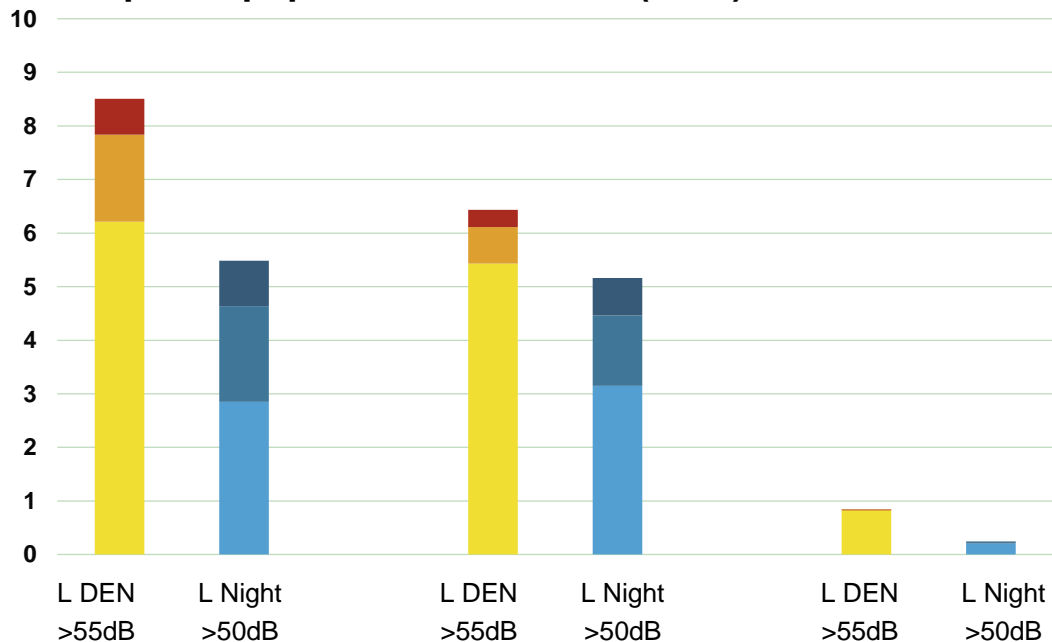




Reducing traffic noise to  
improve health and  
quality of life

# Traffic Noise Pollution in Germany

Noise-exposed population in millions (2017)



WHO Guideline 2018: Exposure levels for traffic noise

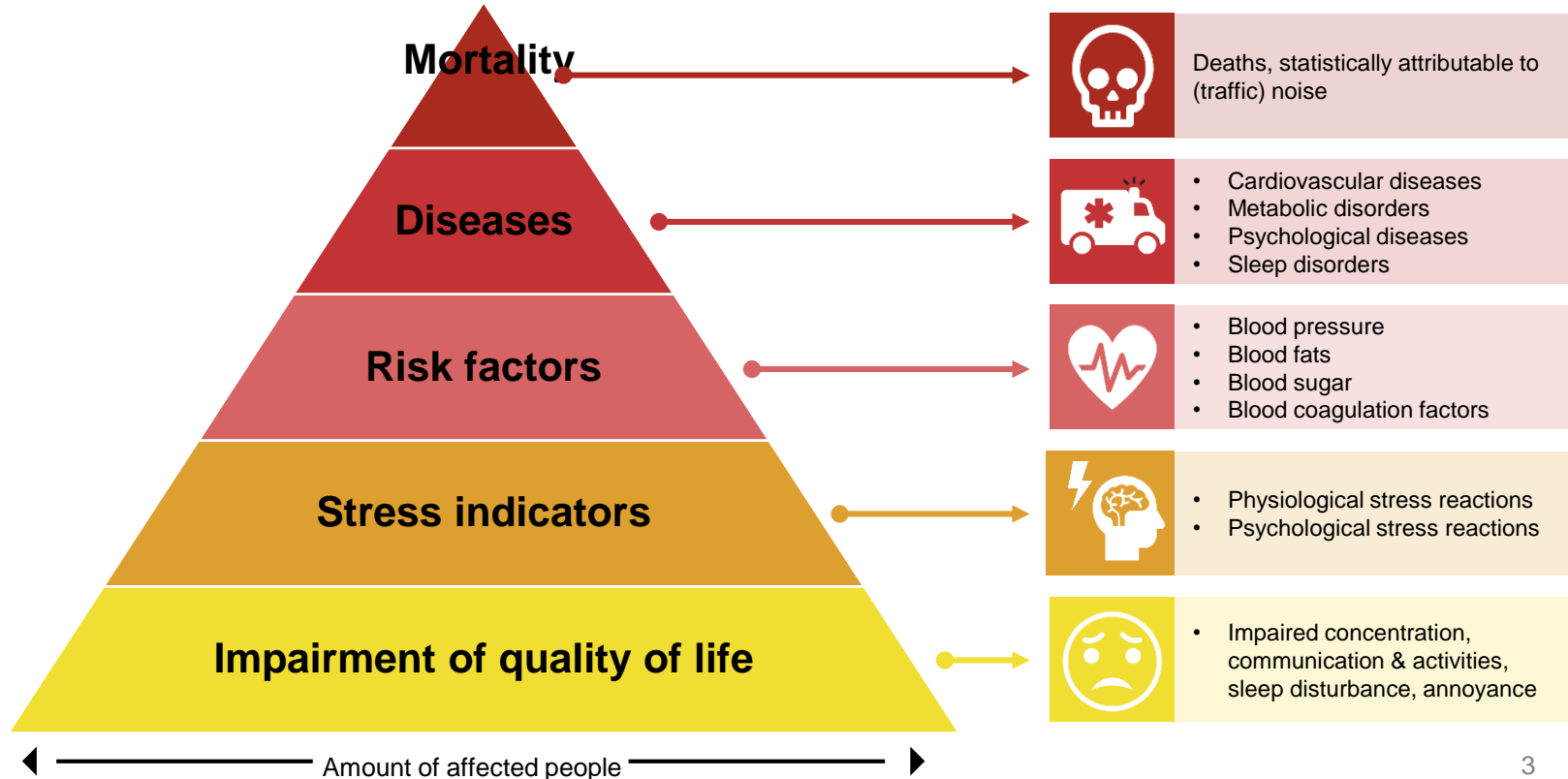


$L_{DEN}$	<b>53</b>	54	45
$L_{Night}$	45	44	40

8.5

million people affected by road traffic alone, for day-evening-night exposure

# Health Effects of Noise-Exposure



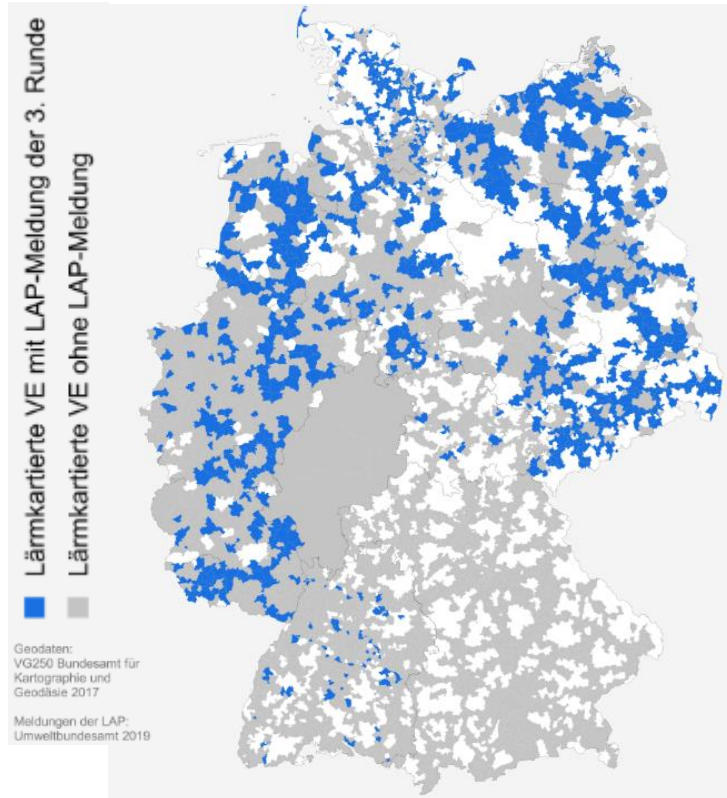
# Environmental Noise Directive (END)

**Objective:** Common approach intended to avoid, prevent, or reduce harmful effects, including annoyance, due to exposure to environmental noise (traffic noise, industrial noise)

## Required actions:

- determination of exposure to environmental noise (**noise mapping**), make information on environmental noise and its effects available to the public
- adoption of **noise action plans** by Member States, based upon noise-mapping results
- Designation of **quiet areas within agglomerations**

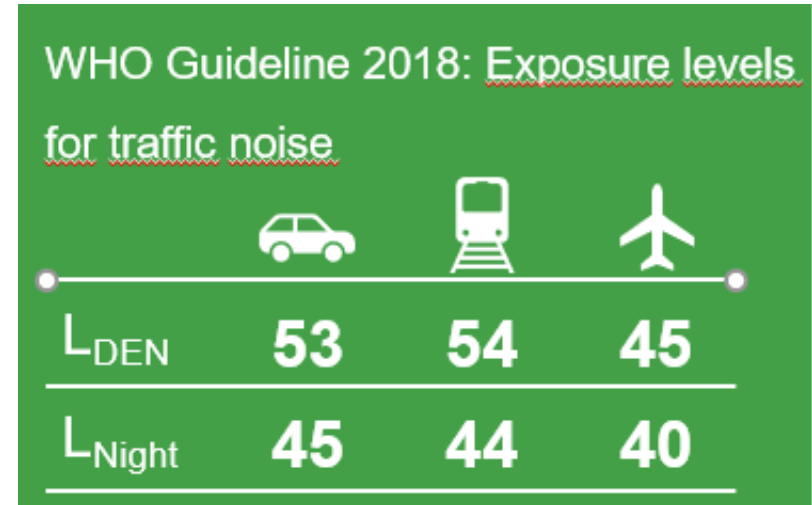
# Noise Action Planning in Germany



- Action plans only in one third of local communities with noise mapping (Jan. 2020)
- No nationwide thresholds for action planning
- Reluctant installation of quiet areas
- **Uniform nationwide trigger values**, set at 65 dB during the day and 55 dB at night
- **Quiet areas** to be stipulated in sufficient numbers

# Noise Limit Values for Existing Roads and Railways

- Values for noise control for existing roads and railways: 70 dB during daytime and 60 dB at night → higher than WHO recommends
- Values should be reduced to **65 dB (day)** and **55 dB (night)**
- In the long term: 55 dB (day) and 45 dB (night)



# Financing Noise Control

- Local communities often lack financial means to reduce road traffic noise
- **Support through long term investment programs, financed by federal and state governments**  
in addition: integrating noise control into urban development funding





# Sound Level Limits for Vehicles

- Current sound level limits (road and rail vehicles, aircraft) **do not exhaust technical potential for noise reduction**
- **Lobby for ambitious sound level limits for vehicles** at EU level for road and rail vehicles; at international level for aircraft



Dirk Vorderstraße „Autobahn, Kamener Kreuz, Rush Hour (11783262743)“, <https://creativecommons.org/licenses/by/2.0/legalcode>



# SRU Recommendations

## PLANNING & FINANCING

**Noise action planning:** Uniform nationwide trigger values at (65 dB(A) (daytime), 55 dB(A) (nighttime); Quiet areas to be stipulated in sufficient numbers

**Financing:** Support for local communities through long term investment programmes, financed by federal and state governments

## NOISE LIMIT VALUES

**Noise Limit Values for Existing Roads and Railways:** Reduce to 65 dB(A) (daytime); 55 dB(A) (nighttime)

**Tighten Sound Level Limits for Vehicles**

## COMMUNICATION & INTEGRATION

**Integration:** sustainable urban mobility plans for cities > 50.000 inhabitants

**Environmental Justice:** guiding principle in noise action planning; cross-cutting objective in municipal development strategies

**Enhance communication** on traffic noise and health

## SECTOR-BASED MEASURES

**Road traffic in urban areas:** Strengthen, expand and modernise public transport, walking and cycling; reduce general speed limit in built-up areas to 30 km/h; strategic parking management in cities; distance-based car toll

**Freight trains:** further develop noise-based train-path pricing system

**Air traffic:** Standardize immission limit values for aircraft noise; make airport planning compatible with noise protection, improve noise protection considerations when determining flight routes, Improve passive noise protection, Repeal tax exemption for kerosene, Ban on night flights at airports close to urban areas



Sachverständigenrat  
für Umweltfragen

Download Chapter 5 of the Environmental report 2020: “Towards an ambitious environmental policy in Germany and Europe” (in German, summary in English):

[www.umweltrat.de](http://www.umweltrat.de)

info@umweltrat.de

 @umweltrat