

## REPORT 2010

### **Progress of UNECE regarding automotive regulations during 2009**

The World Forum for Harmonization of Vehicle Regulations (WP.29) adopted at its November 2009 session harmonized requirements on Tyre Pressure Monitoring Systems (TPMS). As well as preventing casualties, the widespread use of TPMS in cars could significantly reduce fuel consumption and CO<sub>2</sub> emissions.

Deflated tyres can cause up to 4 per cent increase in fuel consumption while reducing tyre lifespan by 45 per cent. Deflated tyres are also an important factor causing road accidents (9 per cent of fatal accidents on motorways are related to tyre failures). Despite these facts, owners are not careful with the condition of their tyres. According to a European study, 50 per cent of all cars are driven on under-inflated tyres. This is the reason why the World Forum (WP.29) developed in 2009 harmonized requirements on TPMS.

TPMS warn the driver when the tyre is significantly below its optimum pressure. The use of TPMS will therefore help to improve road safety, tyre performance, fuel efficiency and CO<sub>2</sub> emissions. For CO<sub>2</sub> emissions in particular, according to research by TNO in the Netherlands, the fuel saving potential of TPMS in passenger cars is 2.5 per cent. For new cars with expected engine test cycle performance of 130 g CO<sub>2</sub>/km this would mean additional reductions of 3g CO<sub>2</sub>/km.

The European Community will make reference in its own legislation to the corresponding UNECE Regulation<sup>1</sup> to make mandatory the TPMS requirements developed by the World Forum.



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