



GTR No. 15 Amendment 6

Informal Document

Introduction

- GTR15 Amendment 5 was voted at the xxx session of WP.29 in xxx 2019 and was uploaded onto the UN registry on xxx September 2019.
- Since WP.29 there has been a wide range of further work undertaken under the umbrella of WLTP IWG to add new elements to GTR15 and to clarify/correct/amend some existing elements.
- The parallel process to transpose GTR15 into UNR WLTP has contributed to the development of some elements.
- This post WP.29 work has triggered the requirement to develop a new Amendment 6 to GTR15.
- Full draft texts are not yet available for the 80th GRPE and so this Informal Document provides a summary of the changes which will be included in a Working Document to be submitted to the 81st GRPE and provides links to the latest drafts of the various texts.

Amendment 6 versus Amendment 5

- The following slides provide a summary of the key updates to GTR15 which are proposed for Amendment 6. These cover the following topics:
 - Updates to existing GTR15 requirements – with the slides identifying the main changes by GTR section
 - New Optional Annex for Type 5 test (durability)
 - New Optional Annex for Type 6 test (low temperature)
 - New Optional Annex for Conformity of Production
 - New Annex for OBD

Key updates to Amendment 5 GTR15 requirements

- Main Body of GTR
 - Additional definitions relating to new annexes
 - Family definition for FCHVs
- Annex 1 - Worldwide light-duty test cycles (WLTC)
 - Updates provided by Gear Shift Task Force
- Annex 2 - Gear selection and shift point determination for vehicles equipped with manual transmissions
 - Updates provided by Gear Shift Task Force
- Annex 3 – Reference fuels
 - Type 6 reference fuels added
- Annex 4 - Road load and dynamometer setting
 - Updates from UNR WLTP

Key updates to Amendment 5 GTR15 requirements

- Annex 5 – Test equipment and calibrations
 - Updates from UNR WLTP
- Annex 6 - Type 1 test procedures and test conditions
 - Updates from UNR WLTP
- Annex 7 - Calculations
 - Updates from UNR WLTP
- Annex 8 - Pure electric, hybrid electric and compressed hydrogen fuel cell hybrid vehicles
 - Updates from UNR WLTP
- The latest 'work in progress' version of the Word document for Amendment 6 can be found at the following UN Wiki link:

<https://wiki.unece.org/display/trans/GTR15+Amnd+6+Drafting>

New Optional Annex for Type 5 test (durability)

- A new Type 5 test has been developed for UNR WLTP. The technical elements will be incorporated in a new optional annex for GTR15.
- The text of the optional annex will be based on the technical elements of the Type 5 test requirements developed for UNR WLTP, with Contracting Party options reflecting the differences in the requirements between Level 1A (Europe) and Level 1B (Japan) – and taking account of any additional requirements for other CPs, where they exist

New Optional Annex for Type 6 test (low temperature)

- The Low Temperature Task Force have been working on a new Type 6 test to replace the Type VI test in UNR No. 83.
- The Type 6 test requirements for the optional annex are under development. Key changes to the UNR No. 83 Type VI test include:
 - Produce an **optional annex** to GTR#15 for low and realistic winter temperature
 - Applicable **to all type of vehicles and fuels** (exempt FCHV for the first version of the optional annex)
 - Purpose is to check compliance of pollutant emissions (THC, CH₄, NMHC, CO, NO_x, PM, PN) and provide information for CO₂, FC, EC and range.
- NB: this new Type 6 test is not included in the initial versions of UNR WLTP – it will be added at a later stage
- The latest 'work in progress' version of the Word document for the Type 6 test requirements can be found at the following UN Wiki link:

<https://wiki.unece.org/display/trans/Optional+annex+Low+T+-+Drafting> 7

New Optional Annex for Conformity of Production

- In preparing UNR WLTP new Conformity of Production requirements have been developed by the CoP Task Force.
- The text of the optional annex will be based on the technical elements of the CoP requirements developed for UNR WLTP, with Contracting Party options reflecting the differences in the requirements between Level 1A (Europe) and Level 1B (Japan) – and taking account of any additional requirements for other CPs, where they exist

New Annex for OBD

- The OBD Task Force have been working on new OBD requirements to replace those in Annex 11 to UNR No. 83.
- The OBD requirements for the annex are under development. Key changes to the UNR No. 83 OBD requirements include:
 - Incorporate Japan's OBD requirements into the GTR
 - Incorporate driving cycle for OBD
 - Clarification of requirements incl. additional definitions

NB: these new OBD requirements are only partly included in the initial versions of UNR WLTP – the full update will be added at a later stage

- The latest 'work in progress' version of the Word document for the OBD requirements can be found at the following UN Wiki link:
- <https://wiki.unece.org/display/trans/WLTP+29th+session>



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