TPMS

OICA POSITION
Background

Kyoto Protocol: commitment to reduce CO₂ emissions

EC involvement in Geneva '58 Agreement + commitment to mandate TPMS by October 2012 in EU

US: FMVSS 138 mandatory since September 2007 for all new vehicles

Which TPMS in UNECE?
### OICA target

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<thead>
<tr>
<th>Area</th>
<th>Description</th>
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<tr>
<td>Assure user acceptance and system credibility</td>
<td>- By appropriate threshold value and warning delay avoiding false alerts and user complaints</td>
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<td>Prevent cost inflation</td>
<td>- Base requirements on performance of current systems</td>
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<td>- Economic solutions should be possible</td>
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<td>- Follow-up costs for consumers to be considered</td>
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<td>Keep technical flexibility</td>
<td>- Do not exclude certain technologies</td>
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<td>International Harmonization</td>
<td>- Try to harmonise with existing national regulations</td>
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OICA can support TPMS based on FMVSS138

For harmonization sake

OICA can recommend UNECE TPMS aligned on FMVSS 138

- US lab research shows no risk of tyre failure at 25% under-inflation
- US real world experience does confirm the above outcomes
  - tyre maintenance is improved
  - narrower distribution of under/over inflation
  - slightly improved fuel efficiency

Those benefits can be realized in Europe

FMVSS138 is currently sole candidate for a harmonized regulation
Situation inside
UNECE 1958 agreement

FMVSS 138 sole regulation in force worldwide:
- Targets tyre integrity
- CO2 reduction is side effect
- Feasibility is proven

Objectives defined by EC:
- CO₂ reduction is main effect
- Safety in case of quick deflation

NEED FOR POLITICAL DECISION ON TECHNICAL APPROACH*

* 2 possible approaches
Situation inside
UNECE 1958 agreement

“Harmonisation approach"
- Paves the way to a gtr thanks to US/EU experience
- Fast application of FMVSS138 requirements

“European Approach”
- Amending FMVSS in order to:
  - Improve fuel efficiency, and
  - Accelerate deflation detection

Political decision to be taken by the 1958 Contracting Parties

OICA can support "Harmonisation approach"

"European approach" needs some compromise inside GRRF-TPM-WG
GRRF-TPM-WG proposal

Pressure

\( P_{\text{warm}} \)
\( P_{\text{rec-cold}} \)
\( P_{\text{rec-cold}} -25\% \)

Learning phase
Detection with vehicle running
Correctly inflated tyres
Deflated tyre
Deflation

Time
A TPMS regulation defines no requirement on tyres, but only vehicle performance requirements.

The component "tyre" is approved with regard to load/speed-performance (R30 and 54). The component "tyre" is sold without pressure.

The driver is responsible for the correct maintenance of its tyres. Field data shows that drivers with TPMS are generally more sensitive to tyre pressure.

Vehicles should NOT be more heavily regulated only to protect the tyre Industry!
GRRF-TPM-WG proposal is the maximum OICA can accept in "European Approach"

- Proper communication campaign is necessary
- Accuracy of public pressure gauges should be regulated

- Most OICA members see it as the toughest acceptable compromise
- Need for good user acceptance
- User is final responsible for tyre pressure

= Proper communication campaign + pressure gauge accuracy
Annex 1: Example of user acceptance

TrueSquare
New TN User
Join Date: Sep 2007
Location: USA
Posts: 7
Trader Rating: (9)

Disable TPMS

How can you disable the tire pressure monitoring system? I have new wheels and would rather leave the sensors in the original wheels.

2008 Xb

aircooled
Touareg Addicted Admin

Possible NEW procedure to disable TPMS

Folks, I stumbled across this possibly juicy bit of information on Vortex today. Some of you wheels geeks may really like this.

It comes straight from Uwe, owner of Ross-Tech. The following advice is in reference to a poster that was looking for a way to disable the "not federally mandated" tire pressure monitoring system (TPMS) in his early model Touaregs.

Can someone that is brave enough try these instructions to see if we can make TPMS go away? I’d try, but I no longer have a TPMS vehicle.
Annex 2: Example of Communication

Your vehicle has something new to tell you.

Keeping your automobile's tires

TPMS

Tire Pressure Monitoring System (TPMS)

Q. How does the new Tire Pressure Monitoring System (TPMS) work?
A: Tire pressure monitoring systems continuously monitor the pressure in the tires through sensors located in the tires (direct system) or the use of wheel speed and other vehicle sensors (indirect system). The information collected by the sensors is transmitted to an on-board processor that interprets the sensor signals and warns the driver when tire pressure is below the minimum acceptable level by illuminating a warning lamp.