



## Declaration on Better Tyres

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### Summary

Almost 50% of residents in European cities are exposed to noise levels above 55 dB and nearly 15% of residents are exposed to noise levels higher than 65dB. One third of people living in urban areas are exposed to concentrations of air pollutants above European and/or National limits. In total 31.500 people were killed in 2010 in traffic accidents. One third of these accidents happened in urban areas. In urban areas, traffic is the largest contributor of CO<sub>2</sub>, which leads to global warming.

These facts, especially the noise burden in urban areas, was the reason for Working group Noise EUROCITIES and the Dutch ministry of Infrastructure and Environment to draft a 'Declaration on Best Tyres'. Better Tyres are less noisy, safer and less energy consuming. The Declaration invites European cities and towns to include the use of better tyres in their green procurement policies in order to provide their municipal car fleet on better tyres when replacing tyres or when buying or leasing vehicles. By signing the Declaration signatories commit themselves to do so and also to promote the use of better tyres towards companies, citizens and other institutes in their jurisdiction. By changing to better tyres not only the environment and health of citizens will be improved but also their financial resources because better tyres are not necessarily more expensive.

## 1. Introduction

Road traffic noise is the major noise source in urban areas. Numerous interventions can be taken to reduce noise. However, all measures together will not solve the problem entirely [1]. To eliminate the noise in urban areas high ambitions should be set. It needs a change of thinking, behaviour, producing, consuming, governing etc. meaning another way of life. This is hard to achieve. However the roadmap to a better acoustic environment could be paved by local governments, showing society the ropes. This by means of green procurement implying purchasing and leasing green products and services. One of this services or products should be to lease or buy municipal fleet vehicles that are employed with the best possible tyres<sup>1</sup>. In order to stimulate local authorities in purchasing better tyres the Working Group Noise EUROCITIES and the Dutch ministry of Infrastructure and Environment have drafted a 'Declaration on Best Tyres'.

## 2. What authorities should know

The declaration has a preamble that describes the reasons to draft this declaration. It starts with the concern over the growth of the number of cars estimated in the EU to be more than 235 million and the negative impacts on human health and the environment. These impact are i.a.:

1. One third of people living in urban areas are exposed to concentrations of air pollutants above European and/or National limits;
2. Almost 50% of residents in our cities are exposed to noise levels above 55 dB and nearly 15% of residents are exposed to noise levels higher than 65dB, resulting in yearly 10,000 premature deaths [1];
3. In total 31.500 people were killed in 2010 in traffic accidents; one third of these accidents happened in urban areas; and

4. In urban areas, traffic is the largest contributor of CO<sub>2</sub>, which leads to global warming.

Assuming that local authorities are committed to contribute to a healthy environment for their citizens and determined to limit the noise in streets they can use the most 'Quiet Road Surfaces [2]. Cities will recognize that for noise abatement quiet roads and better tyres complement each other. Local authorities should also recognise that better tyres are safer, produce less noise and last but not least have a lower rolling resistance, reducing fuel consumption and thus CO<sub>2</sub> emissions. By using better tyres and promoting them amongst citizens, institutions, enterprises and other local bodies, cities can benefit from reduced CO<sub>2</sub>, less air pollution, a lower number of fatalities, injuries and less noise exposed people. Recent reports show huge potential benefits of using better tyres e.g. the study 'Potential benefits of Triple-A tyres in the European Union [3]' that showed major benefits moving to AAA-tyres according to the EU tyre label ((1222/2009). In this report it is estimated that the use of Triple-A tyres in the EU would annually save up to 17 billion litres of fuel and reduce CO<sub>2</sub> emissions by roughly 42 Mton. Yearly, 2,567 less people would be killed in traffic accidents, the number of serious injuries would be reduced by 12,353 and the number of slight injuries would be reduced by 19,631. The report mentions that the number of annoyed and highly annoyed people by road traffic would be reduced by 8.3 and 13 million respectively. Further, the number of sleep-disturbed and highly sleep-disturbed people would be reduced by 3.4 and 6.1 million respectively. From a societal perspective, the associated annual cost savings are estimated to amount to 34 billion Euros.

Many people think that better tyres are not as safe as normal tyres, do wear more or emit more particular matter (PM). This is not true. Actually, there are no trade-offs. Moving to the best possible tyres are win-win-win. Better tyres do not necessarily cost more than other tyres. However, any additional cost will be offset by savings in fuel for the average end-user where the annual fuel cost savings would range from 90 € for passenger cars to 2000 € for long-haul vehicles. For better tyres but also for normal tyres, it is important that they are inflated at the right pressure which in turn lead to less fuel use, less casualties, less CO<sub>2</sub> emission and air pollution and, last but not least,

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<sup>1</sup> 'Best Tyres' are tyres that have the best possible/available label for the three categories Energy, Wet grip and Noise according to EU Regulation 1222/2009.

less noise. By means of the Tyre Pressure Monitoring Systems (TPMS) which monitors the inflation of the tyres and warns the driver if the tyre pressure becomes too low. The performance of properly inflated tyres is optimal, it will save more fuel, reduces wear and will drive safer.

### 3. What authorities should do

Cities are invited to sign the 'Declaration on Best Tyres' and to commit themselves to:

1. Provide municipal car fleets with the *Best Tyres* when these cars or vehicles are bought or leased and when the tyres are being replaced if they are worn;
2. Evaluate the progress towards AAA tyres and move to Triple A rated tyres as soon as they become available;
3. Include Best Tyres in the Terms of References for works or services commissioned by the city council and/or municipal services as a part of the Green Procurement policies;
4. Strive to ensure that in 2018 50% of the municipal car fleet is provided with the best possible/available tyres and in 2020 all cars are provided with the Best Tyres;
5. Provide municipal car fleets with TPMS as meant in Regulation (EC) No 661/2009 of the European Parliament and of the Council of 13 July 2009 and organise that the tyres of the fleet will be checked and inflated to the correct pressure at least every three months;
6. Monitor the percentage of Best Tyres and TPMS applied in the municipal car fleets and commissioned work and services and to report periodically (once per 2 years) about the progress made;
7. Consider a European wide benchmark among cities to determine the percentage of Best Tyres applied in municipal car fleets and rank cities to apply Best Tyres in their municipal car fleet;
8. Endeavour that once per two years the report as meant above will be published in local media to inform the public and to encourage them to purchase Best Tyres as well;
9. Meet every two years under auspices of EUROCITIES to discuss the reports and to present an overall view which will be put in a covering report set up by EUROCITIES;

10. Work together with the European Commission to ensure emission limit values for vehicles and tyres are updated and stricter than the current ones, and to reduce the number of exemptions;
11. Promote the use of Best Tyres among citizens, businesses and institutions when and where possible; and
12. Call upon local, regional and national authorities and other fleet-owners that acceleration of the implementation of these kinds of measures and introduction of quiet, clean, safe and energy friendly transport in our cities should be implemented as soon as possible.

By the city of Rotterdam and the Working Group Noise of EUROCITIES both a website will be launched to monitor the efforts and the achievements of the cities that have signed the declaration.

### 4. Conclusions

By means of signing the Declaration on Best Tyres local authorities (cities) take responsibility in combating urban transport noise. By choosing for quieter and better tyres for their municipal car fleet the cities choose for also more energy friendly and safer vehicles. By doing this cities take the role of a shining example to their residents, the companies, institutes and schools that are settled in their jurisdiction. Together with many other interventions that should be taken at a local level this Declaration could be an important instrument to reduce road traffic noise in cities.

### References

- [1] C. Nugent et al, Noise in Europe, EEA 2014.
- [2] Quiet Road Surfaces, EUROCITIES, Leaflet, 2010
- [3] [www.unece.org/trans/main/wp29/wp29wgs/wp29grb/grbinf60.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29grb/grbinf60.html), informal doc GRB-60-13