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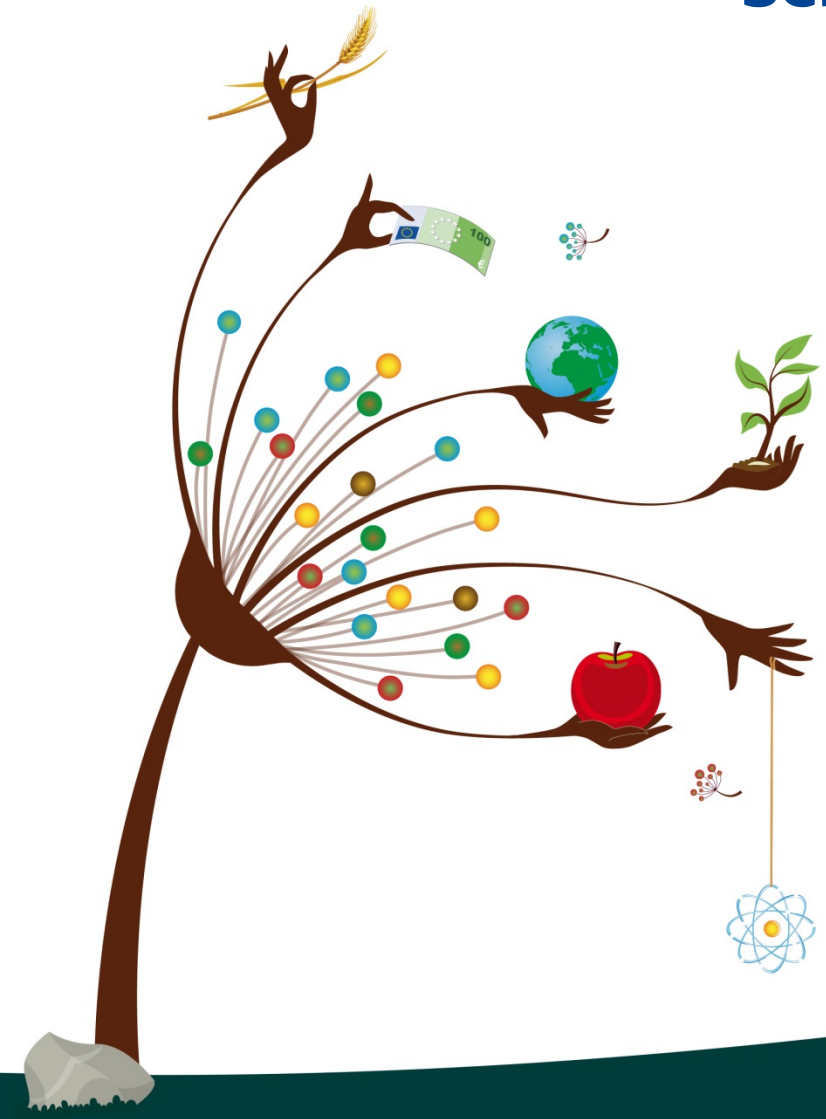

Progress Report of the f2f (16-17th April) 2018 Ispra

WLTP 22nd (18th April)

Low and Realistic Winter Temperature TF

Sequence of items to be discussed in LowT TF along 2018

1st part – Proposal for ICE test procedure:
GTR drafting coordinator: star-up process (DONE)

2nd part - Discussion for a proposal for a test procedure for hybrid vehicles & emissions

3rd part - Discussion for a proposal for a procedure for (hybrids) and electric vehicles (PEVs)

4th part – Discussions on new Test procedure: Information to the customers?

Japan position on the Low Temperature test procedure: Testing Temperature -7℃

To Reach harmonized testing procedure, it is preferred to cover the CP ‘s environmental situation as much as possible, and it is better to set the testing temperature from −7℃ to 38℃.

Therefore, if each CP can agree the concept above and 38℃ for the high testing temperature, which Japan needs, then Japan can support −7℃ for the low testing temperature.

ICE, NOVC−HEV, OVC−HEV and EV

Testing Cycle
L+M+H
The value to be measured
CO, NMHC, NOx, PM, Fuel Consumption, Electric Energy Consumption and Range
Purpose
To regulate the emission at Low Temperature and to use for Customer Information

Progress in the discussions for a low T procedure:

1st part - ICE test procedure- Follow up and progress during 1st semester 2018:

GTR drafting process: star-up

2nd part - Discussion for a proposal for a test procedure for hybrid vehicles & emissions
(By WHOM?-WHEN?)

3rd part - Discussion for a proposal for a procedure for hybrids and Electric vehicles
(By WHOM?-WHEN?)

LATER THIS YEAR:
4th part – Discussions on new Test procedure: Information to the customers?

VALIDATION PHASE NEEDED?

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SHORT NOTE (REMIND)

1st part - discussions on new Test procedure: Proposal for LD "pure ICE" vehicles test at low Temperature (sub-zero)

Test for LD vehicles under cold weather conditions (sub-zero) should be done for:

- **All "pure ICE" (Technology independent and fuel independent)**
- **Type 1 test of WLTP (see GTR 15) at sub-zero T**
- **all pollutants need to be referred (same as for Type 1)**
- **Preconditioning & soaking (force cooling?)**
- **Cold start**
- **Auxiliary devices "on" (heating on, others?)**
- **R/L determination at -7 °C or 10% (?) reduction of coast-down time**
- **Gear shift calculations (adaptation)**
- **Fuels**
- **Cycle**
- **Hardware and instrumentation of the test**

LowT TF agreed on this proposal as a starting point for discussion of the procedure on 12th December 2017 (16th f2f meeting)

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Content of the f2f meeting in April 16th & 17th:

- **A/ Auxiliary devices: (i.e. Heating for comfort = OK). Further discussion needed on… lights? defrosting? Others??.**

- **b/ Test procedure (s): proposal 3 phases *vs.* 4 phases.**

  Proposal of a test which consider 3-phase-WLTC instead of the 4-phase, analysis of the emissions change is on-going and need further study.

C/Progress and development of GTR: first approach to a detailed revision of the points under discussion

2nd part - Discussion for a proposal for a test procedure for hybrid vehicles & emissions

Points for discussion

- **Test could follow Type 1 test of WLTP (see GTR 15)**
- ***CS & CD tests should be necessary to fully address OVC-HEV emissions***
- **COLD START**
- **Preconditioning (same time and method as pure ICE?) of the vehicle, soaking T and time?? *Heating, lights?, defrosting? (*Others?)*system* or any other auxiliary device necessary under cold T conditions: "ON"**

  (US 1066 - set control max… etc). List of devices that may have an influence on the range of the vehicle and/ safety)

  No particular opposition was shown by the members of the TF. The following comments were collected and will be taken into consideration for further discussion and progress.

1. **Jama; Request for time & data collection**
2. **Different time of soaking for ICE and EV OVC-HEVs?**
3. **Worst case scenario? Preconditions: reasonable and representative of real world conditions?**
4. **EV to give input to GTR Drafting coordinator directly and GTR**
5. **Soaking time? Definitions and time (is charging part of soaking)**

PROGRESS OF GTR drafting (after 22nd WLTP)

1st part

- *Proposal for ICE test procedure*
- *Progress of the GTR drafting process*

- 2nd part -

- *Discussion for a proposal for a test procedure for hybrid vehicles & emissions*
- *GTR 2nd part: hybrid vehicles & emissions LowT drafting. Structure discussion*

3rd part

- *Discussion for a proposal for a procedure for hybrids and Electric vehicles*
- *Effect of fast charging on the efficiency of energy storage system (on-going research)*
- *GTR 3rd part: EV procedure at LowT drafting: How to start? Structure discussion*

CALEDAR OF TELCO & MEETING (after 22th WLTP)

March 16th TelCo

f2f 16-17th April (Ispra)

Temperature?

CP

Technical presentations

GTR

1st June TelCo

7th Sept Telco

16th Nov Telco

f2f 11-12th December (????)

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New calendar of proposed dates for telco and f2f meeting during 2018

(slide)

Next appointments for the LowT TF:

1st June TelCo 9 to 11
7th September TelCo 9 to 11
16th November TelCo 9 to 11
&
11&12th December 2018 f2f meeting (to be confirmed later this year)

https://wiki.unece.org/display/trans/WLTP+2018+calendar

Meeting Schedule, Holidays & Milestones, 2018

	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	JAPAN, EUROPE	Low Temp; telco; 9-11 am					FRANCE, ITALY	
2	JAPAN							
3	JAPAN					GERMANY		
4	JAPAN	EVE GENEVA						
5		IWG #23, 77th GRPE						
6		IWG #23, 77th GRPE						
7	UK	IWG #23, 77th GRPE			Low Temp; telco; 9-11 am			
8	FRANCE	IWG #23, 77th GRPE				JAPAN		ITALY
9	ITALY					Approximate deadline for working doc. Jan. 2019 GRPE		
10	GERMANY, FRANCE							
11								Low Temp; f2f; to be confirmed
12								Low Temp; f2f; to be confirmed
13				JAPAN				
14				JAPAN				
15	PMP TF;f2f;Ispra			JAPAN, FRANCE				
16	PMP TF;f2f;Ispra		JAPAN	JAPAN			Low Temp; telco; 9-11 am	
17				JAPAN	JAPAN			
18				IWG #24, Tokyo (morning start)				
19					IWG #24, Tokyo			
20					IWG #24, Tokyo			
21	GERMANY, FRANCE				IWG #24, Tokyo			
22								
23							JAPAN	
24					JAPAN			JAPAN
25								JAPAN (tbd), EUROPE
26								JAPAN (tbd),EUROPE
27				UK				JAPAN (tbd)
28	UK							JAPAN (tbd)
29						EU: Clocks move back 1 hour		
30								
31								JAPAN

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