

Commission study on tyre use

The Commission services ran study to assess various aspects of the tyre use and quality related to road safety, by means of the study “Study on some safety-related aspects of tyre use”. The report is the result of a tender and was granted to TNO (Netherlands) with TML (Belgium) as partner.

The overall aim of the study is to propose policy options concerning the use of tyres for improvement of traffic safety. Centrally to this, is the idea that end users need to make the correct assessment in relation to the tyre condition in order to achieve a level of safety as high as possible. Within this context, the tyre condition is considered in relation to technical elements (tyre inflation pressure, tyre tread depth, tyre damage, tyre age, and meteorological influences) and one information element (driver awareness). The study addresses the topics of tyre usage and the impact on road safety (which are the potential safety improvements related to tyre usage from a technical perspective) and how can road users be supported to use tyres that have a better safety performance by policy options. The policy options are subject to a costbenefit analysis.

In summary the actions to improve safety on a European scale are as follows.

- A. Increase efforts for campaigning and enforcement of current tread depth legislation
- B. Increase efforts for campaigning of tyre inflation pressure maintenance
- C. Provide sufficient access to calibrated air filling stations⁷
- D. Define a unified Winter tyre with the requirement to have the 3PMS marking
- E. Include a requirement for quick deflation detection in TPMS regulation with a short reaction time (e.g. several seconds rather than minutes)
- F. Install a harmonized tread depth requirement for Winter tyres (e.g. 4 mm⁸)
- G. Increase efforts for enforcement of Winter tyre legislation
- H. Depending on the occurrence of wintery road conditions and member state-specific mobility demand increase awareness campaigns or install Winter tyre legislation

Note: item G and H may not be cost effective as a policy option; however the estimated safety benefit corresponds to 3% reduction of the number of fatalities under wintery conditions

The following actions are not supported with a cost benefit analysis, but are expected to be beneficial:

- I. Install a harmonized tread depth requirement for truck tyres (e.g. 1.6 mm)
- J. Organise tyre inspections on a voluntary basis or regulated between periodic vehicle inspections

The full study may be found at the following link:

http://ec.europa.eu/transport/road_safety/pdf/vehicles/study_tyres_2014.pdf