Country fact sheet

Noise in Europe

2017 overview of policy-related data

Finland

April 2017

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European Environment Agency

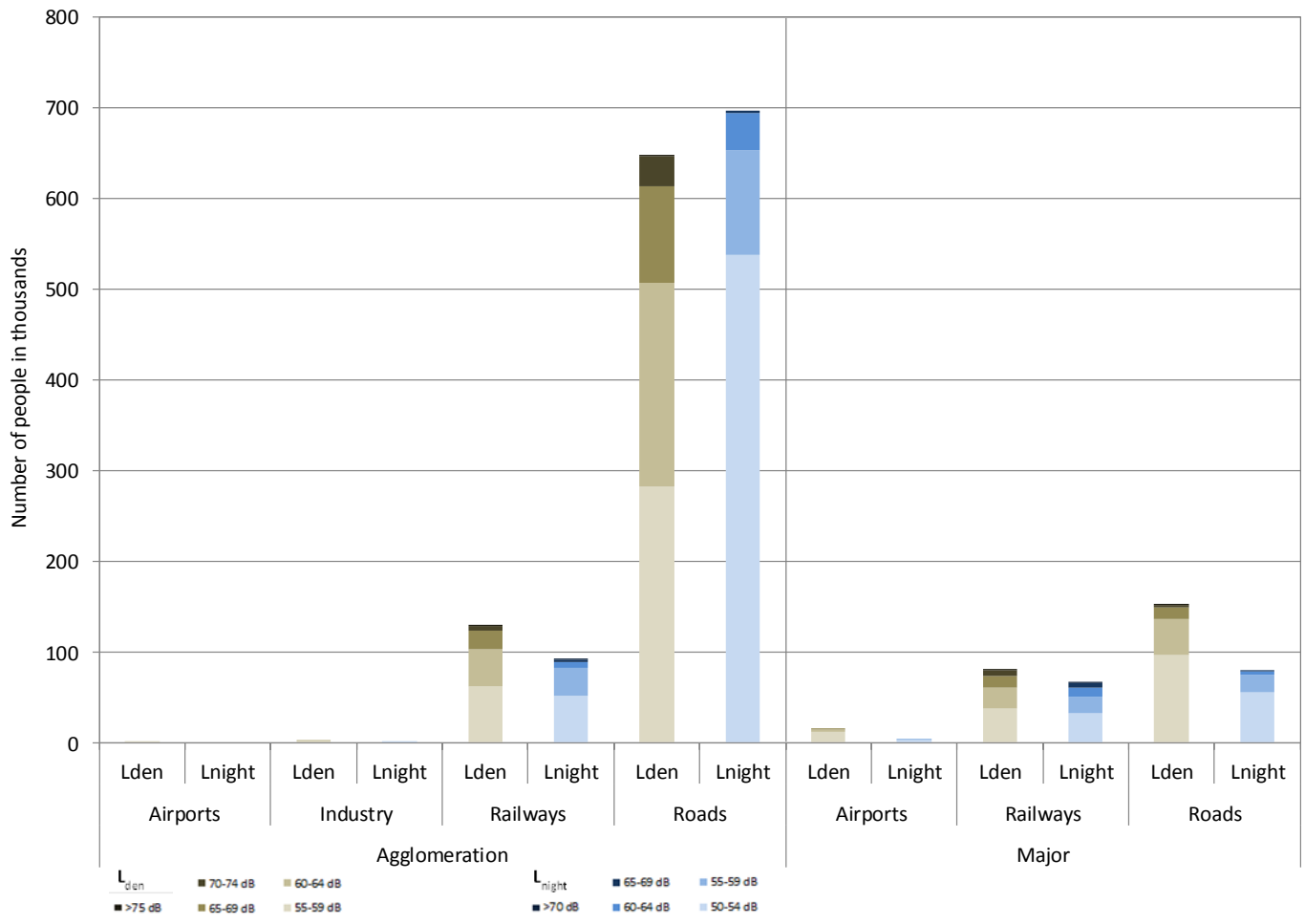
The Environmental Noise Directive (END) requires EU member states to assess exposure to noise from key transport and industrial sources with two initial reporting phases: 2007 and 2012. Where the recommended thresholds for day and night indicators are exceeded, action plans are to be implemented. This country fiche presents data related to END assessments as reported to EEA by 15th April 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.

FINLAND

Noise sources covered by this assessment

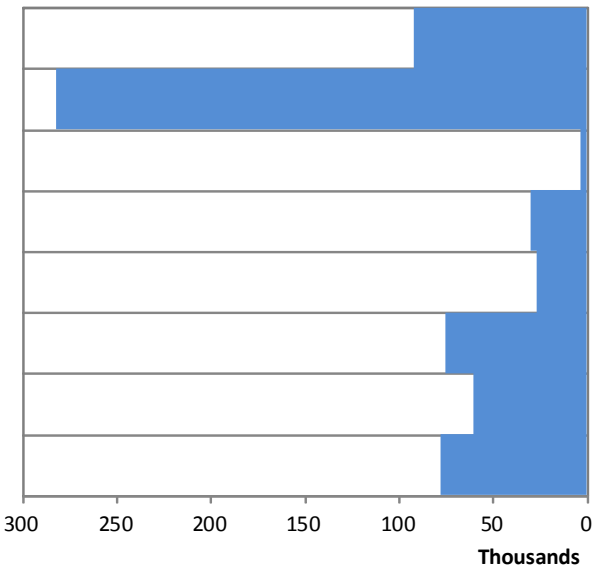
Agglomerations **> 100.000 inhabitants**	Espoo, Helsinki, Kauniainen, Lahti, Oulu, Tampere, Turku, Vantaa **8 agglomerations in total, covering 1.627.352 inhabitants**
Major airports **> 50.000 movements per year**	Helsinki Vantaa Airport, Helsinki-Malmi Airport, Turku Airport **3 major airports in total**
Major roads **> 3 million vehicles per year**	2243 km in total
Major railways **> 30.000 train passages per year**	230 km in total

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

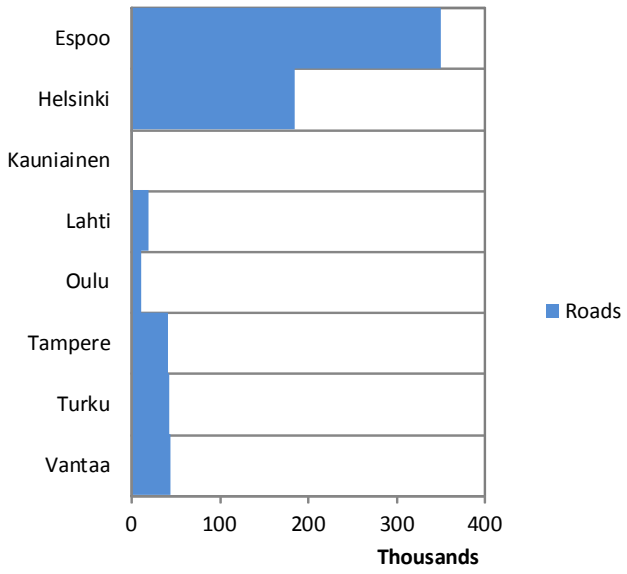


Data not applicable in 6 agglomerations for aircraft noise, out of 8 agglomerations.

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



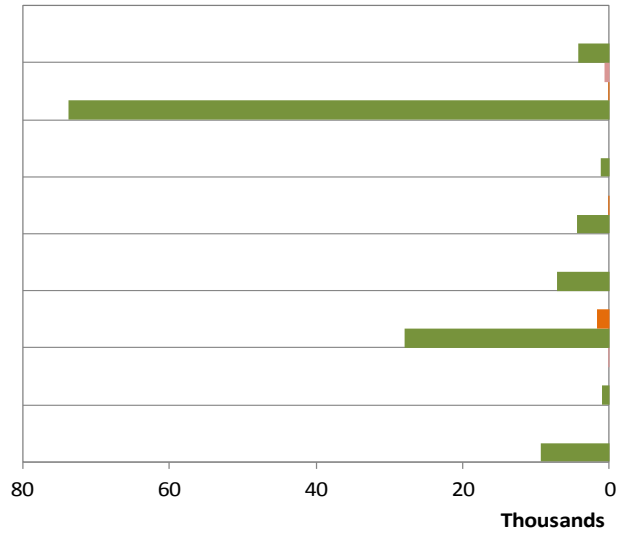
Number of people exposed to Lden > 55 dB



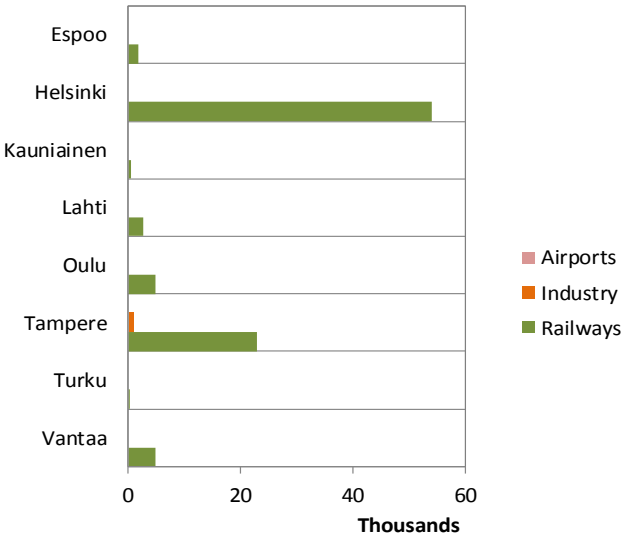
Number of people exposed to Lnight > 50 dB

Espoo delivered more than 100% of the total number of inhabitants exposed to road noise

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

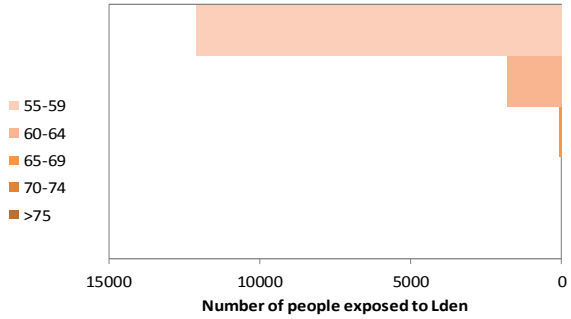


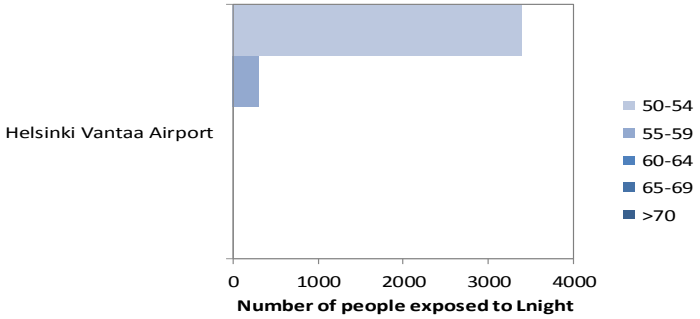
Number of people exposed to Lden > 55 dB



Number of people exposed to Lnight > 50 dB

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



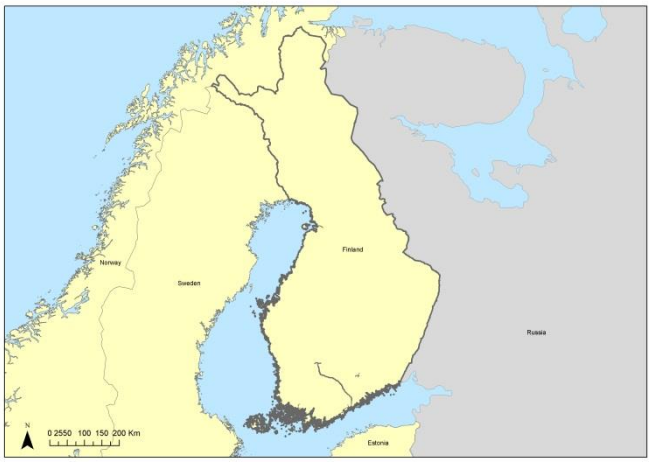


Helsinki-Malmi Airport and Turku Airport have not provided data on noise exposure.

Noise contour maps (2012)

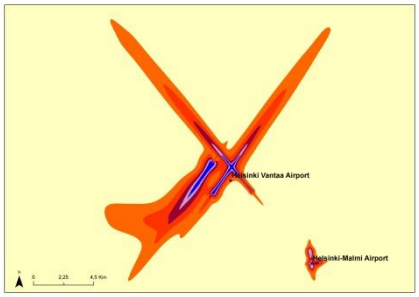
Major roads

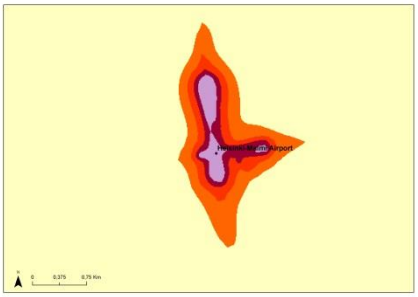
Major railways

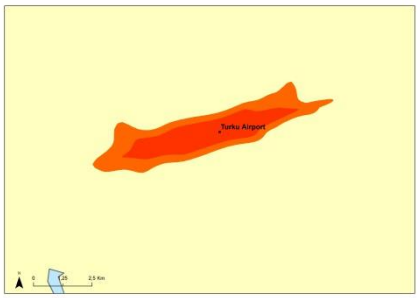


Major airports

Airport	ICAO	Annual traffic
Helsinki-Malmi Airport	EFHF	42000
Helsinki Vantaa Airport	EFHK	185000
Turku Airport	EFTU	22000

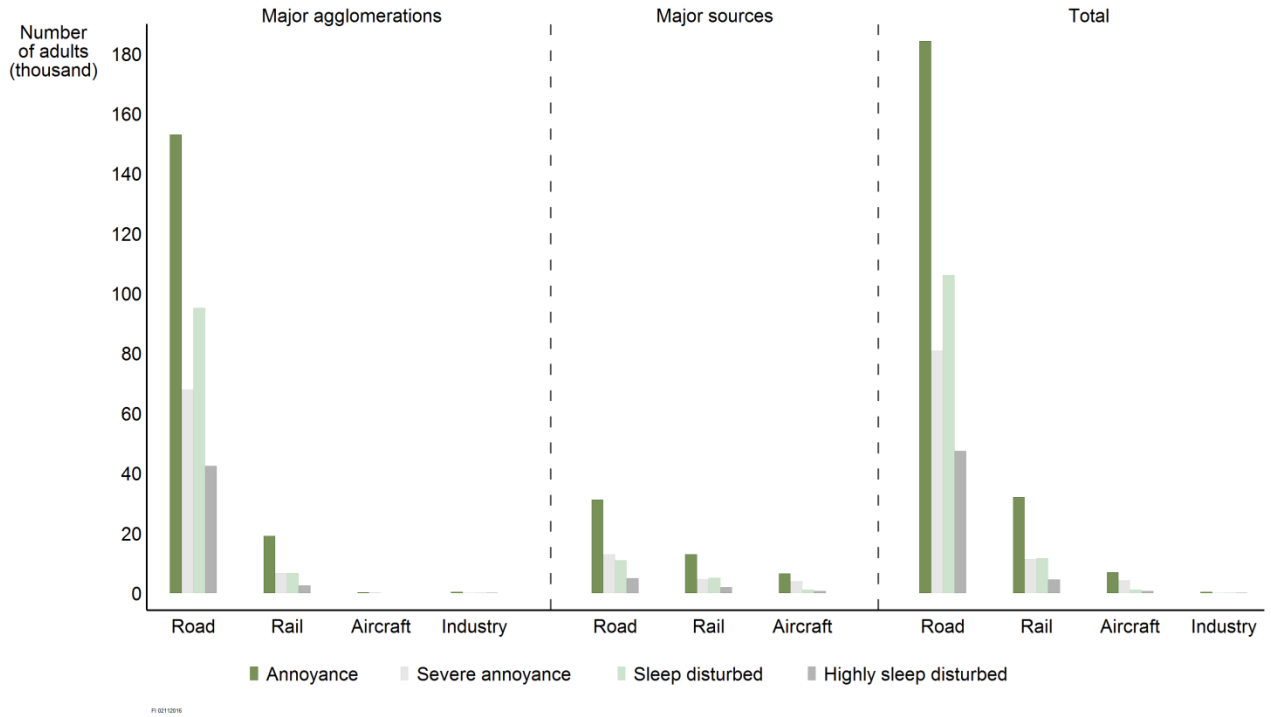




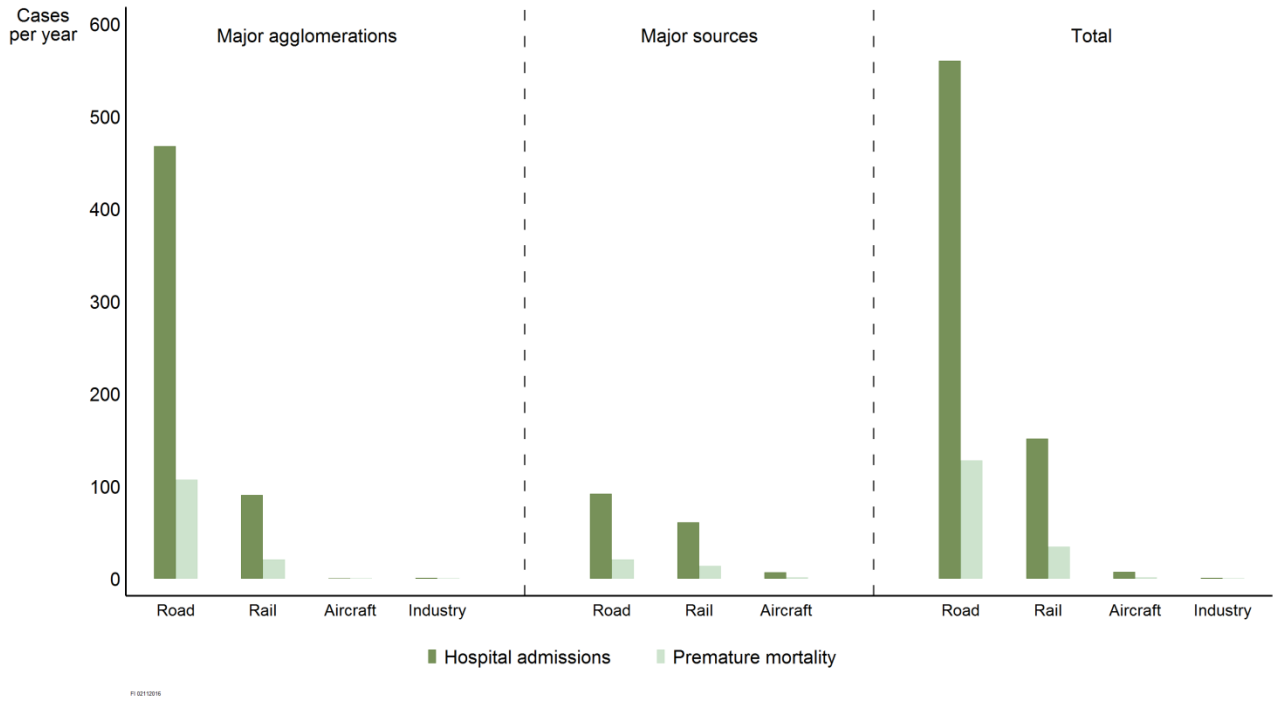


Health impact assessment

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
Helsinki Vantaa Airport	10200	14000	2900	3700

Agglomerations:

Air	L_{den}		L_{night}	
(values in %)	First Round	Second Round	First Round	Second Round
Helsinki	0.1	0.1	0	0

Railway	L_{den}		L_{night}	
(values in %)	First Round	Second Round	First Round	Second Round
Helsinki	12.4	12.9	9.1	9.5

Industry	L_{den}		L_{night}	
(values in %)	First Round	Second Round	First Round	Second Round
Helsinki	Data not provided or unsuitable for deriving trends			

Road	L_{den}		L_{night}	
(values in %)	First Round	Second Round	First Round	Second Round
Helsinki	42	49	29	32

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Decrease in population exposed

No change

Increase in population exposed

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.