70th GRBP
11-13 September 2019

Study on requirements and test procedures for TPMS for vehicle categories M2, M3, N2, N3, O3 and O4
The political mandate for TPMS


- Required functionality:
  - 'tyre pressure monitoring system' means a system fitted on a vehicle which can evaluate the pressure of the tyres or the variation of pressure over time and transmit corresponding information to the user while the vehicle is running;
  - The TPM system shall:
    - Be capable of working with environmental conditions in all Member States
    - Provide an appropriate warning to the driver
    - Be designed to avoid resetting or recalibrating at a low tyre pressure
Task and relevant timelines

- TRL’s task is to:
  - Draft requirements and test procedures for type-approval of Tyre Pressure Monitoring (TPM) Systems
  - Trial the draft procedures
  - To be based on physical test (e.g. test track-based) based on the procedure as defined by UN R141 under additional consideration of the proposals submitted by third parties

- Implementation:
  - Vehicle categories: M2, M3, N2, N3, O3, O4
  - New types 05/2022, Existing types 05/2024 (actual dates defined relative to date of entry into force, currently assumed to be November 2019)
Timelines TRL TPMS workstream

- Stakeholder consultation in parallel with development of requirements/testing plan: April 2020
- Testing of draft method: April/May 2020
- Interim report: June 2020
- Review of interim report: during June/July 2020
- Finalise work: November 2020
Vehicle Categories

1. Extracted from 2007/46/EC as last amended by 385/2009

Vehicle categories are defined according to the following classification: (Where reference is made to "maximum mass" in the following definitions, this means "technically permissible maximum laden mass" as specified in item 2.8 of Annex I of the above Directive.)

- **Category M:** Motor vehicles with at least four wheels designed and constructed for the carriage of passengers.
  - Category M1: Vehicles designed and constructed for the carriage of passengers and comprising no more than eight seats in addition to the driver’s seat.
  - Category M2: Vehicles designed and constructed for the carriage of passengers, comprising more than eight seats in addition to the driver’s seat, and having a maximum mass not exceeding 5 tonnes.
  - Category M3: Vehicles designed and constructed for the carriage of passengers, comprising more than eight seats in addition to the driver’s seat, and having a maximum mass exceeding 5 tonnes.

- Category N: Motor vehicles with at least four wheels designed and constructed for the carriage of goods.
  - Category N1: Vehicles designed and constructed for the carriage of goods and having a maximum mass not exceeding 3.5 tonnes.
  - Category N2: Vehicles designed and constructed for the carriage of goods and having a maximum mass exceeding 3.5 tonnes but not exceeding 12 tonnes.
  - Category N3: Vehicles designed and constructed for the carriage of goods and having a maximum mass exceeding 12 tonnes.

- **Category O:** Trailers (including semi-trailers).
  - Category O1: Trailers with a maximum mass not exceeding 0.75 tonnes
  - Category O2: Trailers with a maximum mass exceeding 0.75 tonnes but not exceeding 3.5 tonnes.
  - Category O3: Trailers with a maximum mass exceeding 3.5 tonnes but not exceeding 10 tonnes.
  - Category O4: Trailers with a maximum mass exceeding 10 tonnes.
Thank you for your attention

DG GROW – Unit C4

Further information: