



ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations

Working Party on Pollution and Energy

**REPORT OF THE WORKING PARTY ON POLLUTION AND ENERGY
ON ITS FIFTY-SIXTH SESSION
(Geneva, 3 – 6 June 2008)**

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I. ATTENDANCE

1. The Working Party on Pollution and Energy (GRPE) held its fifty-sixth session from 3 to 6 June 2008, under the chairmanship of Mr. B. Gauvin (France). Experts from the following countries participated in the work following Rule 1(a) of the Rules of Procedure of WP.29 (TRANS/WP.29/690): Belgium; Canada; Czech Republic; France; Germany; Hungary; India; Italy; Japan; Netherlands; People's Republic of China; Poland; Republic of Korea; Republic of South Africa; Romania; Russian Federation; Serbia; Spain; Sweden; Switzerland; Thailand; United Kingdom of Great Britain and Northern Ireland; United States of America. Experts from the European Commission (EC) also participated. The United Nations Environment Programme (UNEP) was also represented. Experts from the following non-governmental organizations took part in the session: European Association of Automobile Suppliers (CLEPA); Foundation for the Automobile and Society (FIA Foundation); International Energy Agency (IEA); International Motorcycle Manufacturers Association (IMMA); International Organization for Standardization (ISO); International Organization of Motor Vehicle Manufacturers (OICA); Association for Emission Control by Catalyst (AECC); Committee for European Construction Equipment (CECE); Engine Manufacturers Association (EMA); European Association of Internal Combustion Engine Manufacturers (EUROMOT); European Liquefied Petroleum Gas Association (AEGPL); International Petroleum Industry Environment Conservation Association (IPIECA); Technical Committee of Petroleum Additive Manufacturers in Europe (ATC/CEFIC). Upon the special invitation of the Chairman, the experts from the Natural Gas Vehicle Association of Europe (NGVA Europe) participated.

II. ADOPTION OF THE AGENDA (Agenda item 1)

2. GRPE inserted a new agenda item 6(f), and adopted the agenda.

**III. REGULATION No. 49 (Emissions of C.I. and P.I. (NG and LPG) engines)
(Agenda item 2)**

A. Off-Cycle Emissions (OCE) (Agenda item 2(a))

Documentation: Informal documents Nos. GRPE-56-13 and GRPE-56-14 of Annex I to this report

3. The Chairman of the OCE working group, Mr. T. Sherwood (United States of America) informed GRPE about the results (GRPE-56-13) made by the informal group during its twentieth session (held in Tokyo on 8-9 April 2008) and its twenty-first session (held in Geneva prior to the GRPE session proper) (see Annex II to this report). He introduced the draft gtr on OCE (GRPE-56-14) and announced the group's intention to submit it to GRPE, as an official document, for consideration at the next GRPE session. He volunteered to submit, in due time, a revised document to the secretariat and invited all experts to send him their final comments.

4. GRPE endorsed the OCE group's request to meet again prior to the next GRPE session in January 2009 (para. 44 below). In the case, the draft gtr on OCE is expected to be adopted by GRPE session in January 2009, the final report on the development of the OCE gtr has to be submitted in parallel by the technical sponsor, also for consideration and adoption by GRPE (see 1998 Agreement, article 6.3.4.2.1.).

B. Gtr No. 4 on the Worldwide harmonized Heavy-Duty emission Certification (WHDC) procedure (Agenda item 2(b))

Documentation: Informal documents Nos. GRPE-56-01, GRPE-56-07, GRPE-56-21 and GRPE-56-22 of Annex I to this report

5. The Chairman of the WHDC working group, Mr. J.P. Laguna (EC), reported on the progress of work of the twenty-third and twenty-fourth informal group's sessions, held respectively in Tokyo on 10-11 April 2008 and in Geneva prior to the proper GRPE session (GRPE-56-07). Recalling the main objective of the group, the WHDC Secretary informed GRPE that the informal group could resolve, within the current mandate, the options 1, 2 and 5 regarding the engine power, reference fuel as well as the particulate filter material and filter size (GRPE-56-22). However, the informal group could not agree on solutions for the options 3 and 4 regarding the hot soak period and the cold start weighting factors. He added that further tests have to be done and that a resolution for those options would take another 2 years time period. Thus, he suggested going forward in a two-step approach and to prepare, on the basis of the options resolved, a first draft amendments to gtr No. 4 for consideration and adoption by the Executive Committee (AC.3) of the 1998 Agreement in 2009 and to resume consideration of the unresolved options in a further step. GRPE endorsed that suggestion, subject to the consent by the Executive Committee (AC.3) of the 1998 Agreement.

6. GRPE considered GRPE-56-01, tabled by the expert from the Russian Federation, regarding a validation study of the WHDC cycles for gasoline engines. The expert from the United States of America expressed his concerns about the broad consensus (as referred to in GRPE-56-07) and raised again a study reservation on the extension of the scope of the gtr to gasoline engines. With regard to the soak period, he added that a 20 minute period was more representative (according to data discussed during the WHDC group meeting) and had already been included into the US legislations about thirty years ago. He underlined the United States position that a backsliding to lower stringency would be unacceptable.

7. Following the discussion, GRPE agreed to resume consideration of the extension of the scope to gasoline engines at its next session in January 2009. With regard to the follow-up procedure for the remaining options in the gtr, GRPE agreed to seek, at the June 2008 session, AC.3's advice on the basis of GRPE-56-21 and to review, if necessary, the mandate of the WHDC informal group.

8. GRPE noted that the next meeting of the WHDC working group would take place in Beijing (China), on 15-17 October 2008, subject to confirmation by the expert from China. During that meeting, the informal group would consider the differences between the WHDC gtr and the gtr on non-road mobile machinery (NRMM), taking into account the latest amendments to the Environmental Protection Agency (EPA) standard Part 1065. GRPE agreed that the WHDC group should also meet prior to its next session (para. 44 below).

C. Gtr No. 5 on the Word-Wide harmonized Heavy-duty OBD systems (WWH-OBD) (Agenda item 2(c))

9. Recalling the discussion at the previous session, the expert from India withdrew his proposal (GRPE-55-01) to amend gtr No. 5 with regard to the ambient temperature range. GRPE welcomed that decision and agreed to remove this item from its agenda.

IV. PARTICLE MEASUREMENT PROGRAMME (PMP) (Agenda item 3)

Documentation: Informal document No. GRPE-56-09 of Annex I to this report

10. The Chairman of the PMP working group, Mr. C. Parkin (United Kingdom), reported that the validation and round robin tests were still in progress. He added that discussion of the reduction in calibration frequency, in the case that gas dilution validation checks were conducted, would have to await experience in the field with measurement systems. He announced the group's intention to have a further informal meeting in November 2008 to discuss initial results of the heavy-duty validation programme.

11. The expert from OICA raised concerns about the inability of vehicle manufacturers to validate the measurement procedures, due to the limited access to commercial PMP equipment and the practicability of equipment calibration which has to be conducted by equipment manufacturers (GRPE-56-09). The expert from Italy endorsed that position. GRPE encouraged equipment manufacturers to speed up the production of PMP equipment.

12. Upon the request of the PMP Chairman, GRPE also agreed that the PMP group should also meet prior to its next GRPE session (para. 44 below) in January 2009.

V. GTR No. 2 ON THE WORLDWIDE HARMONIZED MOTORCYCLE EMISSION TEST CYCLE (WMTC) (Agenda item 4)

Documentation: Informal documents Nos. GRPE-56-11 and GRPE-56-15 of Annex I to this report

13. Mr. C. Albus (Germany), chairing the WMTC group, informed GRPE about the work progress on Amendment No. 2 to the gtr. Recalling the informal group's mandate (ECE/TRANS/WP.29/AC.3/19), he reported on the results of collecting data and preparing information as a basis for the discussion on the introduction of performance requirements into the gtr (GRPE-56-11). The expert from India raised concerns about the WMTC cycle and the current vehicle classification. He announced his government's intention to introduce into their national legislation limit values for CO₂ emissions. Mr. Albus clarified that the concern by India had been taken into account in Amendment 2, as an option, and would become a subject for decision by AC.3. The expert from India preferred not to have an option in the gtr.

14. GRPE agreed to resume consideration of this subject at its next session in January 2009, on the basis of an official document. For that purpose, the WMTC Chairman was requested to submit, in due time, a revised document to the secretariat.

15. GRPE also considered GRPE-56-15 (tabled by the WMTC informal group) to correct and improve in the gtr the provisions on gear-shift prescriptions. GRPE agreed to submit the proposal as a Corrigendum to gtr No. 2 (without any report). The secretariat was requested to distribute GRPE-56-15 with an official symbol for consideration at the next GRPE session.

VI. EXHAUST EMISSION TEST PROTOCOL FOR NON-ROAD MOBILE MACHINERY (NRMM) (Agenda item 5)

Documentation: Informal document No. GRPE-56-08 of Annex I to this report

16. The EC expert reported, on behalf of the Chairman of the NRMM group, on the progress of work (GRPE-56-08) made by the group during its sessions held in April 2008 and prior to the GRPE session (see Annex II to this report). He confirmed the group's intention to finalize the draft gtr for consideration by GRPE at its next session. GRPE agreed that the NRMM working group should also meet prior to the next GRPE session in January 2009 (para. 44 below).

VII. AMENDMENTS TO UNECE REGULATIONS (Agenda item 6)

A. Worldwide harmonized Light vehicles Test Procedures (WLTP) (Agenda item 6(a))

Documentation: Informal documents Nos. GRPE-56-16, GRPE-56-17 and GRPE-56-19 of Annex I to this report

17. GRPE noted GRPE-56-19 regarding the key messages which have been agreed by the transport ministers during the International Transport Forum (ITF) held in Leipzig (Germany), from 28-30 May 2008. These key messages addressed transport and energy as a challenge of climate change, and especially global warming and the emissions of Greenhouse gases. In this respect, WP.29 was urged to accelerate the work to develop common methodologies, test cycles and measurement methods for light vehicles, including CO₂ emissions.

18. The expert from IEA reported about the results of the recent International Symposium on a global approach to automotive fuel economy, held in Paris on 15-16 May 2008 in cooperation with FIA Foundation, UNEP, ITF and IEA. He underlined the importance of the political support given during these recent conferences to the activity of the WLTP working group. The expert from the FIA Foundation underlined the need that future fuel economy policies, especially with regard to the CO₂ abatement, have to take into account the needs and concerns of the developing countries and emerging regions.

19. Mr. Gauvin (France), also chairing the WLTP working group, introduced a proposal for the terms of reference for the WLTP group (GRPE-56-17). He added that, due to the political urgency to develop new test cycles for light vehicles, the WLTP group had agreed to anticipate, if possible, the conclusion of the roadmap by 2009 instead of 2010. GRPE welcomed this decision and adopted the terms of reference and rules of procedure as reproduced in Annex III to this report.

20. The Secretary of the WLTP working group informed GRPE about the good progress made by the group at its first session, held prior to the GRPE session (GRPE-56-16). He stated that the WLTP group would like to seek the advice of AC.3 regarding the insertion into the gtr of provisions for durability and in-service testing, as no provisions on administrative procedures were mentioned in the 1998 Agreement. Thus, the GRPE Chairman announced his intention to inform WP.29 and AC.3 during their June 2008 sessions. GRPE agreed that the WLTP group should meet again prior to the next GRPE session (para. 44 below).

B. Gaseous-Fuelled Vehicles (GFV) (Agenda item 6(b))

Documentation: Informal document No. GRPE-56-18 of Annex I to this report

21. The Chairman of the informal group on Gaseous-Fuelled Vehicles (GFV), Mr. A. Rijnders (Netherlands), reported on the work progress (GRPE-56-18) made by the group at its second meeting, held on 3 June 2008 (see Annex II to this report). He informed GRPE that the informal group was considering proposals for Corrigenda to Regulations Nos. 49 and 83 with

regard to the LPG reference fuel, as well as proposals for amendments to Regulations Nos. 101 and 115 concerning the clarification of a number of provisions.

22. GRPE noted that the next meeting of the GFV working group would take place in Brussels, on 30 September 2008 (in CLEPA offices). GRPE agreed that the GFV group should also meet prior to the next GRPE session (para. 44 below).

C. Regulation No. 83 (Emissions of M₁ and N₁ categories of vehicles) (Agenda item 6(c))

Documentation: ECE/TRANS/WP.29/GRPE/2008/5, ECE/TRANS/WP.29/GRPE/2008/6, Informal documents Nos. GRPE-56-04, GRPE-56-05, GRPE 56-10 and GRPE-56-12 of Annex I to this report

23. Recalling the discussion at the previous GRPE session, the expert from the United Kingdom introduced ECE/TRANS/WP.29/GRPE/2008/5 and GRPE-56-12 proposing revised amendments to Regulation No. 83 to better reflect the real world CO₂ emissions of plug-in hybrid electric vehicles. The expert from Japan welcomed that proposal and informed GRPE that his government had started to discuss similar provisions for insertion into the national legislation.

24. GRPE adopted ECE/TRANS/WP.29/GRPE/2008/5, as amended below, and requested the secretariat to submit it to WP.29 and AC.1, for consideration at their November 2008 session, as draft Supplement 8 to the 05 series of amendments to Regulation No. 83.

Page 3, Annex 14, paragraph 3.1.2.5.2.2., correct to read:

"..... specified in Appendix 2 of **Annex 8 to Regulation No. 101**, and used

The battery minimum (in Ah) in its **maximum** state of charge, as"

Page 9, Annex 14, paragraph 3.2.2.6.2.2., correct to read:

"..... specified in Appendix 2 of **Annex 8 to Regulation No. 101**, and used

The battery minimum (in Ah) in its **maximum** state of charge, as"

25. The expert from OICA introduced ECE/TRANS/WP.29/GRPE/2008/6 and GRPE-56-10 proposing to include into Regulation No. 83 an alternative preconditioning procedure for the Type I test, to allow the use of E5 and B5 biofuels as alternative reference fuels and to clarify and update specifications for the proportional speed fan. The expert from the EC suggested taking into account additional amendments.

26. GRPE adopted ECE/TRANS/WP.29/GRPE/2008/6, as amended by Annex IV to this report. The secretariat was requested to submit it to WP.29 and AC.1, for consideration at their November 2008 session, as part (see para. 24 above) of draft Supplement 8 to the 05 series of amendments to Regulation No. 83.

27. The expert from Germany presented GRPE-56-04, proposing an amendment to the Regulation to align the temperature range with real world test conditions. The document received a number of comments. The expert from OICA was invited to prepare, jointly with the experts from the EC, Germany, the Netherlands and the United Kingdom a revised proposal for consideration at the next GRPE session in January 2009, as an official document.

28. The expert from Germany introduced GRPE-56-05 aiming at correcting the calculation of the combined exhaust emissions. GRPE noted a number of comments. The expert from OICA was invited to prepare, jointly with the experts from the France and Germany, a revised proposal for consideration at the next GRPE session in January 2009, as an official document.

D. Regulation No. 101 (CO₂ emissions/fuel consumption) (Agenda item 6(d))

Documentation: ECE/TRANS/WP.29/GRPE/2008/7, ECE/TRANS/WP.29/GRPE/2008/8; Informal document No. GRPE-56-12 of Annex I to this report

29. For the same purpose as mentioned in paragraph 23 above, the expert from the United Kingdom introduced ECE/TRANS/WP.29/GRPE/2008/7 and GRPE-56-12. GRPE adopted the proposal as amended below and requested the secretariat to submit it to WP.29 and AC.1, for consideration at their November 2008 session, as draft Supplement 8 to Regulation No. 101.

Page 4, Annex 8, paragraph 3.2.3.2.2., correct "battery (in Ah) in its minimum state of charge" to read "battery (in Ah) in its **maximum** state of charge".

Page 8, Annex 8, paragraph 3.4.5., correct "in paragraphs 3.2.5. and 3.3.7." to read "in paragraphs 3.2.5. and 3.3.6.".

Page 12, Annex 8, paragraph 4.2.4.2.2., correct "battery (in Ah) in its minimum state of charge" to read "battery (in Ah) in its **maximum** state of charge".

30. For the same purpose as mentioned in paragraph 25 above, GRPE considered ECE/TRANS/WP.29/GRPE/2008/8 (tabled by OICA) and adopted it, without amendment. The secretariat was requested to submit it to WP.29 and AC.1, for consideration at their November 2008 session, as a part (see para. 29 above) of draft Supplement 8 to Regulation No. 101.

E. Regulation No. 115 (Specific LPG and CNG retrofit systems) (Agenda item 6(e))

Documentation: ECE/TRANS/WP.29/GRPE/2008/4

31. The expert from AEGPL withdrew ECE/TRANS/WP.29/GRPE/2008/4 and announced that he would introduce a new document at a later time point, if necessary.

F. Regulation No. 85 (Measurement of net power) (Agenda item 6(f))

Documentation: Informal document No. GRPE-56-02 of Annex I to this report

32. The EC expert announced his organization's intention to repeal EU Directive 80/1269/EEC and replace it by a reference to Regulation No. 85. He introduced GRPE-56-02 to align the provisions of the Regulation with those of the current Directive.

33. GRPE welcomed that initiative and agreed to have, at its next session, a final review of the proposal. The secretariat was requested to distribute GRPE-56-02 with an official symbol.

34. The expert from the Netherlands reminded that such references in EU Directives have to be updated to take into account new amendments to the UNECE Regulations.

VIII. HYDROGEN AND FUEL CELL VEHICLES – SUB-GROUP ENVIRONMENT (HFCV-SGE) (Agenda item 7)

35. The HFCV Project Manager, Mr. Albus (Germany), informed GRPE that no further work progress had been made by the subgroup on environmental issues (HFCV-SGE) since the last GRPE session. He added that a detailed status report on the activities of the subgroup on safety (HFCV-SGS) would be presented at the next WP.29 session in June 2008.

36. Mr. Albus confirmed that the subgroup on HFCV-SGE would not meet in conjunction with the next GRPE session. However, he announced that HFCV-SGS intended to hold a 3-day meeting in Geneva, from 19-21 January 2009 (see para. 44 below).

IX. ENVIRONMENTALLY FRIENDLY VEHICLES (EFV) (Agenda item 8)

37. Mr. Albus (Germany), also chairing the EFV working group, recalled the terms of reference and rules of procedure of the EFV group adopted by GRPE at its previous session. He informed GRPE about his intention to consider the feasibility to develop a measurement procedure and an evaluation method for EFV. This feasibility study would be considered at the fourth EFV conference, scheduled to be held in New Delhi (India) in November 2009. He announced that the first meeting of the EFV working group would be held on 6 June 2008, after the GRPE session proper. All working papers for that meeting were available at the following GRPE website: <<http://www.unece.org/trans/main/wp29/wp29wgs/wp29grpe/efv01.html>>

38. Mr. Albus also announced his intention to convene a further EFV meeting in Bonn (Germany), on 30-31 October 2008, in order to prepare a first concept of that feasibility study for consideration at the next GRPE session in January 2009. GRPE agreed that the EFV group should also meet in conjunction with the next GRPE session (para. 44 below).

X. FUEL QUALITY (FQ) (Agenda item 9)

Documentation: Informal document No. GRPE-56-20 of Annex I to this report

39. GRPE noted the good progress of work done by the FQ working group. GRPE welcomed the commitment by IPIECA and OICA to prepare a list of fuel quality parameters deemed necessary to enable the corresponding motor vehicle emission levels from EURO II to EURO V. The expert from OICA clarified that this exercise should be carried out, in a first step, with liquid fuels (including biofuels) and, in a further step, with gaseous fuels (including biogases).

40. GRPE agreed that the FQ group should meet prior to its next session (para. 44 below).

XI. EXCHANGE OF INFORMATION ON NATIONAL AND INTERNATIONAL REQUIREMENTS ON EMISSIONS (Agenda item 10)

Documentation: Informal documents Nos. GRPE-56-03 and GRPE-56-06 of Annex I to this report

41. The expert from Japan presented GRPE-56-03 and announced the intention of his government to introduce into the national legislation a new regulation on emissions of special vehicles (i.e. non-road mobile machinery). GRPE noted also the information by the expert from the United States of America regarding a new program to control emissions from locomotive and marine diesel engines (GRPE-56-06).

XII. ELECTION OF OFFICERS (Agenda item 11)

42. In compliance with Rule 37 of the Rules of Procedure (TRANS/WP.29/690), GRPE called the election of officers on Thursday afternoon. Mr. B. Gauvin (France) was unanimously re-elected Chairman of GRPE for the sessions scheduled for the year 2009.

XIII. OTHER BUSINESS (Agenda item 12)

43. GRPE noted that no information was given under this agenda item.

XIV. PROVISIONAL AGENDA FOR THE NEXT SESSION

44. For its fifty-seventh session to be held in Geneva, Palais des Nations, GRPE decided to start on Monday afternoon, 12 January 2009, at 2.30 p.m. until Friday, 16 January 2009, 5.30 p.m. For that purpose, the following agenda was agreed:

A. INFORMAL MEETINGS IN CONJUNCTION WITH THE GRPE SESSION PROPER

1. Informal meeting of the GRPE working group on Off-Cycle Emissions (OCE)
To be held on Monday afternoon, 12 January 2009, from 2.30 p.m. till 5.30 p.m.
The agenda of the meeting will be prepared by the OCE secretariat and distributed to the members of the group prior to the meeting. This meeting will be held without interpretation.
2. (a) Informal meeting of the GRPE working group on the emissions of Non-Road Mobile Machinery (NRMM)
To be held on Tuesday morning, 13 January 2009, from 9.30 a.m. till 12.30 p.m.
The agenda of the meeting will be prepared by the NRMM secretariat and distributed to the members of the group prior to the meeting. This meeting will be held without interpretation.

(b) Informal meeting of the GRPE working group on Gaseous Fuelled Vehicles (GFV)
To be held on Tuesday morning, 13 January 2009, from 9.30 a.m. till 12.30 p.m.
The agenda of the meeting will be prepared by the GFV secretariat and distributed to the members of the group prior to the meeting. This meeting will be held without interpretation.
3. (a) Informal meeting of the GRPE working group on the World-wide harmonized Heavy-Duty Certification procedure (WHDC)
To be held on Tuesday afternoon, 13 January 2009, from 2.30 p.m. till 5.30 p.m.
The agenda of the meeting will be prepared by the WHDC secretariat and distributed to the members of the group prior to the meeting.

(b) Informal meeting of the GRPE working group on the Fuel Quality (FQ)
To be held on Tuesday afternoon, 13 January 2009, from 2.30 p.m. till 5.30 p.m.
The agenda of the meeting will be prepared by the FQ secretariat and distributed to the members of the group prior to the meeting. This meeting will be held without interpretation.
4. Informal meeting of the GRPE working group on the World-wide harmonized Light-duty Test Procedures (WLTP)
To be held on Wednesday (whole day), 14 January 2009, from 9.30 a.m. till 5.30 p.m.
The agenda of the meeting will be prepared by the WLTP secretariat and distributed to the members of the group prior to the meeting.
5. Informal meeting of the GRPE working group on Particle Measurement Programme (PMP)
To be held on Wednesday afternoon, 14 January 2009, from 2.30 p.m. till 5.30 p.m.
The agenda of the meeting will be prepared by the PMP secretariat and distributed to the members of the group prior to the meeting. This meeting will be held without interpretation.
6. Informal meeting of the GRPE working group on Environmentally Friendly Vehicles (EFV)
To be held on Friday afternoon, 16 January 2009, from 2.30 p.m. till 5.30 p.m.
The agenda of the meeting will be prepared by the EFV secretariat and distributed to the members of the group prior to the meeting. This meeting will be held without interpretation.

B. PROVISIONAL AGENDA FOR THE FIFTY-SEVENTH SESSION OF GRPE PROPER

7. To be held on Thursday, 15 January 2009, from 9.30 a.m. to Friday, 16 January 2009, until 12.30 p.m.:

- I. Regulation No. 49 (Emissions of C.I., NG, and P.I. (LPG) engines):
 - (a) Off-Cycle Emissions (OCE);
 - (b) Gtr No. 4 on Worldwide harmonized heavy-duty certification procedure (WHDC).
- II. Particle Measurement Programme (PMP).
- III. Gtr No. 2 on the Worldwide harmonized Motorcycle emission Test Cycle (WMTC).
- IV. Exhaust emissions test protocol of Non-Road Mobile Machinery (NRMM).
- V. Amendments to other UNECE Regulations:
 - (a) Worldwide harmonized Light vehicles Test Procedures (WLTP);
 - (b) Gaseous-Fuelled Vehicles (GFV);
 - (c) Regulation No. 83 (Emissions of M₁ and N₁ categories of vehicles);
 - (d) Regulation No. 85 (Measurement of net power);
 - (e) Regulation No. 101 (CO₂ emissions/fuel consumption).
- VI. Hydrogen and Fuel Cell Vehicles – Subgroup Environment (HFCV-SGE).
- VII. Environmentally Friendly Vehicles (EFV).
- VIII. Fuel Quality (FQ).
- IX. Exchange of information on national and international requirements on emissions.
- X. Other business.

8. Informal meeting of the GRSP working group on the Hydrogen and Fuel Cell Vehicles – Subgroup Safety (HFCV-SGS)

To be held from Monday morning, 19 January 2009, from 9.30 a.m. to Wednesday afternoon, 21 January 2009, until 5.30 p.m. The agenda of the meeting will be prepared by the HFCV-SGS secretariat and distributed to the members of the group prior to the meeting. The three-day meeting will be held without interpretation.

Annex I

LIST OF INFORMAL DOCUMENTS (GRPE-56-...)
DISTRIBUTED WITHOUT AN OFFICIAL SYMBOL DURING THE SESSION

No.	Transmitted by	Agenda item	Language	Title	Follow-up
01.	Russian Federation	2(b)	E	Gasoline engine WHDC validation study	(a)
02.	European Commission	6(f)	E	Proposal for Supplement 5 to ECE Regulation No. 85	(b)
03.	Japan	10	E	New regulation of special vehicles of Japan	(a)
04.	Germany	6 (c)	E	Proposal for a draft amendment to the 05 serie amendments to the regulation No. 83 (Emissions of M ₁ and N ₁ categories of vehicles)	(b)
05.	Germany	6 (c)	E	Proposal for a draft amendment to the 05 serie amendments to the regulation No. 83 (Emissions of M ₁ and N ₁ categories of vehicles)	(b)
06.	USA	10	E	U.S. EPA's New Program to Control Pollution from Locomotives and Marine Diesels	(a)
07.	WHDC	2(b)	E	Progress report on Global Technical Regulation (GTR) No. 4 (WHDC)	(a)
08.	NRMM	5	E	Status of NRMM gtr work	(a)
09.	OICA	3	E	OICA statement on the progress of the PMP programme	(a)
10.	OICA	6(c)	E	OICA proposed corrigendum to ECE/TRANS/ WP.29/GRPE/2008/6	(c)
11.	WMTC	4	E	Report on data collection as a basis for the discussion about the introduction of performance requirements in GTR No. 2 (World-wide harmonized motorcycle emission test cycle (WMTC))	(b)
12.	United Kingdom	6(c) & 6(d)	E	Proposal amending documents ECE/TRANS/WP.29/GRPE/2008/5 and ECE/TRANS/WP.29/GRPE/2008/7	(c)
13.	OCE	2(a)	E	Status of the Off-Cycle Emissions (OCE) gtr	(a)

No.	Transmitted by	Agenda item	Language	Title	Follow-up
14.	OCE	2(a)	E	Draft global technical regulation on Off-Cycle Emissions (OCE)	(b)
15.	WMTC	4	E	Proposal for a corrigendum to global technical regulation No. 2 (WMTC)	(b)
16.	WLTP	6(a)	E	Summary of the 1st informal group meeting on WLTP	(a)
17.	WLTP	6(a)	E	Proposal for the terms of reference and rules of procedure of WLTP informal group	(c)
18.	GFV	6(b)	E	Informal group on Gaseous Fuelled Vehicles (GFV): Results of the 2nd informal meeting	(a)
19.	Secretariat	10	E	1st International Transport Forum (Leipzig, 2008): Key messages on transport and energy: The challenge of climate change	(a)
20.	FQ	9	E	Summary of the 2nd meeting of the informal group on Fuel Quality (FQ)	(a)
21.	WHDC	2(b)	E	Progress on amending global technical regulation No. 4 (WHDC)	(c)
22.	WHDC	2(b)	E	Status of the Worldwide harmonized Heavy-Duty emissions Certification Procedure	(a)

Notes:

- (a) Consideration completed or to be superseded
- (b) Continue consideration at the next session as an official document
- (c) Adopted and submitted to WP.29

Annex II

INFORMAL MEETINGS HELD IN CONJUNCTION WITH
THE FIFTY-SIXTH SESSION OF GRPE

1. Following the agreement reached at the previous GRPE session, seven informal meetings were held in conjunction with proper fifty-sixth session of the GRPE.
2. The twenty-first informal meeting of the GRPE working group on Off-Cycle Emissions (OCE) was held on 2 June 2008 (afternoon only) under the Chairmanship of Mr. T. Sherwood (United States of America). A summary of the proceedings of this informal meeting is given in the report above (paras. 3-4).
3. The twenty-second informal meeting of the GRPE working group on the emissions from Non-Road Mobile Machinery (NRMM) was held on 3 June 2008 (morning only) under the Chairmanship of Mr. R. Hummel (EC/JRC). A summary of the proceedings of this informal meeting is given in the report above (para. 16).
4. The second informal meeting of the GRPE working group on Gaseous-Fuelled Vehicles (GFV) was held on 3 June 2008 (morning only) under the Chairmanship of Mr. A. Rijnders (Netherlands). A summary of the proceedings of this informal meeting is given in the report above (paras. 21-22).
5. The twenty-fourth informal meeting of the GRPE working group on the Worldwide harmonized Heavy-Duty emission Certification (WHDC) procedure was held on 3 June 2008 (afternoon only) under the Chairmanship of Mr. J.P. Laguna (EC). A summary of the proceedings of this informal meeting is given in the report above (paras. 5-8).
6. The second informal meeting of the GRPE working group on Fuel Quality (FQ) was held on 4 June 2008 (morning only) under the Chairmanship of Mr. B. Gauvin (France). A summary of the proceedings of this informal meeting is given in the report above (paras. 39-40).
7. The first informal meeting of the GRPE working group on Worldwide harmonized Light vehicles Test Procedures (WLTP) was held on 4 June 2008 (afternoon only) under the Chairmanship of Mr. B. Gauvin (France). A summary of the proceedings of this informal meeting is given in the report above (paras. 17-20).
8. The first informal meeting of the GRPE working group on Environmentally Friendly Vehicles (EFV) was held on 6 June 2008 (morning only) under the Chairmanship of Mr. C. Albus (Germany). An outlook of the proceedings of this informal meeting is given in the report above (paras. 37-38).

Annex III

TERMS OF REFERENCE OF THE INFORMAL GROUP ON WLTP

1. At its November 2007 session, WP.29 decided to set up an informal group under GRPE to prepare, within the next 2 years, a roadmap for the development of the Worldwide harmonized Light vehicles Test Procedure (WLTP).
2. The goal of the informal group is to propose to GRPE, for its January 2010 session a roadmap for establishing a WLTP gtr, including suggestions for the organization of the future work.
3. The informal group shall try to identify the milestones in the roadmap on which a consensus of the 1998 Agreement Contracting Parties is necessary before WLTP gtr project is put for consideration in AC.3.
4. In order to meet the GRPE January 2010 deadline, the mandate for the informal group shall be limited, in a first step, to October 2009.

RULES OF PROCEDURE

1. The informal group is open to all participants of GRPE. A limitation of number of participants from any country and organization to participate in the informal group is actually not foreseen.
2. A Chairperson and a Technical Secretary will govern the informal group.
3. The official language of the informal group will be English.
4. All documents and/or proposals shall be submitted to the Technical Secretary of the group in a suitable electronic format in advance of the meeting. The group may refuse to discuss any item or proposal which has not been circulated 10 working days in advance.
5. An agenda and related documents will be circulated to all members of the informal group at least two weeks in advance of all scheduled meetings.
6. The process will pursue consensus. When consensus cannot be reached, the Chairperson of the group shall present the different points of view to GRPE.
7. The progress of the informal group will be reported to GRPE orally or as an informal document by the Chairperson or another participant of the group.
8. All working papers should be distributed in digital form. A specific website will be created and URL will be notified to all related parties. See website:
<<http://www.unece.org/trans/main/wp29/wp29wgs/wp29grpe/wltp01.html>>

Annex IV

ADOPTED AMENDMENTS TO ECE/TRANS/WP.29/GRPE/2008/6
(Regulation No. 83, see paragraph 26 of this report)

Page 2, paragraph 2.4., correct to read:

"2.4. "Gaseous pollutants" means the exhaust gas emissions of carbon monoxide, oxides of nitrogen **expressed in NO₂ equivalent, and hydrocarbons** expressed of:
....."

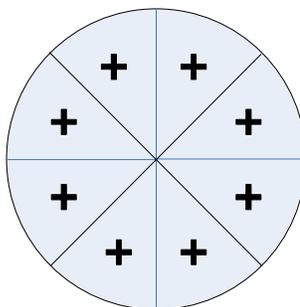
Page 3, Annex 4, the amendments to paragraph 5.3.1., should be deleted.

Page 4, Annex 4, paragraph 6.1.3., correct to read:

"6.1.3. A current of air may be zero.

The above mentioned air velocity shall be determined as an averaged value **of a number of** measuring points which:

- (a) **for blowers with rectangular outlets** are located at the centre of each rectangle dividing the whole of the blower outlet into 9 areas (dividing both horizontal and vertical sides of the blower outlet into 3 equal parts).
- (b) **for circular blower outlets, the outlet shall be divided into 8 equal arcs by vertical, horizontal and 45° lines. The measurement points lie on the radial centre line of each arc (22.5°) at a radius of two thirds of the total (as shown in the diagram below).**



Each value at **those points** shall be within 10 per cent of the averaged value of themselves.

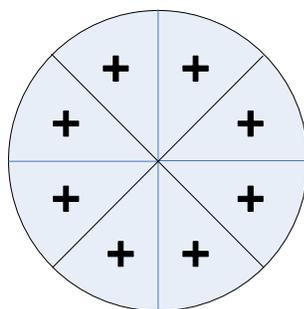
The device used to measure modified at the request of the manufacturer."

Page 6, Annex 4a, paragraph 3.4.2., correct to read:

"3.4.2. A current of air within ± 5 km/h of the corresponding roller speed **within the range of 10 km/h to 50 km/h. At the range over 50 km/h, the linear velocity of the air shall be within ± 10 km/h of the corresponding roller speed. At roller speeds of less than 10 km/h, air velocity may be zero.**

The above mentioned air velocity shall be determined as an averaged value of a number of measuring points which:

- (a) for blowers with rectangular outlets are located at the centre of each rectangle dividing the whole of the blower outlet into 9 areas (dividing both horizontal and vertical sides of the blower outlet into 3 equal parts).**
- (b) for circular blower outlets, the outlet shall be divided into 8 equal arcs by vertical, horizontal and 45° lines. The measurement points lie on the radial centre line of each arc (22.5°) at a radius of two thirds of the total (as shown in the diagram below).**



Each value at those points shall be within 10 per cent of the averaged value of themselves.

The device used to measure the linear velocity of the air shall be located at between 0 and 20 cm from the air outlet.

The final selection of the blower modified at the request of the manufacturer."

Page 6, Annex 4a, the amendments to paragraph 6.3.1., should be deleted.
