Annex 13

WLTP Low Temperature Type 6 test (optional annex)

1. Introduction

This annex describes the procedure for undertaking the Type 6 test defined in paragraph 6.2.4. of this UN GTR.

At the option of the Contracting Party this annex may be omitted.

1.1. The test requirements for different categories of vehicle are set out in Table A 13/1.

[Table A13/1: Test requirements

t-marriage and the same and the				
	Test requirement			
Powertrain	Criteria emissions	CO ₂ emissions	Electric energy consumption	Electric range
Pure ICE	Yes	Yes	N/A	N/A
NOVC-HEV	Yes	Yes	N/A	N/A
OVC-HEV	Yes	Yes	Yes	Yes
PEV	N/A	N/A	Yes	Yes
FCHV	N/A	N/A	Exempt from i	initial phase

}

2. Type 6 test requirements

The Type 6 shall be undertaken according to the definitions, requirements and tests set out in paragraphs 3 to 7 of this UN GTR and Annexes 1 to 8 inclusive of this UN GTR, unless stated otherwise in this annexs unless different requirements are specified in paragraphs 2.1 to 2.8, of this annex.

2.1. Worldwide light-duty test cycles (WLTC)

The requirements of Annex 1 shall apply for the purposes of this annex with no exceptions or amendments

2.2. Gear selection and shift point determination for vehicles equipped with manual transmissions

The shifting procedures described in Annex 2 shall apply with the following specific provision for Type 6 testing.

(a) it is allowed to set unique nmin drive and ASM. The requirements of Annex 2 shall apply for the purposes of this annexutilising the road loads determined as described in paragraphs 2.4.1. to 2.4.4.

2.3. Reference Fuels

The reference fuels to be used for the Type 6 test shall be those specified in [Part II] of Annex 3. At the option of the manufacturer [and approval of the responsible authority] a reference fuel as specified in paragraph 1. of Annex 3 may be used.

2.4. Road load and dynamometer setting

Commented [TS_Nick1]: "nmin_drive" includes "nmin_drive_start", "nmin_drive_up", "nmin_drive_down", "nmin_drive_up_start" and "nmin_drive_down_start"

For the vehicle to be tested, the chassis dynamometer load setting determined according to paragraph 8.1.4. or paragraph 8.2.3.3. of Annex 4 using the tyres which are fitted to the Type 6 test vehicle, shall be modified as follows:

2.4.1. The chassis dynamometer setting A^*_d and B^*_d shall be the same as those determined for the test at 23 °C, as specified in paragraphs 8.1.4. or 8.2.3.3. of Annex 4. The chassis dynamometer coefficient $C^*_{d\text{-Tlow}}$ shall be adapted in accordance with the following equation:

$$C*_{d\text{-Tlow}} = C*_{d} + (f_{2\text{-Tlow}} - f_{2})$$

and

$$f_{2\text{-TLow}} = f_2 * (T_0 + 273)/(T_{\text{low}} + 273)$$

Where:

 C_d^* is the dynamometer coefficient for the vehicle derived at 23 °C

 f_2 is the second order road load coefficient, at reference conditions, $N/(km/h)^2$:

 $T_0 \,$ is the road load reference temperature as specified in paragraph 3.2.10. of this UN GTR, K,

 T_{low} is the Type 6 temperature, 266 K.

To perform this adaptation, the same set of tyres shall be fitted to the test vehicle for the setting of the chassis dynamometer at $23\,^{\circ}\text{C}$ and for the [testing] at the temperature -7°C.

- 2.4.2. The chassis dynamometer coefficient A*_d, B*_d and C*_d from a chassis dynamometer in a different test cell at 23 °C may be used as a basis for the setting of the chassis dynamometer at the temperature of -7°C, as specified in paragraph 2.4.1. [In this case the setting shall additionally be corrected for the difference in the parasitic loss coefficients of the respective chassis dynamometers.]
- 2.4.3. The Type 6 test and its road load setting shall be performed on a 2WD dynamometer in the case that the corresponding Type 1 test was done on a 2WD dynamometer and it shall be performed on a 4WD dynamometer in the case that the corresponding Type 1 test was done on a 4WD dynamometer.

Prior to any vehicle operation on a dynamometer in the context of this annex, the tyre pressure shall be adjusted to the [same pressure] as applied for the setting of the chassis dynamometer at $23\,^{\circ}$ C.

2.5. Test Equipment

The specifications for test equipment as set out in Annex5 paragraphs 1. to 3.2.6. and from 3.3.3. to 7.4.2.3.1. shall apply for the purposes of this annex. In addition, paragraphs 2.5.1 to 2.5.2. of this annexshall apply. Test equipment required and specifications are equivalent to the requirements for the Type I test as specified Annex5 to this Regulation, if specific requirements for the Type VI test are not prescribed. Paragraphs 2.5.1. to 2.5.2.2. of this annex describe deviations applicable to Type 6 testing

- 2.5.1. Connection to vehicle exhaust
- 2.5.1.1. The start of the connecting tube is the exit of the tailpipe. The end of the connecting tube is the sample point, or first point of dilution. For multiple tailpipe configurations where all the tailpipes are combined, the start of the connecting tube shall be taken at the last joint of where all the tailpipes are combined. In this case, the tube between the exit of the tailpipe and the start of the connecting tube may or may not be insulated or heated.
- 2.5.1.2. The connecting tube between the vehicle and dilution systems hall be designed so as to minimize heat loss.

- 2.5.1.3. The connecting tube shall satisfy the following requirements:
 - (a) Be less than [6.1 metres] long with an internal diameter not exceeding 105 mm and shall be heated to 70 °C or higher.
 - (b) Not cause the static pressure at the exhaust outlets on the vehicle being tested to differ by more than ± 0.75 kPa at 50 km/h, or more than ± 1.25 kPa for the duration of the test from the static pressures recorded when nothing is connected to the vehicle exhaust pipes. The pressure shall be measured in the exhaust outlet or in an extension having the same diameter and as near as possible to the end of the tailpipe. Sampling systems capable of maintaining the static pressure to within ± 0.25 kPa may be used if a written request from a manufacturer to the responsible authority substantiates the need for the tighter tolerance;
 - (c) No component of the connecting tube shall be of a material that might affect the gaseous or solid composition of the exhaust gas. To avoid generation of any particles from elastomer connectors, elastomers employed shall be as thermally stable as possible and have minimum exposure to the exhaust gas. It is recommended not to use elastomer connectors to bridge the connection between the vehicle exhaust and the connecting tube.
- 2.5.2. Dilution air conditioning
- 2.5.2.1. The dilution air used for the primary dilution of the exhaust in the CVS tunnel shall pass through a medium capable of reducing particles of the most penetrating particle size in the filter material by ≤ 99.95 per cent, or through a filter of at least Class H13 of EN 1822:2009. This represents the specification of High Efficiency Particulate Air (HEPA) filters. The dilution air may optionally be charcoal-scrubbed before being passed to the HEPA filter. It is recommended that an additional coarse particle filter be situated before the HEPA filter and after the charcoal scrubber, if used.
- 2.5.2.2. At the vehicle manufacturer's request, the dilution air may be sampled according to good engineering practice to determine the tunnel contribution to background particulate and, if applicable, particle levels, which can be subsequently subtracted from the values measured in the diluted exhaust. See paragraph 2.1.3. of Annex 6.

In accordance with the principles of CVS sampling and measurement, there shall be no water condensation after the mixing point of the exhaust gas and dilution air within the CVS system and within any systems sampling or measuring from the CVS system. To ensure this, all parts and pipes connecting the mixing device to the CVS when in the cold environment may be insulated and/or heated. This also applies to any part of the CVS which may be in the cold environment.

2.6. Test procedures and test conditions

The test procedures and test conditions specified in paragraphs 1. to 2.2.1.2. of Annex 6 shall apply for the purposes of this annex whereby $r_{\rm R}^{\rm R}$ eferences to Table A6/2 of Annex 6 shall be understood as references to Table A13/2 and references to Figure A6/1 of Annex 6 shall be understood as references to Figure A13/1. In addition, paragraphs 2.6.1. to 2.6.11. of this annex shall apply. [Criteria regarding declared CO₂ mass emissions in paragraphs 1.2.3.2. to 1.2.4.2. of Annex 6 shall not apply. In case more than one test is performed according to the criteria in Table A13/2, the arithmetic average of the first and second test results shall be reported/declared.]

The limits regarding humidity and therefore the requirement to measure humidity shall not apply to the Type 6 test.

Criteria for number of tests

For pure ICE vehicles, NOVC-HEVs and OVC-HEVs charge-sustaining Type 6 test.

	Test	Judgement parameter	Criteria emission
Row 1	First test	First test results	\leq Regulation limit \times 0.9
Row 2	Second test	Arithmetic average of the first and second test results	\leq Regulation limit \times 1.0 ^a

^a Each test result shall fulfil the regulation limit.

For OVC-HEVs charge-depleting Type 1 test.

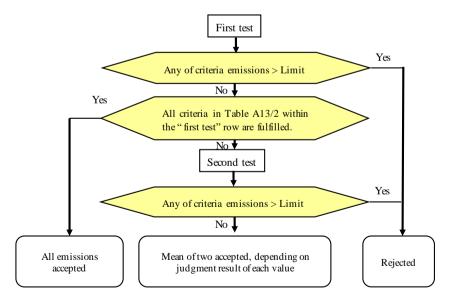
	Test	Judgement parameter	Criteria emissions
Row 1	First test	First test results	\leq Regulation limit \times 0.9 ^a
Row 2	Second test	Arithmetic average of the first and second test results	\leq Regulation limit \times 1.0 b

a "0.9" shall be replaced by "1.0" for charge-depleting Type I test for OVC-HEVs, only if the charge-depleting test contains two or more applicable WLTC cycles.

For PEVs

	Test	Judgement parameter	Electric energy consumption	PER
Row 1	First test	First test results	\leq Declared value \times 1.0	\geq Declared value \times 1.0
Row 2	Second test	Arithmetic average of the first and second test results		≥ Declared value × 1.0

 $Figure \ A\ 13/1\\ \textbf{Flowchart for the number of Type 6 tests}$



b Each test result shall fulfil the regulation limit.

- 2.6.1. Test cell and soak area
- 2.6.1.1. Test cell
- 2.6.1.1.1. The test cell shall have a temperature set point of -7 °C. The tolerance of the actual value shall be within \pm 5 °C. The air temperature shall be measured at the test cell's cooling fan outlet at a minimum frequency of 0.1 Hz. At the start of the test, the test cell shall have a temperature set point of -7 °C and the tolerance of the actual value shall be within \pm 3 °C
- 2.6.1.1.2. The limits regarding humidity and therefore tThe requirement of to measure humidity measurement and the specific criteria shall not apply to the Type 6 test.
- 2.6.1.2. Soak area
- 2.6.1.2.1. Same requirement as specified paragraph 2.2.2.2. of Annex 6 replacing the temperature set point as The soak area shall have a temperature set point of 7°C and the tolerance of the actual value shall be within ± 3°C on a 5 minute running arithmetic average and shall not show a systematic deviation from the set point. The temperature shall be measured continuously at a minimum frequency of 0.033 Hz (every 30 s).
- 2.6.1.2.2. [The location of the temperature sensor for the soak area shall be representative to measure the ambient temperature around the vehicle and shall be checked by the technical service. The sensor shall be at least 10 cm away from the wall of the soak area and shall be shielded from direct air flow. The air flow conditions within the soak room in the vicinity of the vehicle shall represent a natural convection flow representative for the dimension of the room (no forced convection).]

[The location of the temperature sensor for the soak area shall be representative to measure the ambient temperature around the vehicle. The sensor shall be at least 10 cm away from the wall of the soak area and shall be shielded from direct air flow. The air flows in the soak area shall be low to avoid unintended forced cooling.]

- 2.6.2. Test vehicle
- 2.6.2.1. General

The test vehicle shall conform in all its components with the production series, or, if the vehicle is different from the production series, a full description shall be recorded. In selecting the test vehicle, the manufacturer and the responsible authority shall agree which vehicle model is representative for the Type 6 family.

- 2.6.2.2. [Selection of vehicles for Type 6 testing]
- 2.6.2.2.1. For each combination of fuels (e.g., petrol-LPG, petrol-NG, petrol only), on which some vehicle of the Type 6 family can operate, at least one vehicle that can operate on this combination of fuels shall be selected for Type 6 testing.
- $[2.6.2.2.2. \label{eq:pmc_scale} The manufacturer shall specify a value PMR_H (= highest power-to-mass-ratio of all vehicles in the Type 6 family) and a value PMR_L (= lowest power-to-mass-ratio of all vehicles in the Type 6 family). Here the 'power-to-mass-ratio' corresponds to the ratio of the maximum net power of the internal combustion engine as declared by the manufacturer and of the reference mass, where "reference mass" means the mass of the vehicle in running order plus 25 kg. At least one vehicle configuration representative for the specified PMR_H and one vehicle configuration representative for the specified PMR_L of a Type 6 family shall be selected for testing. If the power-to-mass ratio of a vehicle$

Commented [TS_Nick2]: Please refer "Low Temp Family.docx"

- deviates by not more than 5 % from the specified value for $PMR_{\rm H}$, or $PMR_{\rm L}$, the vehicle should be considered as representative for this value.
- 2.6.2.2.3. At least one vehicle for each transmission type (e.g., manual, automatic) installed in vehicles of the Type 6 family shall be selected for testing.
- 2.6.2.2.4. At least one four-wheel drive vehicle (4x4 vehicle) shall be selected for testing if such vehicles are part of the Type 6 family.
- 2.6.2.2.5. For each internal combustion engine displacement of a vehicle within the Type 6 family at least one representative vehicle shall be tested.
- 2.6.2.2.6. Notwithstanding the provisions in points 2.6.2.2.1. to 2.6.2.2.5., at least the following number of vehicle emission types of a given Type 6 family shall be selected for testing:

Number of vehicle emission types (N) in a Type 6 family	Minimum number of vehicle emission types (NT) selected for Type 6 testing	
1	1	
from 2 to 4	2	
from 5 to 7	3	
from 8 to 10	4	
from 11 to 49	$NT = 3 + 0.1 \times N^{(1)}$	
more than 49	$NT = 0.15 \times N^{(1)}$	
(1) NT shall be rounded to the next higher integer number.		

]

2.6.2.3. Run-ir

The vehicle shall be presented in good technical condition. It shall have been run in and driven between 3,000 and 15,000 km before the test. The engine, transmission and vehicle shall be run in in accordance with the manufacturer's recommendations.

- 2.6.3. Settings
- 2.6.3.1. Dynamometer settings shall be determined according to paragraph 2.4. of this annex.
- 2.6.3.2. Dynamometer operation
- 2.6.3.2.1. The requirements of paragraphs 2.6.3.2.1.1. to 2.6.3.2.1.3. inclusive apply to the Type 6 test, all other auxiliary devices shall be switched off or deactivated during dynamometer operation.
- 2.6.3.2.1.1. Thermal Comfort System setting

The vehicle's interior Thermal Comfort system must be operated by adjusting the comfort setting as indicated in following paragraphs.

During the <a>[lentire] Type 6 test procedure, the vehicle cabin shall not be heated by any external heating device.

2.6.3.2.1.1.1. The temperature control shall be set to 22 $^{\circ}$ C within 0-9 seconds after the start of the first applicable WLTC. For vehicles with a thermal comfort system not allowing the selection of 22 $^{\circ}$ C, maximum heat shall be set within 0-9 seconds

after the start of the first applicable WLTC. This setting shall remain unchanged for the whole test procedure.

2.6.3.2.1.1.2. The blower speed control system shall be set to the auto mode within 0-9 seconds after the start of the first applicable WLTC.

If no auto mode is available, the blower speed control system shall be set as follows.

The fan speed control shall be set to the minimum setting, above the setting where the fan is switched off, within 0-9 seconds after the start of the test. After the second 100 and before the second 105 of the test, fan speed shall be set to maximum setting. After the second 987 and before the second 992 of the test, the fan speed shall be reduced to the minimum setting, not being the setting where the fan is switched off.

- 2.6.3.2.1.1.3. The airflow direction control shall be set to the auto mode within 0-9 seconds after the start of the first applicable WLTC. If no auto mode is available, the airflow direction control shall be set to the feet compartment and to the front windscreen. If that setting is not available, the airflow direction control shall be set to the front windscreen.
- 2.6.3.2.1.1.4. The air recirculation control shall be set to the auto mode within 0-9 seconds after the start of the first applicable WLTC. If no auto mode is available, it shall be set to the recirculation off position.
- 2.6.3.2.1.1.5. Air Conditioning control button, if present, shall be pressed to set to ON position within 0-9 seconds after the start of the first applicable WLTC.
- 2.6.3.2.1.1.6. Multiple-zone systems

For vehicles that have separate (left & right) driver and front passenger controls, all temperature and blower controls shall be set as described in paragraphs 2.6.3.2.1.1.1. and 2.6.3.2.1.1.2. of this annex. Rear Thermal Comfort Systems, if available, shall be set to off position.

2.6.3.2.1.1.7. Assessment of activation of Thermal comfort

The responsible authority shall verify that the thermal comfort system is representative of serial production intent and operating as intended during the test. The responsible authority may request the manufacturer to install a measurement device for the duration of the test at a designated location to record the warm-up profile as evidence for the verification.

- 2.6.3.2.1.2. Passing-beam (dipped-beam) headlamps shall be switched ON within 0-9 seconds after the start of the test. If the vehicle is equipped with an automatic activation system for dipped-beam headlamps without user selectable settings, actions shall be taken to simulate driving in the hours of darkness (i.e. sufficient to activate at least the dipped beam headlamps). The lights shall remain ON during the test.
- 2.6.3.2.1.3. If the vehicle is equipped with electrical system(s) to defrost (rear window and/or windscreen), these systems shall be switched on within 0-9 seconds after the start of the first test. [After the second 987 and before the second 992 of the test, the system shall be switched off.]
- 2.6.4 The requirements of paragraphs 2.4.2.1.1. to 2.5. of Annex 6 shall apply to the Type 6 test.
- 2.6.5.1. Vehicle preparation
- 2.6.5.1.1. Fuel tank filling

The fuel tank(s) shall be filled with the specified test fuel. If the existing fuel in the fuel tank(s) does not meet the specifications contained in paragraph 2.4.63. of this Annex-6, the existing fuel shall be drained prior to the fuel fill. The test fuel shall be at a temperature of \leq 16 °C. The evaporative

- emission control system shall neither be abnormally purged nor abnormally loaded.
- 2.6.5.1.2. The requirements of paragraphs 2.6.1.2. to 2.6.1.4. of Annex 6 shall apply to the Type 6 test. Paragraph 2.6.1.3. (Tyre pressures) shall be performed according to paragraph 2.4.3. of this annex.
- [2.6.5.1.3. Soak before preconditioning (precond-soak)
- 2.6.5.1.3.1. Before preconditioning, Pure ICE vehicles shall be kept in an area with ambient conditions as specified in paragraph 2.6.1.2. of this annex for a minimum of 6 hours and a maximum of [36] hours before preconditioning. This time shall be referred as t_{precond-soak}
- 2.6.5.1.3.2. The thermal comfort preconditioning function, if available, shall not be activated during this soak.
- 2.6.5.1.3.3. The soak shall be performed without using a cooling fan and with all body parts positioned as intended under normal parking operation.
- 2.6.5.1.3.4. In case that the vehicle is exposed to a temperature higher than -4 °C <u>during</u>, the transfer from the soak area to the test cell, it shall be undertaken as quickly as possible, without any unjustified delay and for no longer than [20] minutes.]
- 2.6.5.2. Test cell
- 2.6.5.2.1. Temperature

During preconditioning, the test cell temperature shall be the same as defined for the Type 6 test (paragraph XXXXX. of this annex). During preconditioning, the test cell temperature shall have a temperature setpoint of 7 °C. The tolerance of the actual value shall be within \pm 3 °C at the start of the test and within \pm 5 °C during the test. The air temperature shall be measured at the cooling fan outlet at a rate of 0.1 Hz.

- 2.6.5.2.2. The requirements of paragraph 2.6.2.2. (Background measurement) of Annex 6 shall apply to the Type 6 test.
- 2.6.5.3.21. The test vehicle shall be placed, [either by being driven or] pushed, on a dynamometer and operated through the applicable WLTCs. [The vehicle need not be cold, and may be used to set the dynamometer load].
- 2.6.5.3.32. Same requirement as paragraph 2.6.3.2. to Annex 6 replacing the paragraphs 2.4. of this annex for Tthe dynamometer load setting shall be set according to paragraphs 2.4. to this annex. In the case that a dynamometer in 2WD operation is used for testing, the road load setting shall be carried out on a dynamometer in 2WD operation, and in the case that a dynamometer in 4WD operation is used for testing the road load setting shall be carried out on a dynamometer in 4WD operation.
- 2.6.5.3.43. Pure ICE vehicles shall be preconditioned over one WLTC and in accordance with paragraphs 2.6.5. to 2.6.5.4. to this annex.
- 2.6.5.3.5. [The engine oil temperature and coolant temperature, if any, shall be within \pm 2 °C of the set point of -7 °C].
- 2.6.5.4. The requirements of paragraphs from 2.6.4. to \$\frac{\phi}{.6.8.3.2}\$ of Annex 6 shall apply to the Type 6. Paragraph 2.6.4.3. of Annex 6 shall not apply.
- 2.6.6. Soak before testing (test-soak)
- 2.6.6.1. After preconditioning and before testing, vehicles shall be kept in a soak area with the ambient conditions described in paragraph 2.6.1.2. to this annex.
- 2.6.6.2. <u>During soaking the connecting tube, described in paragraph 2.5.1.3, of this annex, shall not be disconnected from the vehicle.</u>

In case that the vehicle is exposed to a temperature higher than 4 °C, the transfer from the preconditioning to the soak area shall be undertaken as

Commented [TS_Nick3]: We've never discussed DTI for Type 6. Since few interest on CO2/FE, 2.6.8.3.1.2. Tolerance (2) is enough.

quickly as possible, without any unjustified delay and for no longer than [20] minutes not be activated during this soak.

- 2.6.6.4. Same requirement as paragraph 2.7.2. of Annex 6 replacing a minimum soak time as The vehicle shall be soaked for a minimum of 12 hours and a maximum of 36 hours with the engine compartment cover opened or closed. If not excluded by specific provisions for a particular vehicle, cooling may be accomplished by forced cooling down to the set point temperature, -7 °C ±2 °C, for coolant and oil. If cooling is accelerated by fans, the air shall not be additionally cooled and the fans shall be placed such that the cooling of the drive train, engine and exhaust after treatment system is achieved in a homogeneous manner.
- 2.6.6.5. In case that the vehicle is exposed to a temperature higher than -4 °C, the transfer from the soak area to the test cell shall be undertaken as quickly as possible, without any unjustified delay and for no longer than [20] minutes.
- 2.6.6.6. If a stabilized vehicle is moved through a warm area when transporting it to the dynamometer for testing, the vehicle shall be restabilised by holding it at an ambient temperature of -7 °C \pm 3°C for at least six times as long as the vehicle was exposed to warmer temperatures.
- 2.6.6.7. After In case that the forced cooling was applied, period and once the vehicle reaches the set point temperature, -7 °C \pm 2 °C, for coolant and oil, the vehicle shall be cold-soaked within the stabilized temperature, [-7 °C \pm 2 °C,] for coolant and oil, for at least one hour before starting the emission test. During this time, the ambient temperature shall be kept at -7 °C \pm 3 °C.
- 2.6.7. Paragraph 2.7. of Annex 6 (Soaking) shall be performed according to paragraph 2.6.6. to this annex.
- 2.6.9. The requirements of paragraphs from 2.8. to 2.14.3.7. of Annex 6 shall apply to the Type 6 with the exceptions of paragraphs 2.8.1., 2.8.2.2., [2.8.4., 2.8.5.] and 2.13.2. of Annex 6 that shall be undertaken according to paragraphs 2.6.9., 2.6.10. and 2.6.11. respectively of this annex.
- 2.6.9. The test cell temperature at the start of the test shall be -7 $^{\circ}$ C \pm 3 $^{\circ}$ C. The engine oil temperature and coolant temperature, if any, shall be within \pm 2 $^{\circ}$ C of the set point of -7 $^{\circ}$ C.
- 2.6.10. The drive-wheel tyre pressures shall be set to same pressure as Type 1 test. The chassis dynamometer shall be warmed up in accordance with the dynamometer manufacturer's recommendations, or as appropriate, so that the frictional losses of the dynamometer are stabilized. The Type 6 test shall be started no longer than 30 minutes after: i) the completion of dynamometer warm up or ii) after an applicable WLTC cycle has been performed. If frictional losses of the dynamometer can be stabilized without warming the dynamometer, the test can start. following the dynamometer manufacturer's recommendations. The manufacturer shall provide documentation on the validation of the systems upon request of the responsible authority.
- [2.6.11. Paragraphs 2.8.4, and 2.8.5, of Annex 6 may be omitted During societing the connecting tube, described in paragraph 2.5.1.3, of this annex, shall be disconnected from the vehicle.
- 2.7. Calculations

The calculations specified in paragraphs 1. to 3.1.3.2.2.1.1. and from 3.3. to 5. of Annex 7 shall apply for the purposes of this annex, without the calculation or and? application of the NOx correction factor described in paragraph 1.3.3.

2.8. Pure electric and hybrid electric vehicles

Commented [TS_Nick4]: Table A7/1 should be modified. Step 3, 4b, 4c, 5, 6(CO2 declaration), 7, 8, 9 and 10 can be skipped.