

Mapping the work ahead

UN ECE EVE IWG GTRs

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Web-meeting

April 21st-22nd, 2026

UN GRPE 94th March 2026

- UN GTR No. 21: proposal for amendment [2]
- UN GTR No. 22: proposal for amendment [2]
- UN GTR No. 25: proposal for amendment [1]



➤ Future work

UN GTR No. 21 – Phase 4 objectives

- Consider fuel-cell electric vehicles
 - Testing, data and proposals have been offered
 - Draft text is under discussion
 - Further information and validation may be required to ensure equivalence
- Consider measurement alternatives for highly integrated systems
 - Initial experimental results were put forward for direct measurement of K1
 - Require more validation, OBD data comparison and exploration of K2 calculation
- Consider modifications for more efficient test methods
- Consider alignment with UN Regulation No. 177 transposition efforts
- Other amendments as new data and continued research, analysis and testing lead to new developments

March 2028 – Consideration of Phase 4 at GRPE



UN GTR No. 21 – Phase 4 Priorities: inputs?

➤ Consider fuel-cell electric vehicles

- China inputs.....
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➤ Consider measurement alternatives for highly integrated systems

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➤ Consider modifications for more efficient test methods

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• Consider alignment with UN Regulation No. 177 transposition efforts

• Other amendments as new data and continued research, analysis and testing lead to new developments



UN GTR No. 22 – Phase 4 objectives

- Explore conditioning cycles and readiness monitors for official testing
 - Proposed as a monitor that indicates whether the vehicle is eligible for certification testing
- Investigate minimum performance requirements for state of certified range
 - Further considering whether certified range is required or desirable
- Consider alignment with UN Regulation No. 154-04 (and UN Regulation No. 83-09 for ISC) transposition efforts
- Incorporate necessary amendments based on lessons learned from the implementation experience of the contracting parties
- Future amendments as new data and continued research, analysis and testing lead to new developments, MPR revision
- Considering establishing MPR values for additional lifetime (10 years, 200000 km)

March 2028 – Consideration of Phase 4 at GRPE



UN GTR No. 22 – Phase 4 Priorities: inputs?

- Explore conditioning cycles and readiness monitors for official testing
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- Investigate minimum performance requirements for state of certified range
 - ...Japan/ OICA inputs.....
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- Considering establishing MPR values for additional lifetime (10 years, 200000 km)
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- Consider alignment with UN Regulation No. 154-04 (and UN Regulation No. 83-09 for ISC) transposition efforts
- Incorporate necessary amendments based on lessons learned from the implementation experience of the contracting parties
- Future amendments as new data and continued research, analysis and testing lead to new developments:
 - MPR revision, revisit the survey for Part C (probably to develop a dedicated one), update of monitor to be revisited for virtual distance (see flow chart for Part C)



UN GTR No. 25 – Phase 3 objectives

- Consider amendment to Annex 2 provisions of values to be read from vehicles
- Consider Part C: Verification of reported virtual distance provisions
- Reconsider the MPRs regarding mileage and lifetime thresholds and consider the appropriateness of energy throughput as a threshold, based on the monitoring exercise for energy throughput
- Consider the need for further segmentation of the MPR thresholds by vehicle category/application
- Consider updating MPRs for HDV OVC-HEVs
- Exploring normal usage indices
- Continue development of alternative test methods including chassis dynamometer testing
- Future amendments as new data and continued research, analysis and testing lead to new developments

March 2027 – Consideration of Phase 3 at GRPE
March 2029 – Consideration of Phase 4 at GRPE



UN GTR No. 25 – Phase 3 Priorities: inputs?

- Consider amendment to Annex 2 provisions of values to be read from vehicles
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- Consider Part C: Verification of reported virtual distance provisions
 - OICA proposal on pilot test phase
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- Reconsider the MPRs regarding mileage and lifetime thresholds and consider the appropriateness of energy throughput as a threshold, based on the monitoring exercise for energy throughput
- Consider the need for further segmentation of the MPR thresholds by vehicle category/application
 - China inputs
 - JRC TEMA inputs
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UN GTR No. 25 – Phase 3 Priorities: inputs?

- Consider updating MPRs for HDV OVC-HEVs
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- Exploring normal usage indices (linked to MPRs, lifetime, metrics revision)
 - Is there something already in place for monitoring data?
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- Continue development of alternative test methods including chassis dynamometer testing
- Future amendments as new data and continued research, analysis and testing lead to new developments



Thank you

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