

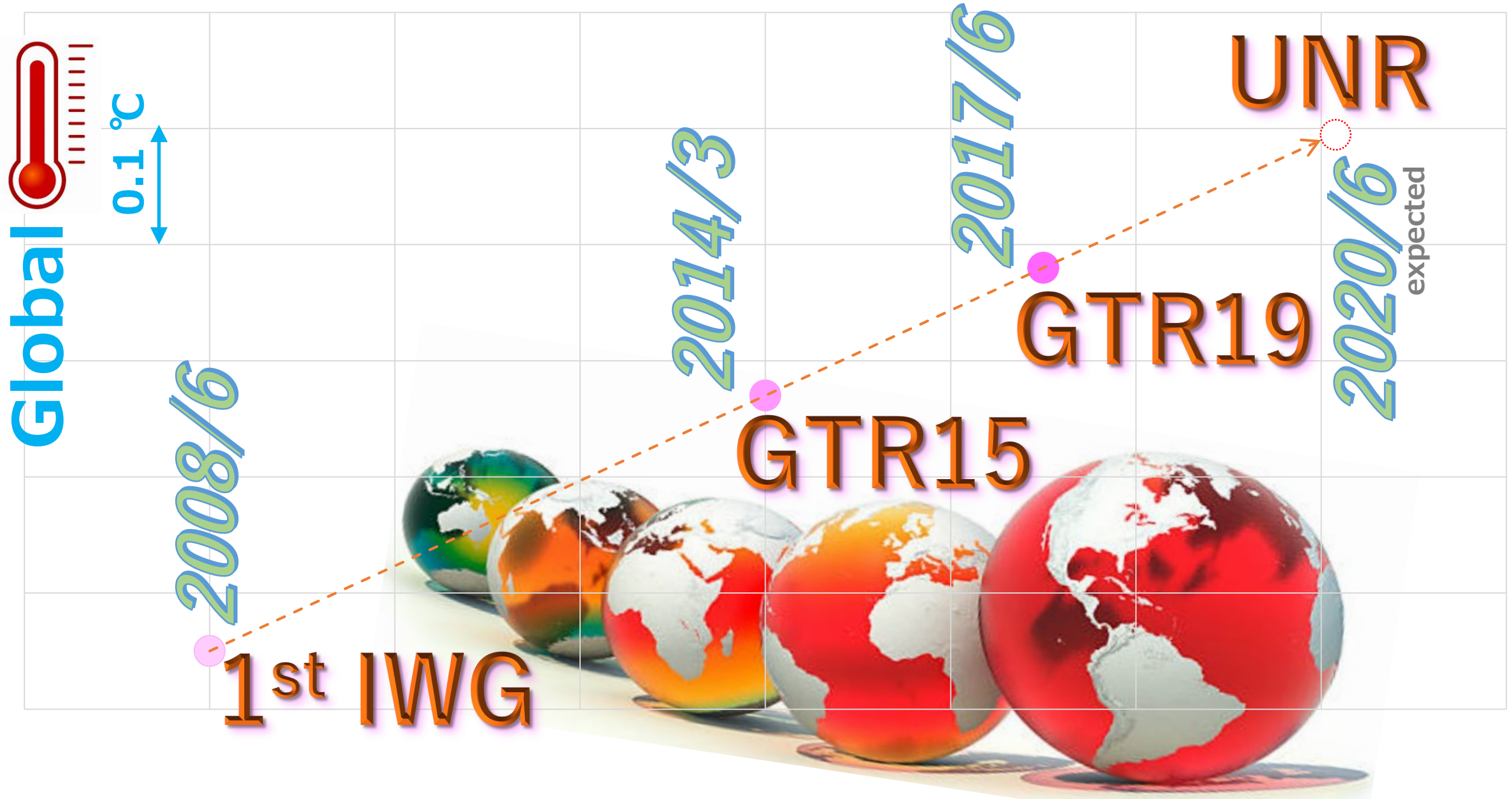
Progress and Final report
of the
WLTP Informal Working Group

Prepared by WLTP IWG

Contents

- 1. WLTP IWG Activities***
- 2. Action Lists during 81st GRPE***
- 3. Modification of UNR-WLTP for WP.29 Approval***
- 4. Overview of GTR15 Amendment#6***
- 5. Status of Sub-Groups / Task Forces***
- 6. Outlook for 82nd GRPE***

1. WLTP IWG Activities (1)



1. WLTP IWG Activities (2)

Since 80th GRPE session

- **One (1) face-to face and Two (2) Webex IWG meetings**
 - **Brussels (18th to 21st February)**
 - **Webex (14th to 16th April and 4th June)**
- **Thirty-three (33) Webex meetings of Subgroup and/or TF**

As a result,

- **Closed all recognised open issues* and reflected into informal document to update the GRPE Working Document to amend GTR 15 (GRPE/2020/14)**

***) Low Temperature Test Procedure and EVs related**

- **Updated the WP.29 Working Document to introduce UNR WLTP for approval (ECE/TRANS/WP.29/2020/92&93)**

1. WLTP IWG Activities (3)

including Collaboration with other IWGs

WD : Working Document

ID : Informal Document

we are here ▼

| Working Items | | 2019 | 2020 | | | | |
|---------------|--|--------------------------------|--------------------|--|----------------------------------|----|-----------|
| | | 10 | 1 | 3 | 4 | 6 | 10 |
| UNR | WLTP for GRPE | WDs : 2020/3 2020/4 | IDs 80-38 80-39 | | | | |
| | WLTP for WP.29 | | | WDs : 2020/77 2020/78 2020/87 | WDs : 2020/92 2020/93 | | |
| | 83-08(/09) | | | | | | WD |
| GTR15 | Amd#6 (Low Temp, OBD,COP, Durability, and upgrade) | | | WD 2020/14 | | ID | |
| EVE | HEV system power | | | WD → is used for cycle classification 2020/12 | of HEVs/PEVs | | |
| PMP | PN sub 23nm | | | | | ID | |

2. Action Lists during 81st GRPE session

| <i>Working Items</i> | <i>Expected Actions</i> (informed during 80 th session) | <i>Action List</i> |
|----------------------|---|--|
| GTR15 Amd#6 | ✓ submit Working Documents for approval | ➤ request for approval including informal documents which will be merged into working documents |
| PMP IWG | | ➤ ask guidance how to merge PMP document into GTR15 |
| UNR WLTP | ✓ NA | < for information purpose only > ➤ submit two(2) working documents to WP.29 |
| UNR83-08(/09) | ✓ submit Working Documents for approval | ➤ postpone to 82 nd GRPE |

3. Modification of UNR WLTP for WP.29 Approval

***Please take a look at
Separate Document***

4. Overview of GTR15 Amd#6 (1)

Annex 13 : Low Temperature Testing



| <i>items</i> | <i>CONTENTS</i> | | | <i>notes</i> | <i>current UNR83</i> |
|--|--|-------------------------------|------------------------------------|---|--------------------------------|
| Scope | All vehicle categories except FCHV | | | - | Vehicles with petrol fuel only |
| Measured Parameter | Gaseous compounds(HC/CO/NOx), Particulate matter, Particle number, CO2, Fuel efficiency, Electric range/consumption | | | - | HC and CO only |
| Family Concept and Vehicle Selection | | Power to Mass Ratio selection | most energy consumed configuration | consider the balance between required accuracy and limited infrastructure | not defined |
| | ICE | | - | | |
| | NOVC-HEV | ✓ | - | | |
| | OVC-HEV | | ✓ | | |
| | PEV | - | | | |

4. Overview of GTR15 Amd#6 (2)

Annex 13 : Low Temperature Testing



| <i>items</i> | <i>CONTENTS</i> | <i>notes</i> | <i>current UNR83</i> |
|-----------------------------------|---|---|-----------------------------------|
| Test Cycle | same as 23°C test (Type 1) | - | Urban cycle only |
| Road-Load | apply same dyna. setting value* as Type 1 test *) except aerodynamic coefficient | reflect the technology installed in each vehicle | $\frac{\text{Type 1 value}}{0.9}$ |
| Test Fuel | (e.g. petrol RVP 70~90kPa) | more representative winter condition | (e.g. petrol RVP 56~95kPa) |
| Auxiliary Devices | Heater, Defrost, Passing-beam headlamps | | NONE |
| Soaking prior to pre-conditioning | ICEs / HEV CS test : can be omitted with authority approval | consider the balance between required accuracy and limited infrastructure | NONE |
| | HEV CD test & PEVs : MUST | make battery conditions stable | |

4. Overview of GTR15 Amd#6 (3)

Annex 8 : Electrified Vehicles

| <i>items</i> | <i>CONTENTS</i> | <i>justifications</i> |
|-----------------------------------|---|---|
| CO ₂ correction factor | allow to apply fixed factor as a manufacture option | worst case approach by applying the different alternator coefficient between charge and discharge |
| | family approach for 4 phases test only | combine negligible criteria of interpolation family |

Incorporate UNR elements into GTR

| <i>Annex</i> | <i>CONTENTS</i> | <i>main sources</i> | <i>purpose</i> |
|--------------|--|--------------------------------|------------------|
| Annex 10 | Requirements when using a reagent for the exhaust after-treatment system | UNR WLTP | in line with UNR |
| Annex 11 | On-Board Diagnostics (OBD) | WP.29/2020/77 | |
| Annex 12 | Durability Test (Type 5) | WP.29/2020/78 | |
| Annex 14 | Conformity of Production | WP.29/2020/92 WP.29/2020/93 | |

5. Status of Task Force / Sub-Group

| TF/SG | Status | Next Actions |
|---------------------|--------------------------------|--|
| UNR | SoA_00/01 COMPLETED | depend on the progress and/or new requirement including UNR83 amendment, if related to WLTP activity |
| GTR 15 Amendment | Amd#6 COMPLETED | depend on the progress and/or new requirement |
| SG-EV | a few more step | make the text more robust based on validation exercise |
| Cycle/Gear Shift | | Cycle : incorporate the HEV system power into GTR/UNR Gear Shift : plan to complete tool management |
| Low Temp. | | transpose to UNR make the text more robust based on validation exercise |
| Durability | COMPLETED | |
| COP | | |
| OBD | | |

6. Outlook for 82nd GRPE session in January 2021

WLTP IWG is not in a position to ask for a new mandate under the current situations.

Positions of current WLTP sponsors:

-EC : no new mandate IWG

the results achieved (mature GTR 15 and 19, UNR WLTP) allow to stop the IWG

-JPN : want to continue WLTP activity, hopefully with EC

