Dear Mr. Steininger,

On Thursday last week you asked ACEA for some comments. Attached you’ll find them.

**Normalization Tool during Monitoring-Phase**

ACEA recommend the following statement:

*During the Monitoring phase, as defined in Section 7.4.1 of this annex, if the verification of normal driving as outlined in Appendix 7, has been successfully proven, yet one normalization model, as described in Appendix 5 and Appendix 6, respectively, cannot compute a result, the test should still be considered valid. In this case, the manufacturer will provide one additional test in order to provide additional data for examining the difference of the normalization tool results.*

**Vehicle Test Mass**

- For Chapter 5.1 ACEA recommend the following:

5.1 Vehicle payload and test mass
5.1.1 The vehicle payload shall be comprised of the driver and the test equipment, including the mounting and the power supply devices.
5.1.2 For the purpose of testing, additional payload may be reproduced and an artificial load may be used.
5.1.3 Moderate vehicle test mass conditions: The vehicle test mass shall not exceed the lowest of:
   - a) vehicle unladen mass excluding driver +200Kg
   - b) 90% of GVW
   - or
   - c) 2840Kg

5.1.4 Extended vehicle test mass conditions: The vehicle test mass shall not exceed the lower of:
   - a) 90% of GVW
   - or
   - b) 2840Kg

**Vehicle maximum speed and Extra High Speed Test**

- For Chapter 6 ACEA will accept $v < 145$km/h if at the same time high speed cycle will be deleted of the RDE draft. Otherwise we’ll stay with our $v_{max} = 130$ km/h.

6.7 The vehicle shall never exceed 145 km/h on open public roads.
6.9 The speed range of the motorway driving shall properly cover a range between 90 and at least 110 km/h. The vehicle’s velocity should be above 100 km/h for at least 5 minutes.

   *The vehicle’s velocity above 130 km/h may be driven for a maximum of 5 % of the distance driven on the motorway if the legal situations allows it.*

6.12 For vehicles whose maximum speed exceeds $\ldots$km/h, the Type Approval Authority may require to conduct a test at Extra High Speed, at speeds above 160 km/h. Such a test:
- 6.12.1 May be conducted hot after a pre-conditioning drive;
- 6.12.2 Shall be conducted separately on a closed road or a test track;
- 6.12.3 Shall last at least 5 minutes at two vehicle speeds above 160 km/h. These two vehicle speeds shall be selected by the Type Approval Authority.

**Ambient Temperature**
- For Chapter 5.2.4 and 5.2.5 ACEA would recommend a 2-Step-Approach. This ACEA Temperature Proposal is linked to PEMS-Trips excluding cold start.

5.2.4. **Moderate temperature conditions:** greater than or equal to 282K (9°C) and lower than or equal to 303K (30°C). (Note: 3 ºC to be introduced in a second phase 5 years after RDE-Regulation was published within OJ)

5.2.5. **Extended temperature conditions:** greater than or equal to 276 K (3°C) and lower than 282 K (9°C) and lower than or equal to 303K (30°C). (Note: -7°C may be introduced after a cost-effectiveness analysis considering a low temperature CF in a second phase 5 years after RDE-Regulation was published within OJ)

**Average City Speed**
- For Chapter 6.8 ACEA recommend the following range

6.8. The average speed (including stopsidling) of the urban driving part of the trip should be between 25 and 45 km/h. The vehicle’s speed should be less than 1 km/h for at least 10 % of the time.

- For practical reasons with experience from more than 100 of PEMS-Trips the minimum average speed should not be lower than 25 km/h. In addition to that, 80 % of distance weighted in urban EU-WLTP is larger than 25 km/h speed.
If the Commission wants to avoid constant driving a separate paragraph could make this possible.

**Trip composition**
- One small remark from ACEA

6.6. For the purpose of this paragraph, "approximately" shall mean the target value ±5 per cent. The trip shall consists of approximately 34% per cent urban, 33% per cent rural and 33% per cent motorway operation (distance based)

**Dynamic Boundary Conditions**
- ACEA also strongly postulate to integrate Appendix 7 within Annex IIla as t.b.d.

9.9. If the vehicle is found to fail, the Type Approval Authority may authorise the manufacturer to conduct additional verification of further boundary condition of the trip according to Appendix X (t.b.d.)

**Other**
- ACEA cannot agree to a regulation including undefined topics like cold start or high speed part. Such topics must be deleted.
- ACEA kindly asked you to discuss the Chapter 7 to10 before the next TCMV.

Kind regards

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**for ACEA**
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