

WLTP IWG 27th Session

20th May 2019

Status Report from UNR WLTP Transposition Task Force



Post-26th WLTP IWG Update

- 8th May 2019 Transposition Task Force meeting, WebEx
 - Review and discussions on regulatory text
 - Introduction to the Type Approval documentation working draft (Annexes Part A)
- Drafts post-meeting uploaded to UNECE Wiki:

https://wiki.unece.org/display/trans/Task+Force+Meeting+8th+May+2019

- Drafts further updated before 27th IWG
 - No substantive changes made editorial updates, including rationalisation and clarification of some of the comments.



27th WLTP IWG and beyond

- 27th WLTP IWG
 - Further discussions on harmonisation, including Durability and COP + review of draft regulatory texts
- Informal documents to be submitted to 79th GRPE (May 2019)
 - Transposition status report to provide details of the progress and outstanding areas in relation to UNR WLTP and UNR 83 08 Series
 - No detailed regulatory texts to be provided as Informal Documents
 - ❖ Latest working drafts with square brackets and holding comments as appropriate will be included in the Transposition Wiki page which will be signposted from the Informal Document (Status Report)
- Task Force meeting planned for 20th June 2019 drafting
- Additional meetings to be arranged before 28th IWG (Sept 2019)
- All outstanding items to be resolved before or at the 28th IWG
- Final drafting in October 2019. Submission by 21st October.



Latest Status on Regional Options

NB: no change from 26th IWG Zagreb

| Annex | om WLTP-25-1 Section | brief description | EU | JPN | dis-harmonised ← → harmonised Possible Scenario in UNR_WLTP L2 | Note | Most Stringent |
|-----------|-------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Main body | 1 | Scope | UNR83 (reference mass not exceeding 2,610kg) | JPN (M1 and TPMLM not exceeding 3,500kg) | TBD | Align with GTR15? | Trost Stangent |
| Main body | 1 | Exclusion relating to UNR49 approval | UNR83&101 (less than 2,000 units and above 2,380kg) | N (not accept UNR83&101) | N (not accept UNR83&101) | To be discussed? | JPN - not accept UNR49 |
| Main body | 3.7.1. | Rated engine power | R85 | JPN method (TRIAS,R85,ISO) | level 1/2 concept (R85 for Level2) | | Level 2 - R85 |
| Main body | 3.7.2. | Maximum speed | Maximum speed' (vmax) means the maximum speed of a vehicle as declared by the manufacturer. | JPN method (TRIAS,calculate,R68) | level 1/2 concept | Only some EU Member States are CPs to UNR68 - not EU as a whole. Japan to consider what to do in relation to maximum speed once IWVTA is in place. | need discussion |
| Main body | 4.9 | Flex-fuel vehicles | Y | Y | Y | JPN accept flex-fuel and bi-fuel in L1b and L2 | Harmonised |
| Main body | 5 | Small volume manufacturers | N | N | N | EU - accept removal of requirement relating to small volume manufacturers | Harmonised |
| Main body | 5.1.3. | Inlets to fuel tanks (fuel pump delivery nozzle) | Y (external diameter ≥ 23.6mm) | N | level 1/2 concept (Y(external diameter ≥ 23.6mm) for Level2) | " the inlet orifice of the petrol or ethanol tank shall be so designed as to prevent the tank from being filled from a fuel pump delivery nozzle which has an external diameter of 23.6 mm or greater. | EU - external diameter |
| Main body | UNR83: 5.3.1.2.1.1. | Bi-fuel vehicles | Y | Y | Υ | JPN to accept flex-fuel and bi-fuel in L1b and L2 | Harmonised |
| Main body | UNR83: 5.3.1.2.1.2. | gasoline < 15 litre exemption | Y | N (Japan require gasoline test) | level 1/2 concept (N (Japan require gasoline test) for Level2) | No exemption in L2? - to be further discussed | JPN - require gasoline test |
| 1 | 2 | Vehicle classifications | Y | Y | Υ | JPN to accept Class 1 and Class 2 vehicles | Harmonised |
| 1 | 3.1. ~ 3.3. | Test cycles | include ex-H | exclude ex-H | level 1/2 concept (Run 4 phase and check both 3/4 phases limits) | | Run 4 phase and check both 3/4 phases limits |
| 1 | 3.5 | WLTC city cycles | Y | N | level 1/2 concept (Y for level2) | | EU - requiring city cycle |
| 1 | 8 | Downscaling | Y | Υ | Y | JPN to accept downscaling in L1b and L2 | Harmonised |
| 1 | 9 | Capped speed | Υ | Y | Υ | Need to develop appropriate text, e.g. "If the vehicle has capped speed according to regional legislation the requirements of paragraph 9.1. shall apply" | Harmonised |
| 3 | | reference fuel | EU/UN | TBD (Lead = zero) | level 1/2 concept (EU/UN (Lead (Pb) = zero) for level2) | JPN to accept EU/UN reference fuel | EU/UN (Lead (Pb) = zero) |
| 4 | 4.1.1.2. | Atmospheric temperature | not allow +5℃ | not allow +5℃ | harmonised | | Harmonised |
| 4 | 4.2.2. | Tyre selection | R No. 117 - 02 EU 1222/2009 | R No. 117 -02 GTR15 | harmonised | RRC values in EU 1222/2009 and GTR15 are the same. | Harmonised |
| 4 | 7.3.4.1. | Vehicle warm up (90% of maximum speed) | Y(ExH) | Y(H or ExH) | level 1/2 concept (ExH for level2) | | ExH |
| 5 | e.g. 4.3 | Particle Number | Required | Not required | level 1/2 concept (required for level2) | NB: PN is not just in Annex 5 but in several other sections of GTR15. | EU - PN |
| 5 | Section 7 | Additional sampling and analysis methods | Not required | Not required | harmonised | NB: in WLTP-25-10e this was "level1/2 concept" - now corrected. | Harmonised |
| 6 | 1.2. | criteria pollutant and limit value | EU unique | JPN unique | level 1/2 concept (should meet both criteria for level2) | | should meet both criteria |
| 6 | 1.2.2. | other regional corrections | | N | level 1/2 concept (Y (14℃ ATCT) for level2) | JPN accept ATCT for L2 | EU - ATCT |
| | | | Y (Target speed corrections) | N | Target speed corrections - TBD | Technical discussions needed | ??? |
| 6 | 1.2.3.8. | dCO2 determination. | Y(0.99) | Y(1.00) | level 1/2 concept (0.99 ··· with 4phase for level2) | | EU - 0.99 |
| 6 | 2.1.3.1.1. | Subtraction of background PM | Y | Υ | harmonised | | Harmonised |
| 6 | 2.4.2.1. | Auxiliary devices | Y (DLR) | Y | Y (ON if required by regional legislation) | "Auxiliary devices shall be switched off or deactivated during dynamometer operation unless their operation is required by regional legislation" EV noise generator may need to be considered. The way to turn off may be discussion point. EV Acoustic Vehicle Alerting System (AVAS) - UNR 138 | Harmonised |

| Adapted from WLTP-25-10e | | | | | | | |
|--------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Annex | Section | brief description | EU | JPN | Possible Scenario in UNR_WLTP L2 | Note | Most Stringent |
| 6 | 2.4. | 4WD requirement | Y | Y | Y | Technical discussions needed in relation to "if vertical forces cannot be applied …" | Harmonised |
| 6 | Appendix 1 1.5. & 1.6. | regenerative factor Ki | include ex-H | accept both 3-phase Ki and 4-phase Ki | Harmonised (EU accept 3_phase_Ki, on the other hands, JPN accept 4_phase_Ki) | | Harmonised |
| 7 | Table A7/1 Step 9 | Averaging of criteria emissions | EU 2017/1151 "In the case of the combined THC+NOx emissions, the highest value of the sum referring to either the VH or VL is to be used " | individual limits are applied | level 1/2 concept? | GTR15:"At request of a contracting party, the averaging of the criteria emissions may be omitted and the values of H and L remain separated." Calculate the average. Region can decide whether to use average or individual value. Japan 3-phase, EU 4-phase - allows the option to exist in Level 2 - TBD. | EU - additional requirement for 4phase JPN - individual limits for 3phase |
| 7 | 7.3. | RMSSE threshold | 1.3 | 0.8 | level 1/2 concept (1.3 for 1a, 0.8 for 1b and level2) | | JPN - 0.8 |
| 8 | 4.2.1.2.4., 4.2.1.2.5., Table A8/7 & Appendix 7 para 2.2.7. | Phase specific fuel consumption | not required | Required | level 1/2 concept (required for level2) | Japan require phase specific fuel consumption in L1b and L2 | JPN - phase specific |
| 8 | 4.3.4. & 4.4. | Electric energy consumption | Y - EU do not allow exclusion | N | level 1/2 concept (Y - EU do not allow exclusion for level2) | | EU - not to allow exclusion |
| 8 | Table A8/8~10 | ECDC | Y - required in EU (e.g. Table A8/8 Step 12) | Υ | Harmonised | | Harmonised |
| 8 | OVC-HEV | OVC-HEV CD CO2 (consumption) | UF weighted | Not UF weighted | level 1/2 concept (UF weighted for 4 phase and Not UF weighted for 3 phase) | | UF weighted for 4 phase and Not UF weighted for 3 phase |
| 8 | Appendix 3 para 1.4 c) | GTR15: "(c) Any procedure which may be required by a Contracting Party" | Y (14℃ ATCT) | N | level 1/2 concept (Y (14°C ATCT) for level2) | JPN accept ATCT for L2 | EU - ATCT |
| | | | Y (Target speed corrections) | N | Target speed corrections - TBD | Technical discussions needed | ??? |
| 8 | Appendix 5 | Utility factors | Y (Europe) | Y (Japan) | level 1/2 concept | | EU UF for 4 phase JPN UF for 3 phase |
| 8 | Appendix 6 paras 2.3(d), 3.3(d) & 4.3(d) | Option to replace reference test cycle with applicable WLTP city test cycle. | N - option not allowed | N - option not allowed | N - option not allowed | JPN update - option not allowed | Harmonised |
| 10 | | СОР | Y (Europe) | Y (JPN) | ? (ongoing under COP TF) | Need to discuss for harmonisation at COP TF | TBD |
| 11 | | Durability procedure | Interim use of UNR83 procedure | Interim use of Japan procedure | ? | Japan accepts SRC for L2. Need to compare other requirements to develop L2 | TBD |
| | | Fuel consumption | L/100km kg/100km (FCHV) | km/L km/kg(FCHV) | level 1/2 concept (L/100km and km/L) | | calculate with both method |

ECE/TRANS/WP.29/2018/73 GTR19 Evaporative Emissions

| Annex | Section | brief description | EU | JPN | | Note | Stringency 'Analysis' |
|-----------|------------|----------------------------|---------------------------------------------------|-------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Main body | 6.1. | Limits | Limits in Table 3 of Annex I of EU 715/2007 | Will use same limits as EU | Harmoniced | Option in GTR19 relates to '1 day limit' or '2 day limit'. EU and Japan will both use 2 day limit so option not applicable for UNR WLTP. | Harmonised |
| 1 | 7 | Calculation | 2day total | < | Harmonised | | Harmonised |
| 2 | Table A2/1 | mutual recognition fuel | Υ | Y and JPN fuel | level 1/2 concept (mutual recognition fuel for level2) | Currently EU allows use of reference fuel for Type 1 test - but this would change when there is a new UNR WLTP - with a mutual recognition fuel. | mutual recognition fuel |



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