



Reported data on noise exposure covered by Directive 2002/49/EC, 2022, November 2024

The Directive relating to the assessment and management of environmental noise (the Environmental Noise Directive – END, 2002/49/EC) is the main EU instrument to identify noise pollution levels and to trigger the necessary action both at Member State and at EU level.

Data submitted by EEA member countries until 16/11/2024. This database contains information on the number of people exposed to 5 decibel (dB) bands for two indicators "Lden : 55-59, 60-64, 65-69, 70-74, >75" and "Lnight. : 50-54, 55-59, 60-64, 65-69, > 70".

Additional noise bands below these reporting thresholds are provided by some countries on a voluntary basis. The database covers the noise sources specified in the END (major roads, major railways, major airports and urban agglomerations) and the corresponding number of people exposed to each of the noise sources inside urban areas and outside urban areas. Percentage of people exposed has also been calculated for comparative purposes. The reporting requirements were set to start as from 2005, and the reporting cycle specified in the END is 5 years, with the exposure data submitted in 2007, 2012, 2017 and 2022.

Simple

Identification info

Date (Creation)	2025-08-05T18:02:46+00:00				
Date (Publication)	2025-08-05T18:02:46+00:00				
Citation identifier	eea_t_noise-exposure-2022_p_2021_v02_r00				
Purpose	Number of people exposed to a certain noise band. Percentage of people exposed to a certain noise band. Total number of inhabitants of a urban area, size of the urban area (km2) Length of major roads and major railways (km) Airport annual traffic (number of aircraft movements per year)				
Point of contact	Organisation	Individual	Electronic mail address	Website	Role
	European Environment Agency				Point of contact
	European Environment Agency			http://www.eea.europa.eu/#organization	Custodian
Topic category	<ul style="list-style-type: none"> Environment 				

Extent

Temporal extent

Time period	2021-01-01 2021-12-31
Maintenance and update frequency	
Reporting obligations	<ul style="list-style-type: none"> Strategic noise maps (DF 4 and DF 8)
EEA Management Plan	<ul style="list-style-type: none"> 2019 1.1.5
EEA topics	<ul style="list-style-type: none"> Environmental health impacts
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> Lithuania Romania Denmark Cyprus Netherlands

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Resource constraints

Use constraints	Other restrictions
Other constraints	License CC-BY 4.0 (https://creativecommons.org/licenses/by/4.0/). Copyright holder: European Environment Agency (EEA).

Resource constraints

Access constraints	Other restrictions
Other constraints	No limitations to public access

Language	English
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Additional Information	<p>Data submitted by EEA member countries until 16/04/2024.</p> <p>According to Article 7 of the END:</p> <p>Member States shall ensure that no later than 30 June 2007 strategic noise maps showing the situation in the preceding calendar year have been made and, where relevant, approved by the competent authorities, for all agglomerations with more than 250000 inhabitants and for all major roads which have more than six million vehicle passages a year, major railways which have more than 60000 train passages per year and major airports within their territories.</p> <p>Member States shall adopt the measures necessary to ensure that no later than 30 June 2012, and thereafter every five years, strategic noise maps showing the situation in the preceding calendar year have been made and, where relevant, approved by the competent authorities for all agglomerations and for all major roads and major railways within their territories.</p> <p>This information is reported according to Article 3 of the END, in which:</p> <p>'agglomeration' shall mean part of a territory, delimited by the Member State, having a population in excess of 100 000 persons and a population density such that the Member State considers it to be an urbanised area;</p> <p>'major road' shall mean a regional, national or international road, designated by the Member State, which has more than three million vehicle passages a year;</p> <p>'major railway' shall mean a railway, designated by the Member State, which has more than 30 000 train passages per year;</p> <p>'major airport' shall mean a civil airport, designated by the Member State, which has more than 50 000 movements per year (a movement being a take-off or a landing), excluding those purely for training purposes on light aircraft;</p>
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More information about the END Directive is available on the DG Environment web site (http://ec.europa.eu/environment/noise/directive_en.htm).

Distribution Information

Distribution format	<ul style="list-style-type: none">Microsoft Excel (.xls, .xlsx)
OnLine resource	https://sdi.eea.europa.eu/webdav/datastore/public/eea_t_noise-exposure-2022_p_2021_v02_r00
OnLine resource	Direct download

Resource lineage

Statement	European Commission Directorate-General for Environment; EEA.
Hierarchy level	Dataset

Metadata

Metadata identifier	1c483f43-1227-4068-a365-ecae6c293f87		
Language	English		
Character encoding	UTF8		
Contact	Organisation	Individual	Electronic mail address Website Role
	European Environment Agency		sdi@eea.europa.eu Point of contact

Type of resource

Resource type	Non geographic dataset
Name	Tabular dataset
Metadata linkage	https://sdi.eea.europa.eu/catalogue/srv/api/records/1c483f43-1227-4068-a365-ecae6c293f87
Date info (Creation)	2025-08-05T11:37:21.711026Z
Date info (Revision)	2026-03-19T09:05:18.212352Z

Metadata standard

Title	ISO 19115-3:2018
Edition	1.0

Overviews

Number of people in agglomerations exposed to noise from roads (Lden and Lnight)

Country	EU	Agglomeration Name	Nr inhabitants	Area (km ²)	Nr of people exposed to different noise bands (Lden)							Nr of people exposed to major noise bands (LdenM)							Nr of people exposed to different noise bands (Lnight)							Nr of people exposed to			
					45-49	50-54	55-59	60-64	65-69	70-74	>75	45-49	50-54	55-59	60-64	65-69	70-74	>75	45-44	45-45	50-54	55-59	60-64	65-65	>70	60-64	45-49	50-54	
Austria	EU27	Graz	291000	130	No data	No data	53300	38700	27700	20100	1900	No data	No data	20200	13600	14800	13400	1700	No data	56500	40600	29900	25900	7900	0	No data	24800	16300	
Austria	EU27	Innsbruck	144200	47	No data	No data	33600	23700	15000	4400	No data	No data	15900	8100	7800	3500	0	No data	35200	24500	15300	5700	100	0	No data	17700	8500		
Austria	EU27	Linz	200200	136	No data	No data	38100	26000	16100	8700	1700	No data	No data	17000	7200	4900	2100	0	No data	39200	32400	19900	10500	4400	100	No data	22100	10200	
Austria	EU27	Salzburg	155000	66	No data	No data	29700	16300	13400	6000	600	No data	No data	9200	5800	6100	4000	500	No data	27600	16700	11100	8000	1200	0	No data	11100	5800	
Austria	EU27	Vienna	1977300	456	No data	No data	552000	289700	179900	179900	52000	No data	No data	183400	133200	111200	156100	50900	No data	541300	260800	176400	182400	88000	2600	No data	203400	143200	
Belgium	EU27	Antwerp	1306365	204.37	No data	No data	164000	115500	72400	39900	2700	No data	No data	48900	24500	12600	17900	1100	No data	127900	61500	50700	12200	400	No data	No data	34600	0	
Belgium	EU27	Buges	118509	140.88	No data	No data	14700	12600	13800	9300	1000	No data	No data	5400	3500	4200	5500	400	No data	14000	11800	11900	4200	0	No data	No data	4000	0	
Belgium	EU27	Brussels	1212637	162.43	No data	No data	230100	147900	143200	120800	19400	1400	Not appli	Not appli	Not appli	Not appli	Not appli	Not appli	No data	143800	130100	61100	32900	6100	200	Not appli	Not appli	Not appli	
Belgium	EU27	Charleroi	202411	100.95	No data	No data	38100	17900	11200	11800	6900	1300	No data	29200	11900	6900	1900	500	No data	23500	11700	10500	1100	0	No data	No data	9300	0	
Belgium	EU27	Ghent	265084	157.71	No data	No data	40000	47700	38700	21300	1800	No data	No data	17900	10500	10700	1400	0	No data	44200	45400	35200	7700	300	No data	No data	13100	0	
Belgium	EU27	Leuven	502234	87.5	No data	No data	22700	18800	8400	1300	0	No data	No data	4900	3800	4500	3200	0	No data	20800	11200	5700	400	0	No data	No data	5200	0	
Belgium	EU27	Lige	129137	68.03	No data	No data	29900	50200	21300	18400	12200	1900	No data	22000	14700	9000	6100	5700	800	No data	28400	28700	14400	5800	0	No data	No data	32500	0
Bulgaria	EU27	Burgas	348668	251.84	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
Bulgaria	EU27	Pleven	329265	83	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
Bulgaria	EU27	Plovdiv	864603	101.88	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
Bulgaria	EU27	Ruse	143353	127.12	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
Bulgaria	EU27	Sofia	1280034	462	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
Bulgaria	EU27	Stara Zagora	136144	106	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
Bulgaria	EU27	Varna	120813	154.24	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data
Croatia	EU27	Rijeka	107964	41.58	No data	No data	44700	11600	9200	6900	300	No data	No data	13900	2600	8400	6900	300	No data	12900	10000	7600	1300	0	No data	No data	11900	0	
Croatia	EU27	Split	160577	79.39	No data	No data	27100	17300	33400	2000	200	No data	No data	14900	12600	6700	4100	200	No data	No data	34600	38600	10400	600	0	No data	No data	12900	0
Croatia	EU27	Zagreb	787111	641.24	No data	No data	142200	113800	88100	46200	8700	No data	No data	110500	77900	63200	42200	6600	No data	139200	109500	84900	10500	0	No data	No data	86400	0	
Cyprus	EU27	Larnaca	99649	81.88	No data	17400	48000	20100	7900	3000	1200	300	17400	48000	20100	7300	3000	1200	No data	23900	8600	3900	1400	500	0	No data	23900	8600	
Cyprus	EU27	Nicosia	200411	70.76	No data	14000	16600	64000	98100	6100	600	14000	16600	64000	98100	12800	6100	600	No data	53000	109800	16400	7900	1800	0	No data	53000	109800	
Cyprus	EU27	Nicosia	244995	98.95	No data	19000	23900	91000	114700	14000	8600	19000	23900	91000	114700	14000	8600	700	No data	70900	137300	17100	10500	2100	100	No data	70900	137300	
Cyprus	EU27	Pafos	50451	44.57	No data	10300	33200	14600	2900	2700	700	100	10300	33200	14600	2900	2700	700	No data	8300	3200	2700	1300	100	0	No data	8300	3200	
Czech Republic	EU27	Bрно	443880	128	No data	124800	112900	62100	30800	23500	200	No data	58100	41000	23400	24500	13000	0	111200	121700	74000	35600	26200	1700	0	61600	48700	2800	
Czech Republic	EU27	Liberec	166445	160	No data	44200	42300	24000	13300	3400	0	No data	17100	11300	9100	7000	2500	0	42000	44600	26000	14500	5600	100	0	39000	17500	9200	
Czech Republic	EU27	Pilsen	109514	105	No data	28600	27900	18400	11200	4400	700	No data	19400	8900	5600	4800	1900	0	27600	27800	19900	11500	6400	1300	0	12300	7700	3700	
Czech Republic	EU27	Olomouc	428269	248	No data	112700	107900	69300	36700	12600	2200	No data	63200	38800	30600	18400	4900	400	105800	111600	77800	42700	16300	3000	1200	72700	45600	32600	
Czech Republic	EU27	Pizen	191279	184	No data	39200	35600	27100	17000	6500	400	No data	18400	13500	12500	11700	4900	0	40000	37700	27800	17700	9200	1800	0	20700	15800	13000	
Czech Republic	EU27	Prague	1242278	772	No data	322800	411900	261200	141200	79900	12000	No data	241200	203600	151500	113700	46900	1380	317800	37700	261200	155000	83200	28700	100	0	236600	244600	197800
Czech Republic	EU27	Teplice	171348	171	No data	40300	51900	24000	11100	2900	0	No data	14000	9800	5000	5600	2200	0	37300	54300	26900	11100	5300	100	0	16000	11400	5900	
Denmark	EU27	Aalborg	138981	86	No data	No data	23800	18800	7400	2400	0	Not appli	Not appli	Not appli	Not appli	Not appli	Not appli	Not appli	No data	39100	9800	2400	200	0	Not appli	Not appli	Not appli	Not appli	
Denmark	EU27	Aarhus	252047	83	No data	No data	46800	37800	16400	6600	0	Not appli	Not appli	Not appli	Not appli	Not appli	Not appli	Not appli	No data	41900	24400	10200	100	0	Not appli	Not appli	Not appli	Not appli	
Denmark	EU27	Copenhagen	1254256	384	No data	No data	282800	190100	116900	31000	700	Not appli	Not appli	Not appli	Not appli	Not appli	Not appli	Not appli	No data	225900	136000	64500	5200	100	Not appli	Not appli	Not appli	Not appli	
Denmark	EU27	Odense	198959	101	No data	No data	24600	17800	8700	600	0	Not appli	Not appli	Not appli	Not appli	Not appli	Not appli	Not appli	No data	18500	12100	1700	100	0	Not appli	Not appli	Not appli	Not appli	
Estonia	EU27	Tartu	648970	158	No data	89300	72100	56700	24600	6200	200	0	Not appli	Not appli	Not appli	Not appli	Not appli	Not appli	No data	39100	24700	6400	300	0	0	Not appli	Not appli	Not appli	
Estonia	EU27	Tartu	93389	154	No data	15400	11200	8900	3700	800	0	0	Not appli	Not appli	Not appli	Not appli	Not appli	Not appli	No data	8700	4700	1400	100	0	0	Not appli	Not appli	Not appli	
Finland	EU27	Espoo	287161	250	No data	No data	45500	23200	3200	100	0	No data	No data	16000	9600	2200	100	0	No data	No data	25500	5700	300	0	0	No data	No data	7900	
Finland	EU27	Helsinki	653835	217	No data	No data	115900	74500	32300	8900	0	No data	No data	44100	11300	4200	800	0	No data	No data	80500	12600	14200	800	0	0	No data	No data	19800
Finland	EU27	Jyväskylä	142400	1467	No data	No data	20600	14300	7400	700	0	No data	No data	7600	3200	1200	100	0	No data	No data	15900	8600	1800	0	0	No data	No data	400	
Finland	EU27	Kuusinka	8797	4	No data	No data	1800	600	0	0	0	No data	No data	400	100	0	0	0	No data	No data	500	0	0	0	0	No data	No data	200	
Finland	EU27	Kuusinka	119235	3243	No data	No data	15100	11200	4000	200	0	No data	No data	5100															