceeded, action plans are to be implemented. This country fiche presents data related to END assessments as reported to EEA by 31st March 2016 for the two key END indicators: L_{den} (day evening and night exposure) and L_{night} (night time exposure). 2012 strategic noise maps reported are presented, as well as HIA calculations for annoyance and sleep disturbance, hospital admissions and mortality. Trends are presented as the change in exposure from 2007 to 2012, for comparable sources only.

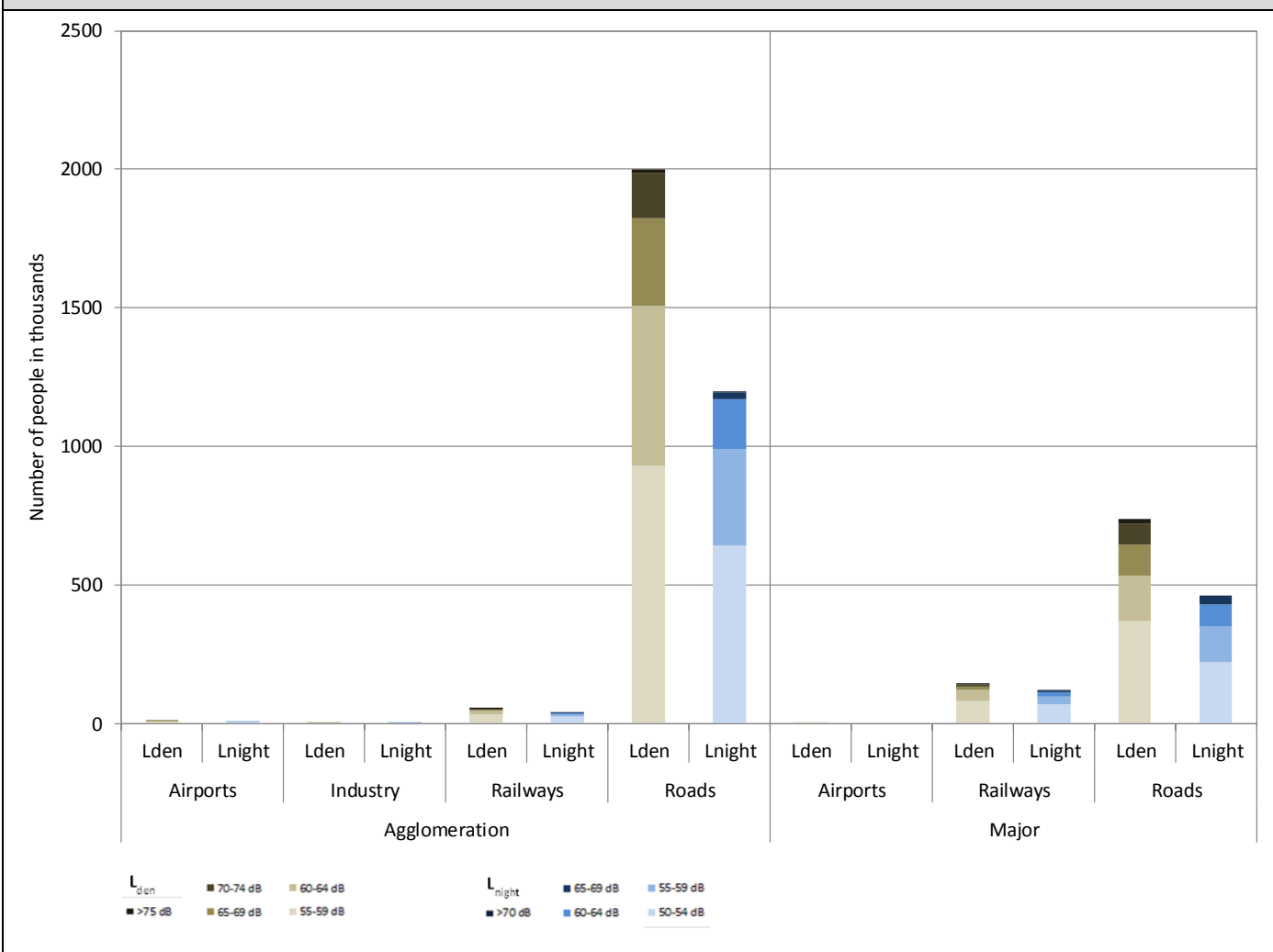


CZECH REPUBLIC

Noise sources covered by this assessment

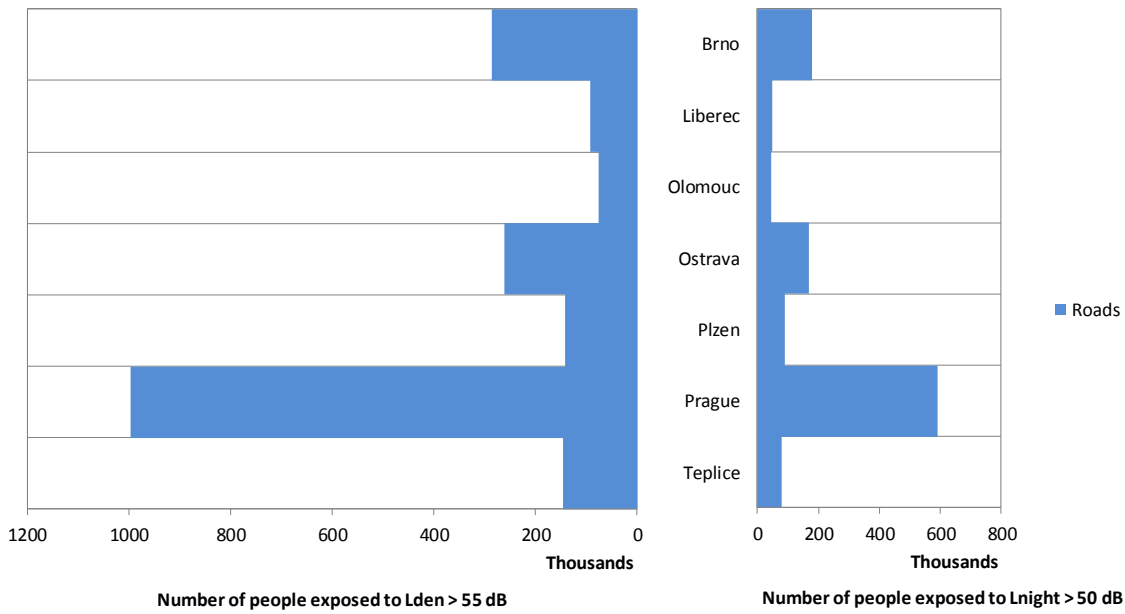
Agglomerations > 100.000 inhabitants	Brno, Liberec, Olomouc, Ostrava, Plzen, Prague, Teplice 7 agglomerations in total, covering 2.780.456 inhabitants
Major airports > 50.000 movements per year	Prague Vaclav Havel Airport 1 major airports in total
Major roads > 3 million vehicles per year	3521 km in total
Major railways > 30.000 train passages per year	1202 km in total

Number of people exposed to different noise bands per L_{den} and L_{night} (2012)

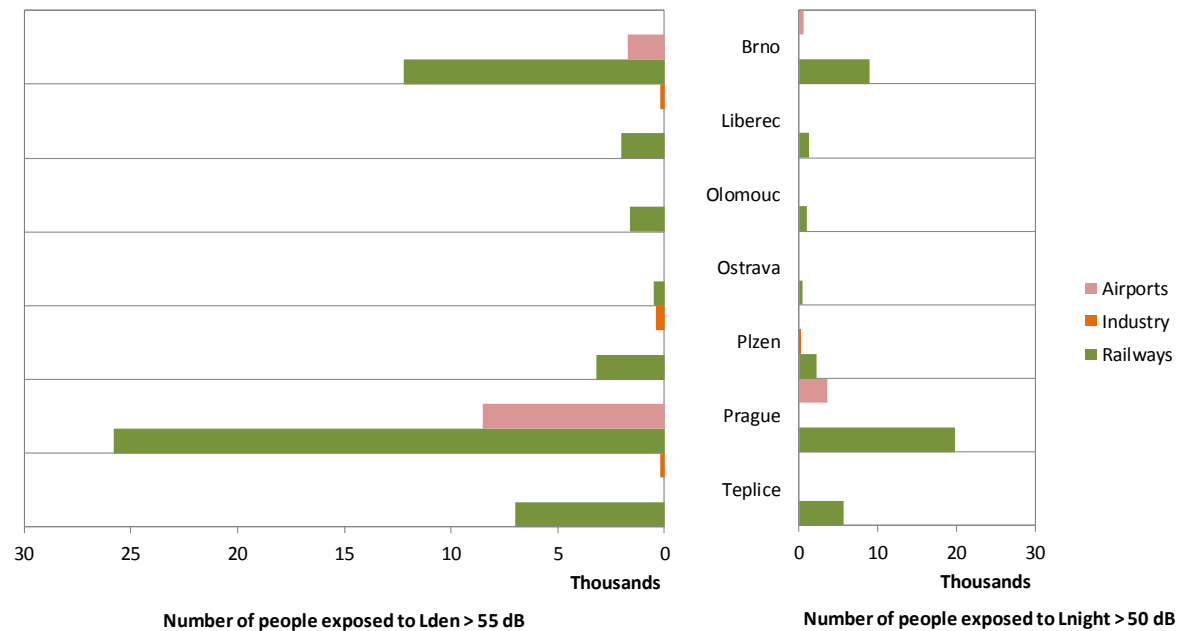


Data not applicable in 2 agglomerations for aircraft noise, out of 7 agglomerations.

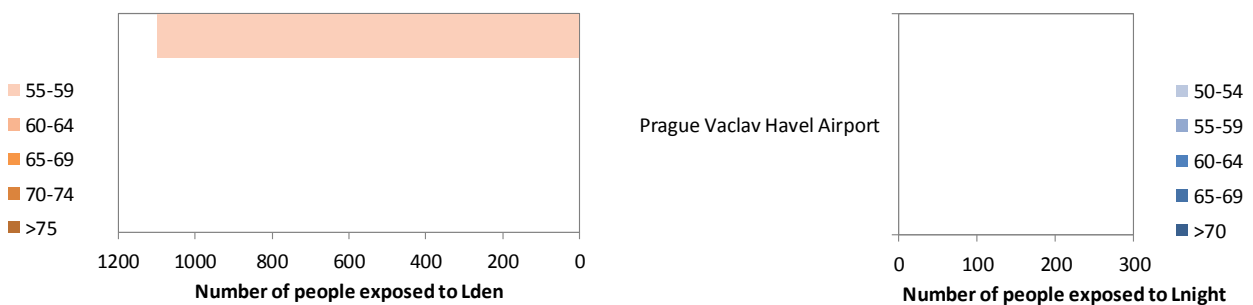
Total number of people exposed to road noise inside agglomerations (2012)



Total number of people exposed to railway, aircraft and industrial noise inside agglomerations (2012)

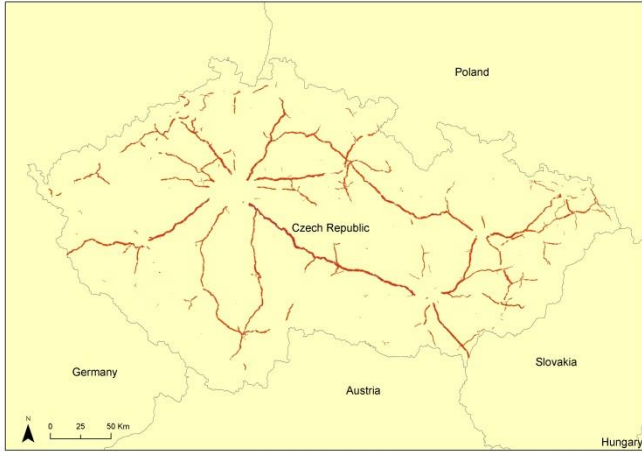


Total number of people exposed to Major Airports outside agglomerations (2012)



Noise contour maps (2012)

Major roads

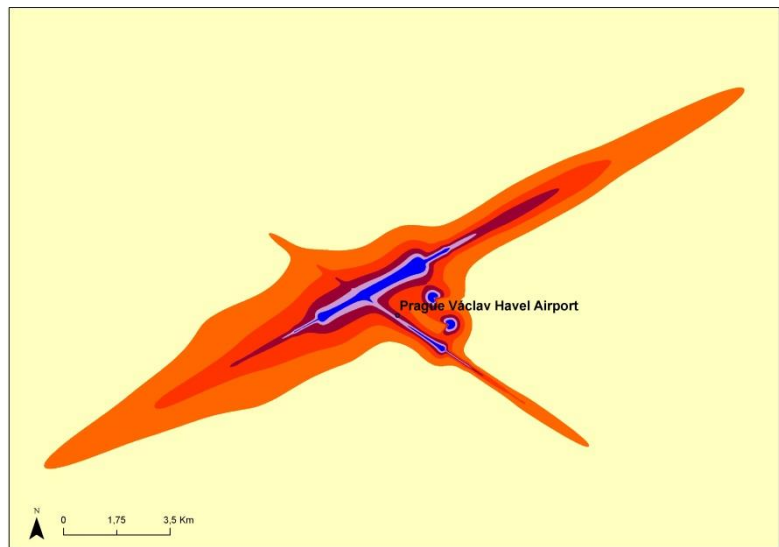
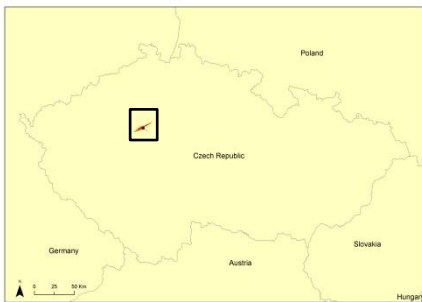


Major railways



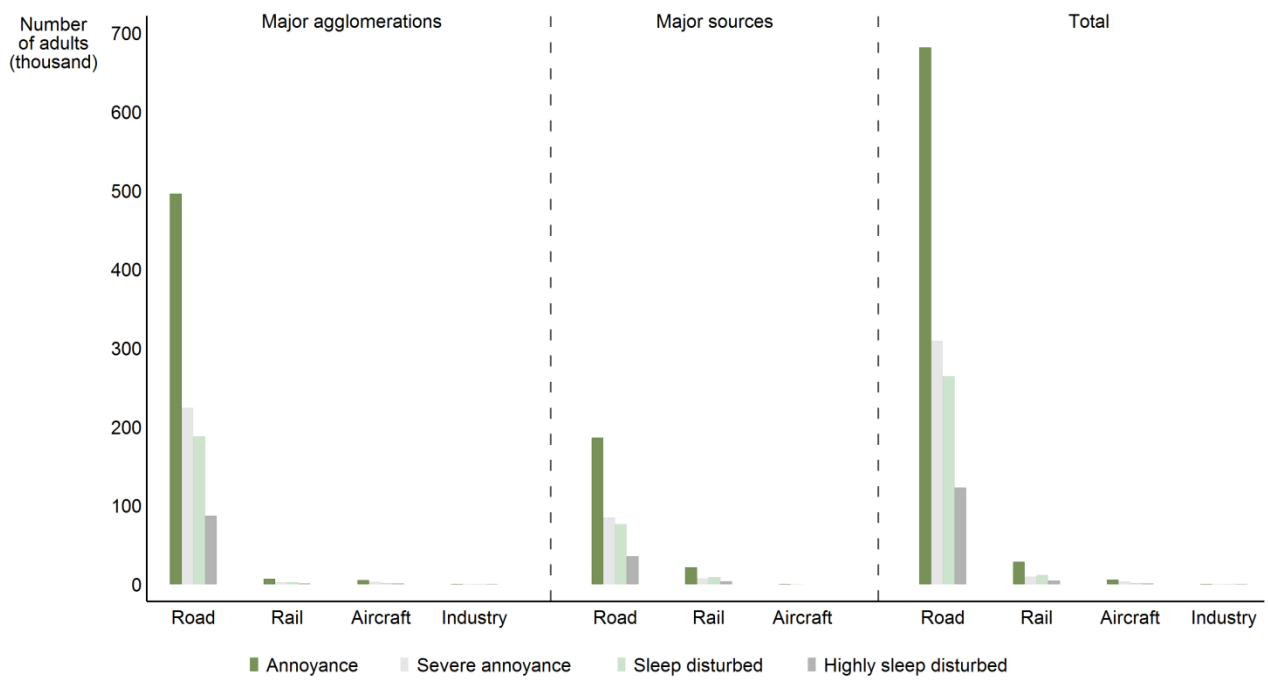
Major airports

Airport	ICAO	Annual traffic
Prague Vaclav Havel Airport	LKPR	174662

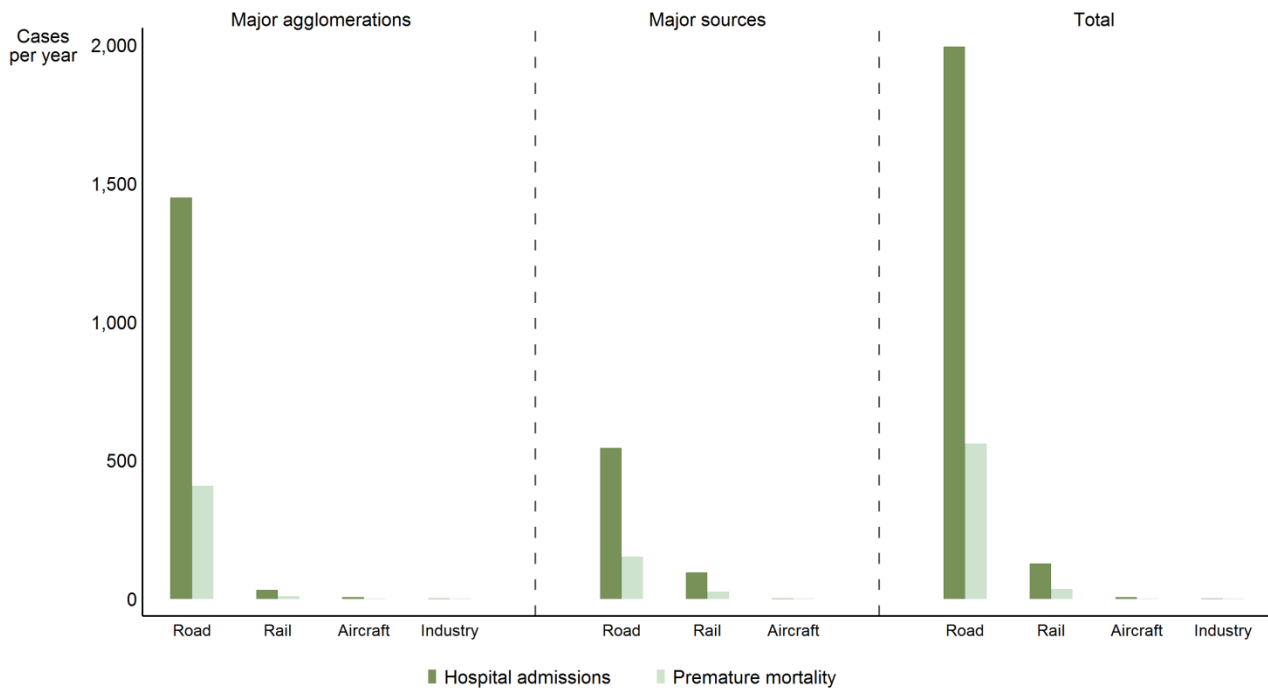


Health impact assessment

Annoyance and sleep disturbance



Hospital admissions and mortality



Trends on noise exposure 2007 - 2012

Trends on noise exposure are shown only in those cases where data is available for both implementation rounds:

- For major airports: total number of people exposed to more than 55 dB Lden and to more than 50 dB Lnight outside agglomerations.
- For agglomerations: percentage of population exposed to more than 55 dB Lden and to more than 50 dB Lnight due to different noise sources.

Major airports:

	L _{den}		L _{night}	
	First Round	Second Round	First Round	Second Round
Prague Vaclav Havel Airport	5500	1100	1900	0

Agglomerations:

Air (values in %)	L _{den}		L _{night}	
	First Round	Second Round	First Round	Second Round
Brno	0	0	0	0
Prague	0	1	0	0

Industry (values in %)	L _{den}		L _{night}	
	First Round	Second Round	First Round	Second Round
Brno	0	0	0	0
Ostrava (*)	0	0	0	0
Prague	0	0	0	0

	Decrease in population exposed
	No change
	Increase in population exposed

Railway (values in %)	L _{den}		L _{night}	
	First Round	Second Round	First Round	Second Round
Brno	14	3	10	2
Ostrava (*)	2	0	1	0
Prague	14	2	11	2

Road (values in %)	L _{den}		L _{night}	
	First Round	Second Round	First Round	Second Round
Brno	67	70	42	44
Ostrava (*)	80	51	55	33
Prague	89	81	47	48

(*) Increase of the number of inhabitants bigger than 10% between 2005 and 2010

For further information about environmental noise in Europe please consult <http://www.eea.europa.eu/themes/human/noise> or visit the Noise Observation & Information Service for Europe at <http://noise.eionet.europa.eu/> and EEA Data Service <http://www.eea.europa.eu/data-and-maps/data/data-on-noise-exposure-2>