

# Noise in Europe

2015 overview of policy-related data



**Denmark** 

April 2016

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 fact sheet presents key statistics related to END assessments as reported to EEA by 30<sup>th</sup> June 2015 for the two key END indicators:  $L_{den}$  (day evening and night exposure) and  $L_{night}$  (night time exposure). Where possible this is presented for second round assessments reported in 2012. Trends are presented as the change in exposure from 2007 to 2012, for comparable sources only.




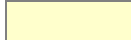

## DENMARK

Noise sources covered by this assessment		Trends on noise exposure 2007 - 2012																																																							
	<b>END noise sources</b>	<p>Trends on noise exposure show, for both implementation rounds:</p> <ul style="list-style-type: none"> <li>- For agglomerations: the relative value of people exposed to more than 55 dB <math>L_{den}</math> and to more than 50 dB <math>L_{night}</math> due to different noise sources (values are expressed in %).</li> <li>- For major airports: total number of people exposed to more than 55 dB <math>L_{den}</math> and to more than 50 dB <math>L_{night}</math> (values are expressed in real numbers).</li> </ul> <p><b>Major airports:</b></p> <table border="1"> <thead> <tr> <th rowspan="2"></th> <th colspan="2"><math>L_{den}</math></th> <th colspan="2"><math>L_{night}</math></th> </tr> <tr> <th>First round</th> <th>Second round</th> <th>First round</th> <th>Second round</th> </tr> </thead> <tbody> <tr> <td>Billund Airport</td> <td>100</td> <td>100</td> <td>0</td> <td>0</td> </tr> <tr> <td>Roskilde Airport</td> <td>100</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Copenhagen Airport</td> <td>600</td> <td>600</td> <td>500</td> <td>500</td> </tr> </tbody> </table> <p><b>Agglomerations:</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Airports (values in %)</th> <th colspan="2"><math>L_{den}</math></th> <th colspan="2"><math>L_{night}</math></th> </tr> <tr> <th>First round</th> <th>Second round</th> <th>First round</th> <th>Second round</th> </tr> </thead> <tbody> <tr> <td>Copenhagen</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th rowspan="2">Industry (values in %)</th> <th colspan="2"><math>L_{den}</math></th> <th colspan="2"><math>L_{night}</math></th> </tr> <tr> <th>First round</th> <th>Second round</th> <th>First round</th> <th>Second round</th> </tr> </thead> <tbody> <tr> <td>Copenhagen</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table>					$L_{den}$		$L_{night}$		First round	Second round	First round	Second round	Billund Airport	100	100	0	0	Roskilde Airport	100	0	0	0	Copenhagen Airport	600	600	500	500	Airports (values in %)	$L_{den}$		$L_{night}$		First round	Second round	First round	Second round	Copenhagen	0	0	0	0	Industry (values in %)	$L_{den}$		$L_{night}$		First round	Second round	First round	Second round	Copenhagen	0	0	0	0
	$L_{den}$						$L_{night}$																																																		
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	First round	Second round	First round	Second round																																																					
Copenhagen	0	0	0	0																																																					
Number of agglomerations	4																																																								
Major roads*	1043 km																																																								
Major railways	894 km																																																								
Number of major airports	3																																																								
Name of major airports	Billund Airport Copenhagen Airport Roskilde Airport																																																								
Name of agglomerations and number of inhabitants	Aalborg 112000 Aarhus 229000 Copenhagen 1163000 Odense 180000																																																								
* Length 2005: includes only major roads > 6 million vehicles/year																																																									

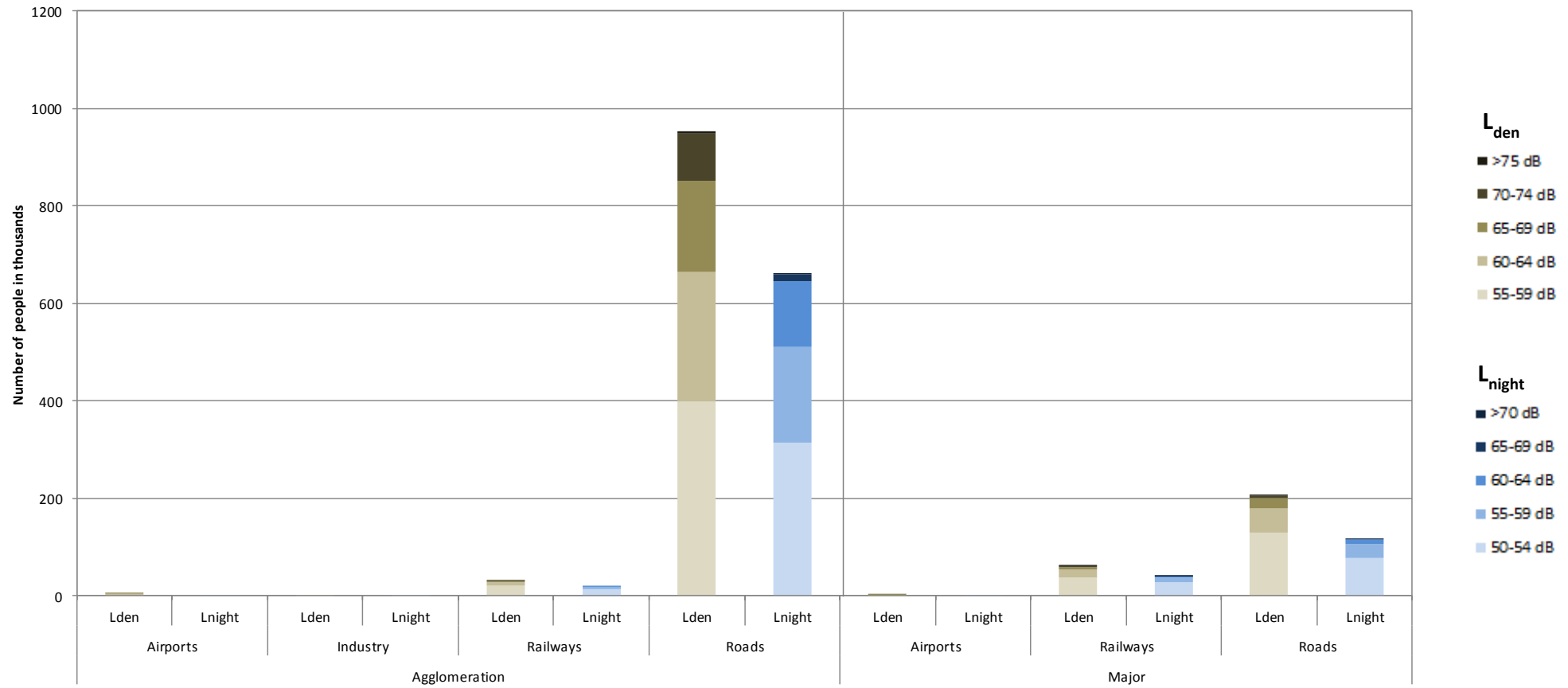
Railways (values in %)	L <sub>den</sub>		L <sub>night</sub>	
	First round	Second round	First round	Second round
Copenhagen	2.8	2.2	1.8	1.3

Roads (values in %)	L <sub>den</sub>		L <sub>night</sub>	
	First round	Second round	First round	Second round
Copenhagen	59	57	46	39

N/D: Data not provided or unsuitable for deriving trends (e.g. data reported for only one round)

	Decrease in population exposed
	No change
	Increase in population exposed

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

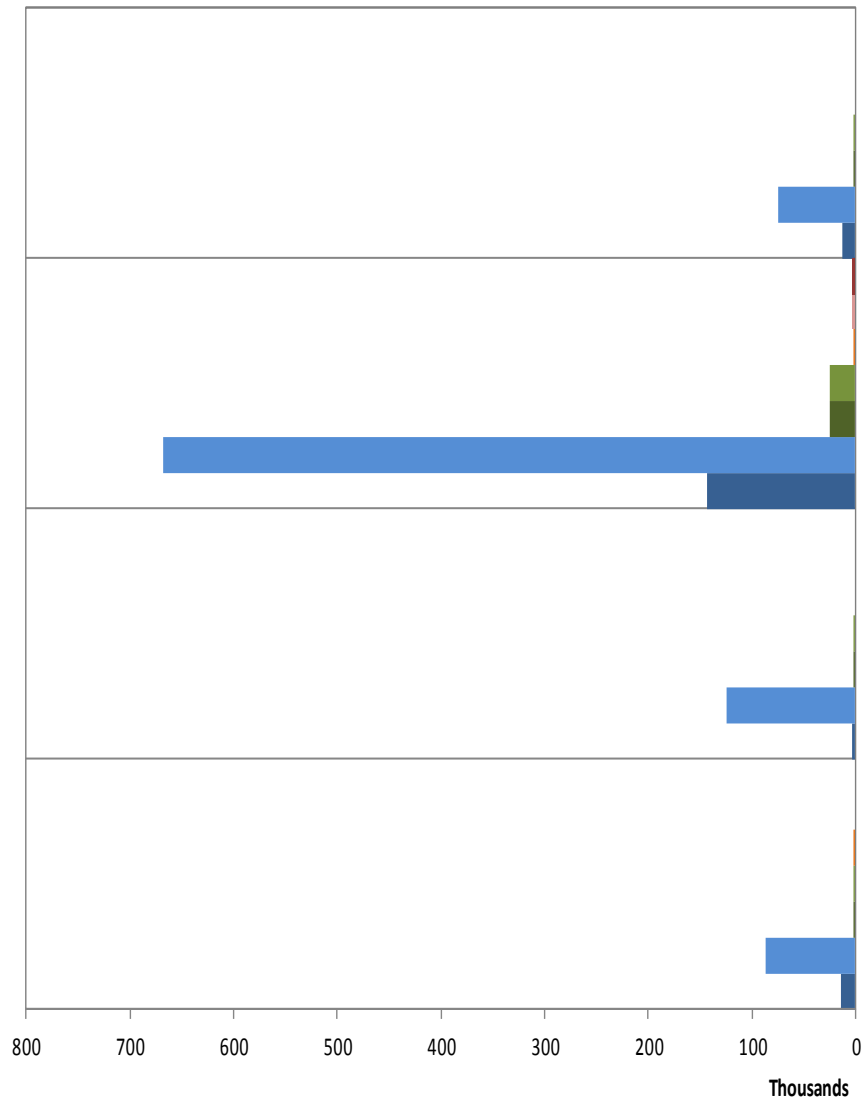


## Data relating to END mandatory noise contour maps (2012)

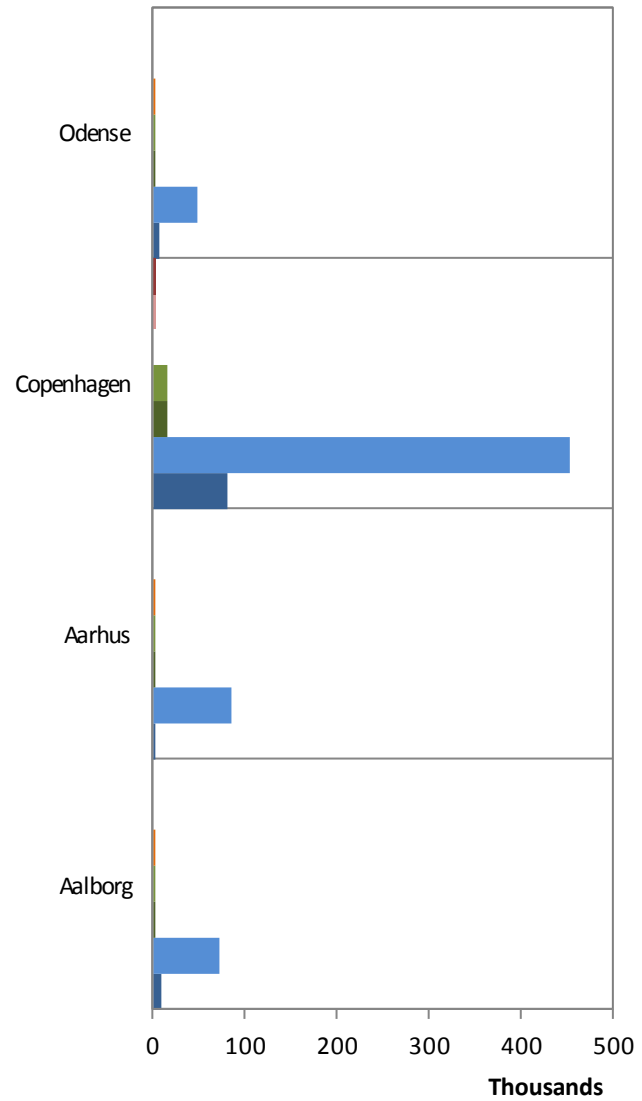
	Major roads	Major railways	Major airports
Country area (km <sup>2</sup> )	42710.25	42710.25	42710.25
Km of noise sources	1043.00	894.00	N/A
Area of contour map in the 55-65 dB L <sub>den</sub> band (in km <sup>2</sup> )	1285.41	286.46	42.23
Share of area of contour map in the 55-65 dB L <sub>den</sub> band per km of noise source reported	1.23	0.32	N/D
Percentage of the country area occupied by contour maps in the 55-65 dB L <sub>den</sub> band (in %)	3.01	0.67	0.01
Area of contour map with more than 65 dB L <sub>den</sub> (in km <sup>2</sup> )	390.91	88.11	15.07
Share of area of contour map with more than 65 dB L <sub>den</sub> per km of noise source reported	0.37	0.10	N/A
Percentage of the country area occupied by contour maps with more than 65 dB L <sub>den</sub> (in %)	0.92	0.21	0.03

\*N/A: Not applicable. N/D: No data in suitable format to perform the spatial analysis

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



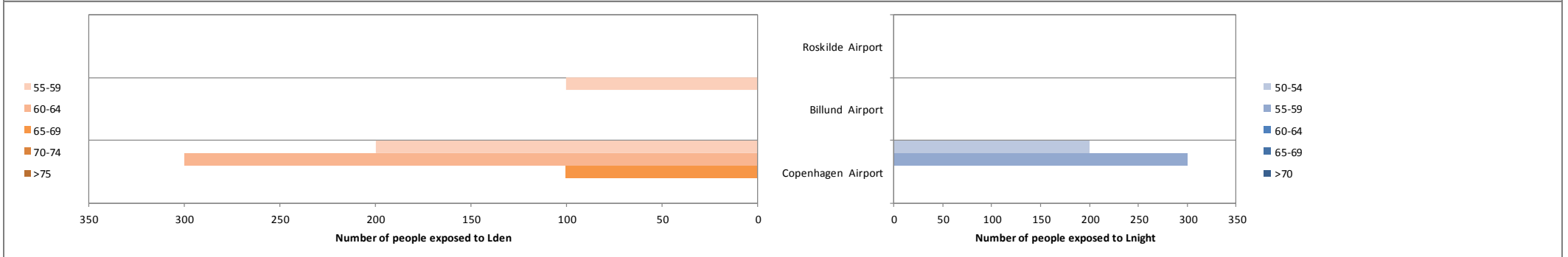
Number of people exposed to  $L_{den} > 55$  dB



Number of people exposed to  $L_{night} > 50$  dB

- Major Airports
- Airports
- Industry
- Railways
- Major Railways
- Roads
- Major Roads

## Total number of people exposed to noise from major airports outside agglomerations (2012)



For further information please consult the full Noise in Europe report at [www.eea.europa.eu/themes/noise](http://www.eea.europa.eu/themes/noise) or visit the Noise Observation & Information Service for Europe at <http://noise.eionet.europa.eu/>.