













Track data indicate only a slight reduction of the speech intelligibility when increasing the average speed, which does not necessarily implies a worse quality of the perceived noise (AI values are all over 80%). The interior sound becomes progressively louder but more pleasant at the same time, since the Sharpness-related annoying sensation decreases with increasing the average speed. Therefore, driving the car over the track at ever higher speed, the reduction of NOx emissions occurs together with the improvement of the sound pleasantness sensation.

The analysis outcomes will be useful for further studies regarding the environmental quality of a vehicle. Specifically, future developments will concern the definition of a vehicle overall quality index through the employment of a multi-criteria method. The index will include all the most relevant criteria, e.g. CO<sub>2</sub>, NOx, PN emissions, interior and exterior noise, and will be capable of assessing vehicles, supporting consumers and policy makers in their choices.

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