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agenda item 3(b))

European Commission

Transposition of GTR15 (WLTP) into EU Legislation and UN Regulations

72nd GRPE January 2016

Submitted by the expert of the European Commission

Background

- New regulations are required in order to transpose GTR No. 15 (WLTP) into EU legislation and UN Regulations
- In the EU, ‘Regulation xxx/2016’ is being prepared as a new implementing and amending regulation of EC No. 715/2007, that will eventually replace EC Regulation No. 692/2008 (NEDC)
- Options for transposition into UN Regulation discussed at 69th, 70th and 71st GRPE. Routes for implementation considered at WP.29 in November 2015.

Transposition into EU legislation

- Regulation xxx/2016 is currently being prepared
- Annex XXI of the new regulation is based on GTR15. Amendments to the GTR include:
  - Supplemental Ambient Temperature Correction Test (14º C test)
  - Deletion of GTR options/elements not applicable in Europe (e.g. option to exclude extra-high phase; tests for additional pollutants)
  - European Utility Factors for OVC-HEVs
- How to report WLTP results in the European Type Approval Process to be finalised
  - Which values?; Where reported?; Where used?
- Aim to submit to Technical Committee - Motor Vehicles (TCMV) in March 2016.

Transposition into UN Regulations

- European Commission put forward two routes for consideration at WP.29 in November 2015
  - Route 1: UN Regulation on WLTP would fully reflect EU legislation
  - Route 2: UN Regulation on WLTP would be developed in a hierarchical manner

See Informal Document WP.29-167-20 and also the report for the WP.29 November 2015 session: ECE-TRANS-WP.29-1118, paragraphs 44-50

- 71st GRPE documents of relevance:
  - GRPE-71-02 - position of Japan on transposition into UN Regulation
  - GRPE-71-15 – position of Japan on transposition into Japanese legislation
  - GRPE-71-19 - European Commission ideas/proposals for transposition

Transposition into UN Regulations

- Route 1: UN Regulation on WLTP would fully reflect EU legislation
  - Non-EU contracting parties do not sign the WLTP Regulation but instead draft their own legislation, referring to parts of Regulation WLTP if/where appropriate
  - UN Regulation would be drafted so that individual parts could be easily referred to in national legislation
- Route 2: UN Regulation on WLTP would be developed in a hierarchical manner
  - Different levels of stringency

    Top level – the most stringent requirements from across the regions

    Regional levels with the region's emission limits and region-specific technical and administrative requirements
  - Each Contracting party applying Regulation WLTP would have to accept the 'top' level and its own 'regional' level certificates and could issue certificates for all levels

Transposition into UN Regulations

- EC representative identified three advantages of Route 2
  - Would foster global harmonisation in the mid and long term
  - Certificates corresponding to regional levels could be issued by any contracting party
  - Would probably allow the inclusion of Regulation WLTP into International Whole Vehicle Type Approval (IWVTA), unlike Route 1.
- To counter this, it is more complex than Route 1 and also introduces a novel approach for GRPE. This needs to be taken into consideration when deciding on the way forward.
- The representatives from Japan and Switzerland expressed their support for Route 2.
- The representative from OICA also agreed in principle, taking into account the apparent compatibility of Route 2 with IWVTA

Transposition into UN Regulations

- WP.29 agreed to transpose the WLTP UN GTR into a UN Regulation according to Route 2.
- The chair of GRPE confirmed that GRPE would start work according to Route 2 at its January 2016 session
  - The complexity of following Route 2 was discussed
  - GRPE needs to start with the consideration for the scope and structure of Regulation WLTP
  - Once Regulation WLTP is included in Annex 4 to Regulation 0, only the highest level of stringency would be applicable for IWVTA – this needs careful consideration

Route 2 - to enable harmonisation

New UN/ECE 'Regulation WLTP'

Regulation WLTP – top level (Level 2)

Contains most stringent limits from across all regions

Subject to full mutual recognition: TA shall be accepted by all CPs

Regulation WLTP – Level 1a
Contains current R.83 limits
Optional acceptance by other CPs

Regulation WLTP – Level 1b
Contains "other" limits (e.g. Jpn)
Optional acceptance by other CPs

Etc.

Use different Approval Marks and Numbering to distinguish approval level

Regulation 83 and Regulation 101 remain unchanged and 'available' for approvals

But pragmatic solution addressing testing options of the GTR 15 for level 2 needed

Potential solution to enable Europe & non-EU contracting parties to issue approvals against the 1958 Agreement

New 'Regulation WLTP'

- Regulation WLTP Level 2
- Regulation WLTP Regional Level 1a
- Regulation WLTP Regional Level 1b
- Etc.

Type 1 test only

- **EU would sign-up to both new regulations**
- **Non-EU contracting parties only need to sign-up to Reg. WLTP**

- **When the GTR15 adds new tests (e.g. Evaporative emissions) 'Reg. 999' will 'shrink' as 'Reg. WLTP' 'grows'**

New 'Regulation 999'

'Empty' regulation with x-refs to equivalent parts of R.83*

Type II test (Carbon monoxide emission test at idling speed)

Type III test (Verifying emissions of crankcase gases)

Type IV test (Evaporative emissions)

Type V test (Durability of pollution control devices)

Type VI test (Cold start at low ambient temperature)

Annex XI - OBD

* Where other tests refer to the Type I test (NEDC) it will be necessary to say (where appropriate) that this should be seen to be the WLTP Type 1 test (over a certain transition period in some cases)

Discussion on Scope and Structure of Regulation WLTP

Regulation WLTP

Regulation WLTP

Table of Contents

Throughout the sections we will need to identify where there are regional variations.

Will need to agree from the start the terminology to use for each region so that it can be used in the tables, approval marks etc.

Regulation WLTP

Regulation WLTP

Table of Contents (continued)

Discussion on Scope and Structure of Regulation 999

Regulation 999

Regulation 999 Table of Contents

Regulation 999

Regulation 999 Table of Contents continued

Regulation 999 – principle for annexes

Annexes are 'empty' of technical content.

Examples

Annex 4: Type II [or 2] test (Carbon monoxide emission test at idling speed)

1. The general requirements for the Type II [or 2] test shall be those specified in Annex 5 to Regulation No. 83 in force at the time of the approval of the vehicle, with the exception set out in paragraph 2.

2. Reference to the Type I test in paragraph 2.2.1. of Annex 5 to Regulation No. 83 shall be understood as referring to the Type 1 test in Regulation No. WLTP.

Annex 5: Type III [or 3] test: (Verifying emissions of crankcase gases)

1. The general provisions for the Type III [or 3] test shall be those specified in Annex 6 to Regulation No. 83 in force at the time of the approval of the vehicle, with the exception set out in paragraph 2.

2. Reference to the Type I test in paragraph 2.1. of Annex 6 to Regulation No. 83 shall be understood as referring to the Type 1 test in Regulation No. WLTP.

Way forward

- Aim to agree scope and structure at 72nd GRPE
- A complex task
  - GRPE to provide mandate to WLTP Informal Working Group to develop detail?

Contact information

Klaus Steininger, European Commission
Nikolaus.Steininger@ec.europa.eu

Robert Gardner, TRL
rgardner@trl.co.uk