

## Context

Noise standards for cars, vans, lorries and buses have been in place under the EU's vehicle noise directive (70/157/EEC) for over forty years. The last update of the noise standards was back in 1992, but the changes made a negligible difference to overall noise levels in the real world. Improved standards are long overdue. On 9 December, the European Commission adopted a new regulation, which will replace the Vehicle Noise directive, with stricter noise emission limits for cars, vans, lorries and buses.

## What's the problem?

More than 200 million EU citizens are exposed to long-term road traffic noise levels which pose a risk to their health. Traffic noise is the most widespread environmental problem in the European Union, and the second in terms of health impacts after air pollution. According to the latest report from the World Health Organisation (WHO), exposure to harmful levels of noise causes cardiovascular disease, sleep disturbance, hearing damage and hinders children's learning<sup>1</sup>. Studies have revealed 50,000 deaths and 245,000 cases of cardiovascular disease every year in Europe are linked to traffic noise and that 5% of strokes can be associated with high noise exposure<sup>2</sup>.

## What are the benefits of reducing vehicle noise?

Cutting road noise levels by 3 decibels is equivalent to halving the level of traffic. The decibel scale is logarithmic, so if a 3-decibel noise reduction means halving the traffic noise, a 10-decibel reduction would imply cutting the noise levels by as much as ten times. Reducing noise emissions by three decibels and thus halving traffic noise levels would bring about major improvements in quality of life for the vast majority of European citizens who live in towns and cities or near major roads. This reduction would be achievable quickly with more widespread application of technologies that are already readily available to car and truck manufacturers.

Furthermore, quieter vehicles would mean less money spent by national governments, local authorities and taxpayers on installing noise barriers or sound insulation to homes and public buildings. Quieter roads would also have a positive effect on property values, since homes in noisy areas tend to be less attractive to potential buyers.

**The benefit of stringent noise limits for vehicles would outweigh the costs by a factor of twenty to one<sup>3</sup>.**

<sup>1</sup> WHO press release and report available at [www.euro.who.int/\\_data/assets/pdf\\_file/0008/136466/Burden\\_of\\_disease.pdf](http://www.euro.who.int/_data/assets/pdf_file/0008/136466/Burden_of_disease.pdf)

Sorensen, M. et al (2011) Road traffic noise and stroke: a prospective cohort study. *European Heart Journal*, 25 January 2011

<sup>2</sup> CE (2007): Traffic noise reduction in Europe: [www.transportenvironment.org/Publications/prep\\_hand\\_out/lid:495](http://www.transportenvironment.org/Publications/prep_hand_out/lid:495)

<sup>3</sup> TNO (2011) VENOLIVA – Vehicle Noise Limit values, assessment for EC DG Enterprise: [ec.europa.eu/enterprise/sectors/automotive/files/projects/report-venoliva\\_en.pdf](http://ec.europa.eu/enterprise/sectors/automotive/files/projects/report-venoliva_en.pdf)

## What will the new regulation involve?

The Commission's proposal<sup>4</sup> is expected to reduce the level for car noise by 4 decibels and lorry noise by 3 decibels in four/five years after its entry into force. This means that, if the regulation is backed by the Parliament and Council and thus comes into force in 2012, the new standards will be implemented in 2016/2017.

The new regulation is based on a two-step approach:

- Step 1 is expected to require a reduction of 2 decibels for noise emissions for new types of cars, and an effective reduction of 1 decibel for new types of lorries, two years after the law is adopted.
- Step 2 is expected to require a further 2-decibel cut for new types of cars, vans and lorries, three years after step 1.

So, if the regulation were adopted in 2012, step 1 would enter into force in 2014, and step 2 in 2017.

Once step 2 is in place, this will result in a limit of 68 decibels for cars, 70dB for vans and 78 decibels for lorries. However, at the beginning, these new standards will only apply to new types of vehicles. It will only be two years after step 2 is implemented, i.e. not before 2019, that the new noise limits will be binding for all new vehicles sales.

Finally, the regulation will be subject to revision within two years after step 1, i.e. possibly in 2016.

Note that proposed limit values are not directly comparable to the current standards, as the test method will be changed, but we refer here to real reductions taking the test change into account.

## What should change?

Transport & Environment, the European Environmental Bureau and the Health and Environment Alliance will highlight a number ways of improving the Commission's proposal.

In summary:

- Given the scale and urgency of the health impacts of traffic noise, a faster timetable is needed for introducing the revised standards, with step 1 to be enforced in 2013 and step 2 in 2015;
- To set out a pathway for further noise reductions in the future, and to provide time to the industry to prepare, a further step must be included now to enter into force in 2020, with a 3-decibel reduction compared to step 2 for vans and cars and a 4-decibel reduction compared to step 2 for lorries;
- A stronger focus on lorries, so that the noise measured in the official test better matches real world noise emissions;
- Require information on vehicle noise emissions to be publicly available, via a European vehicle noise label, with corresponding transparency of the data from the official tests;
- Stricter limits for peak levels of noise, for example when an engine is revved. These peak levels of noise can be particularly intrusive.

[www.transportenvironment.org/transport-noise](http://www.transportenvironment.org/transport-noise)

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<sup>4</sup> For further information on the Vehicle Noise Directive see:

[http://ec.europa.eu/enterprise/sectors/automotive/environment/noise/index\\_en.htm](http://ec.europa.eu/enterprise/sectors/automotive/environment/noise/index_en.htm)