

Clarification of points regarding “UN Regulation WLTP”

GRPE 80 in January 2020 adopted the first two series of amendments for a new UN Regulation, here referred to as “UNR WLTP” as no number has yet been assigned.

The subject of vehicle emissions testing is based on diverse requirements worldwide and varieties of technologies. This is one of the factors which makes testing procedures very complex, and Global Technical Regulation 15 (WLTP) made a first attempt to harmonise these requirements, at least within the Contracting Parties of the 1958 Agreement and where a harmonisation was not possible, documented the differences as regional options.

The Transposition Task Force under the Informal Working Group WLTP has worked further to resolve these non-harmonised items, reaching harmonised compromises in some instances and agreeing on an approval process to the satisfaction of the leading Contracting Parties in this Task Force (Japan and the European Union) in others.

This has resulted in UNR WLTP having features that have not been seen before in Regulations of the 1958 Agreement and GRPE 80 therefore decided to compile this document to assist all users of this Regulation in their understanding.

< key unique feature of UNR WLTP >

UNR WLTP will have 3 Levels (more may be added later if requested by Contracting Parties). There are two regional Levels (contained within Level 1), and one harmonised Level (Level 2). The regional Levels reflect the current (at the time of adoption) emissions legislation in the EU (Level 1A) and in Japan (Level 1B).

As neither of these sub-levels of Level 1 will ever be subject to mutual recognition, it was decided to separate them from Level 2 by means of separate Series of Amendments (SoA). Therefore Regulation WLTP in its original form will be published and will enter into force containing only Level 1A and Level 1B and a set of special provisions and transitional provisions prohibit issuing of approvals until SoA 01 (Level 2) enters into force. In other words, the mandatory mutual recognition of Levels 1A and 1B by Contracting Parties will not come into question as they will belong to a previous version of the Regulation by the time that approvals may be issued.

SoA 01 will be published and will enter into force approximately 6 Months after the original version. This SoA will contain exclusively the Level 2 requirements giving clarity to Contracting Parties that an Approval to the original version is not subject to mutual recognition and an Approval to SoA 01 is subject to mutual recognition. In other words, Contracting Parties will be required to issue and to accept approvals (in accordance with the rules of the 58 Agreement) to SoA 01 but are still not required to accept approvals to the original version.

One aspect where Contracting Parties, and particularly their Type Approval Authorities will have to be attentive is the Scope(s) of the new Regulation. Level 1A, Level 1B and Level 2 each have different Scopes. This was necessary to ensure that neither Level 1B CPs (e.g. Japan) nor Level 1A CPs (e.g. the EU) were required to accept vehicles which were out of the scope of their local emissions legislation for light duty vehicles, whilst including the maximum vehicle diversity possible in the interest of the industry.

< sample of differences between the Levels of UNR WLTP >

items	Level 1A	Level 1B	Level 2
the test driving cycle	all 4 phases	first 3 phases	all 4 phases
			however, OVC-HEVs (“plug-in” hybrid vehicles) need double testing
the Bench Aging Test for durability	accept	do not accept	
		whole vehicle durability testing is required for diesel engined vehicles	
a mono-fuel gas vehicle having a petrol tank of up to 15 litres	exempt the testing with petrol	require the testing with petrol	
		double testing with gas and petrol is required	
OVC-FCHV s (“Plug-In” Fuel Cell vehicles)	within scope	exclude from the scope	
		not able to obtain Level 1B and Level 2 certificate	

These differences may create a concern that misunderstandings due to this complexity could lead to unplanned changes in the effective stringency of the WLTP legislation, particularly in Contracting Parties which are not heavily involved in the Informal Working Group WLTP activity.

< Example of possible concern >

The concern is that for simplicity, a country may decide to accept exclusively Level 2 approvals, despite having previously been satisfied with an approval reflecting the requirements of just one of the Level 1 Contracting Parties. This could lead to undesired consequences as illustrated in the following example:

Vehicle: OVC-HEV (“Plug-In” Hybrid Electric Vehicle)

Intended Markets: EU or Japan + a non-EU-non-Japan Contracting Party which previously accepted UNR 83 (vehicle not intended for sale in both the EU and Japan)

Situation: As described above, there are elements of Level 2 which require separately demonstrating compliance with the requirements of Level 1A and Level 1B. The double testing burden for Level 2 has to be accepted in the interest of harmonisation of the entire Regulation until a solution can be found.

Solution: Contracting Parties should be encouraged to accept the Level 1 approvals which ensure the necessary environmental protection and deliver the desired customer information in the context of their market conditions.