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INLAND TRANSPORT COMMITTEE

Working Party on the Construction of Vehicles

Working Party on General Safety Provisions (GRSG)

REPORT OF THE WORKING PARTY ON GENERAL SAFETY PROVISIONS (GRSG)
ON ITS SEVENTY-FIFTH SESSION

(27 to 30 October 1998)

1. GRSG held its seventy-fifth session from 27 October (afternoon) 1998 to 30 October (morning) 1998, under the chairmanship of Mr. J. Martin (Luxembourg). Experts from the following countries participated in the work: Belgium, Czech Republic; Denmark; Finland; France; Germany; Hungary; Italy; Luxembourg; Netherlands; Norway; Poland; Romania; Russian Federation; Spain; Sweden; United Kingdom; United States of America. A representative of the European Commission (EC) also participated. Representatives of Japan and the People's Republic of China took part in the session under paragraph 11 of the Commission's Terms of Reference. Experts from the following non-governmental organizations took part in the session: International Organization for Standardization (ISO); International Road Transport Union (IRU); International Organization of Motor Vehicle Manufacturers (OICA); Liaison Committee for the Manufacture of Automobile Equipment and Spare Parts (CLEPA); European Insurance Committee (CEA). An expert from the European Caravan Federation (ECF) participated at the invitation of the secretariat.

2. The documents without a symbol distributed during the session are listed in annex 1 to this report.

DEVELOPMENT OF REGULATION No. 36 (Public service vehicles)

Documentation: TRANS/WP.29/GRSG/R.280; TRANS/WP.29/GRSG/R.292; TRANS/WP.29/GRSG/R.298; TRANS/WP.29/GRSG/R.299; TRANS/WP.29/GRSG/1998/1; TRANS/WP.29/GRSG/1998/2; TRANS/WP.29/GRSG/1998/4; TRANS/WP.29/GRSG/1998/12; TRANS/WP.29/GRSG/1998/13; informal documents Nos. 3; 7; 8 and 13 of annex 1 to this report.

3. Consideration of this item was initiated by a review of the situation of the different documents in order to identify those on which agreement had been reached and which could therefore be prepared for transmission to WP.29 and AC.1 (see para. 17 below).

4. With respect to document TRANS/WP.29/GRSG/R.280, the Chairman recalled that GRSG had decided that the specifications proposed for the transport of handicapped passengers should be considered as optional and contained in a separate annex to the Regulation. He also explained that the prescriptions should parallel the solution adopted by the European Community (EC) when the respective Directive was concluded.

5. The expert from IRU announced that a document on this particular subject was being prepared by his organization in collaboration with the International Union of Public Transport (UITP). He said that it would stress difficulties that low floor vehicles would have, mainly concerning the distributions of seats, the access to the seats for handicapped people, the installation of the central stanchion in double doors and the limitation on the use of low floor vehicles caused by street terrain. He envisaged that the document could be considered during the next GRSG session.

6. Following the above statements, GRSG agreed that consideration of specific provisions for handicapped passengers should be resumed during the next session and document TRANS/WP.29/GRSG/R.280 maintained in the agenda. To facilitate the discussion, the Chairman asked the experts to keep informal document No. 8 and to bring the copies of this informal document to the seventy-sixth GRSG session.

7. The proposals in documents TRANS/WP.29/GRSG/R.292, TRANS/WP.29/GRSG/R.298, TRANS/WP.29/GRSG/R.299 and TRANS/WP.29/GRSG/1998/2 were considered as having been fully discussed in the previous sessions. However, the majority were retained for postponed transmission to WP.29 and AC.1 (see para. 17 below).

8. Regarding document TRANS/WP.29/GRSG/1998/1, GRSG agreed that it only proposed a complementary clarification and that this was not a necessary modification of Regulation No. 36.

9. For document TRANS/WP.29/GRSG/1998/4 dealing with fire safety, GRSG agreed to elaborate a new Regulation containing the prescriptions of Directive 95/28/EEC and asked the expert from Norway to prepare a corresponding proposal for consideration at the next GRSG session.

10. Document TRANS/WP.29/GRSG/1998/12 was introduced by the expert from the Czech Republic. After a detailed discussion, GRSG agreed to include prescriptions for plastic fuel tanks in annex 5 to Regulation No. 34 (Prevention of fire risks). Several experts pointed out that, in such case,

the new prescriptions should only apply to vehicles of categories M₂ and M₃. At the request of GRSG, the expert from the Czech Republic agreed to prepare a corresponding proposal for consideration at the next GRSG session.

11. The expert from the Netherlands presented informal document No. 13 containing a draft corrigendum to the table of figure 1 in annex 1 to Regulation No. 36. The proposal was considered and adopted by GRSG and it was agreed to transmit it to WP.29 and to AC.1 for consideration in March 1999.

12. The expert from Japan presented informal document No. 3 explaining measures for the improved frontal collision performance of buses and coaches. He gave a video presentation showing several tests conducted in Japan of frontal impacts of coaches into a rigid barrier from the speed of 36 km/h. The aim of the study was to improve the protection of drivers and passengers provided by the vehicle structure.

13. The expert from the Russian Federation introduced document TRANS/WP.29/GRSG/1998/13 and justified the intentions to extend the scope of Regulation No. 36 to trolleybuses.

14. Possibilities were considered whether prescriptions for trolleybuses should form one separate Regulation or be incorporated in a new annex of Regulation No. 36. No final decisions were taken, but GRSG agreed to consider this matter during the next session, having in mind that questions of electric safety might alternatively be incorporated into Regulation No. 100.

15. The expert from IRU presented informal document No. 7 containing some remarks to document TRANS/WP.29/GRSG/1998/13. After a brief discussion, the secretariat was requested to distribute this informal document with an official symbol.

16. Informal document No. 8 was presented by the expert from Belgium. The proposals referring in this informal document to documents TRANS/WP.29/GRSG/1998/4 and TRANS/WP.29/GRSG/1998/12 were considered satisfied with the decisions adopted by GRSG (see paras. 9 and 10 above). Concerning comments on the proposal for trolleybuses (TRANS/WP.29/GRSG/1998/13), GRSG requested the secretariat to distribute them with an official symbol for detailed consideration at the next session.

17. In order to clarify the situation of the amendments which had been adopted during the previous and the current session to Regulation No. 36, GRSG requested the secretariat to prepare a consolidated document, containing all the amendments approved. It was also agreed that such a document would be the basis for the elaboration of parallel amendments to Regulations Nos. 52 and 107.

DEVELOPMENT OF REGULATION No. 52 (Small capacity public service vehicles)

Documentation: TRANS/WP.29/GRSG/R.281.

18. Considering the document tabled, and the decisions taken with respect to Regulation No. 36 during the current session (see paras. 3. to 17 above), GRSG reiterated that Regulation No. 52 should be developed in parallel with Regulation No. 36. Detailed consideration of the amendments to Regulation No. 52 was therefore deferred.

DEVELOPMENT OF REGULATION No. 107 (Double deck passenger vehicles)

Documentation: TRANS/WP.29/GRSG/R.282; TRANS/WP.29/GRSG/1998/5; TRANS/WP.29/GRSG/1998/14 and informal document No. 14 of annex 1 to this report.

19. Concerning document TRANS/WP.29/GRSG/R.282, GRSG agreed that future decisions should parallel those taken for Regulations Nos. 36 and 52 (see paras. 4 and 18 above).

20. Informal document No. 14 was presented by the expert from the Netherlands, who explained that it replaced document TRANS/WP.29/GRSG/1998/14 and informed GRSG of some additional corrections to be made in this informal document.

21. The expert from the United Kingdom questioned the proposal of informal document No. 14 and pointed out that if the exemption for the gangway height was needed with respect to a vehicle's chassis construction, the limitation should not be based on a door position. He also said that the problem of gangway slope and/or step remained to be adequately addressed.

22. To solve the questions raised, the expert from the Netherlands agreed to reconsider his proposal for submission to the next session of GRSG.

23. The expert from Denmark made a reservation to the proposals to reduce the height of the gangway under certain conditions. He explained that his reservation was based on a study conducted in Denmark and that, if the provisions for the gangway height reduction would be adopted, it might even lead to a decision to cease the application of Regulation No. 107 by Denmark.

DEVELOPMENT OF REGULATION No. 66 (Strength of superstructure)

Documentation: TRANS/WP.29/GRSG/1998/15; informal document No. 9 of annex 1 to this report.

24. Presenting informal document No. 9, the expert from Belgium stated that any amendment to this Regulation should be established on the basis of a recent accident research. His opinion was shared by the expert from OICA. The expert from Hungary reminded GRSG that a decision in principle had been taken to update Regulation No. 66 and endorsed by WP.29 at its one-hundred and thirteenth session (TRANS/WP.29/599, paras. 57 and 59). He said that the informal group he chaired had sufficient expertise to improve the test and calculation methods.

25. The Chairman of GRSG clarified that updating of the Regulation was necessary in order to take account of the increased kinetic energy due to belted passengers for which the survival space needed to be preserved. He agreed that accident statistics should be used adequately in order to justify

any modifications leading to increased vehicle mass and consequently higher engine power and pollutant emissions.

26. Following the items enumerated in document TRANS/WP.29/GRSG/1998/15, GRSG provided to the informal group charged with the development of Regulation No. 66 the instructions for its future work (see annex 2 to this report).

27. GRSG congratulated the informal group and its Chairman, Mr. Matolcsy, on the analytical work done so far and encouraged further step-by-step progress, focusing on those items on which consensus had been reached by GRSG (see annex 2 to this report).

28. In order to facilitate future discussions in GRSG, the secretariat was requested to distribute the figures annexed to informal document No. 6 of the seventy-fourth session as an Addendum to document TRANS/WP.29/GRSG/1998/15.

DEVELOPMENT OF REGULATION No. 43 (Safety glazing)

Documentation: TRANS/WP.29/GRSG/1997/2/Rev.1; informal documents Nos. 2, 10, 12, and 15 of annex 1 to this report.

29. The expert from Belgium introduced informal document No. 10 containing a proposal for an alternative method for examination of glass fragments (Regulation No. 43, para. 1.4.). In the discussions which followed, clarifications were requested by several delegates. The experts from Belgium and CLEPA were invited to review the proposal of informal document No. 10 and transmit it to the secretariat for distribution with an official symbol for consideration at the next session of GRSG.

30. GRSG considered and approved document TRANS/WP.29/GRSG/1997/2/Rev.1 with the following modifications:

Paragraph 2.5.2., (the French version only), delete the words "ne ... pas".

Annex 5, paragraph 4.2., amend to read:

".... This shall not apply to flat windscreens which fall within an already approved group."

Annex 6, paragraph 6., amend to read:

".... This shall not apply to flat windscreens which fall within an already approved group, if the rake angle is less than 40° to the vertical."

Annex 14, paragraph 6.1.3.2., amend to read (including a new footnote 1/):

"... after 100 cycles on the inner surface.

No abrasion testing is required for rigid plastic glazing for trailers and motor caravans. 1/

1/ Until "motor caravan" is defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), "motor caravan" means a special purpose M1 category vehicle constructed to include accommodation space which contains at least the following equipment:

- (i) seats and table
- (ii) sleeping accommodation which may be converted from the seats
- (iii) cooking facilities, and
- (iv) storage facilities

This equipment shall be rigidly fixed to the living compartment; however, the table may be designed to be easily removable."

Annex 16, paragraph 6.1.3.2., amend to read (including a new footnote 1/):

"... after 100 cycles on the inner surface of the test window.

No abrasion testing is required for rigid double plastic glazing for trailers and motor caravans. 1/

1/ Until "motor caravan" is defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), "motor caravan" means a special purpose M1 category vehicle constructed to include accommodation space which contains at least the following equipment:

- (i) seats and table
- (ii) sleeping accommodation which may be converted from the seats
- (iii) cooking facilities, and
- (iv) storage facilities

This equipment shall be rigidly fixed to the living compartment; however, the table may be designed to be easily removable."

Annex 16, paragraph 6.1.3.3., should be deleted:

31. The expert from Belgium presented informal document No. 15. It contained a proposal concerning the conformity of production and introducing prescriptions concerning technical services. The document was adopted by GRSG.

32. GRSG agreed to transmit document TRANS/WP.29/GRSG/1997/2/Rev.1 with the amendments noted in paras. 30 and 31 above for consideration to WP.29 and AC.1 during the session of March 1999.

33. The expert from OICA introduced informal document No. 2 in order to allow an alternative headform for the test, at the request of the manufacturer of the vehicle. He explained that other headforms might prove to have at least the same qualities and should therefore be accepted as an alternative.

34. The proposal by OICA was objected to by several experts who wanted to have the headform specifications incorporated in the proposal. After a detailed discussion, it was noted that the alternative headform proposed by OICA should be identical with specifications contained in document TRANS/WP.29/GRSG/1998/17, annex 8 (draft proposal to amend Regulation No. 21).

35. GRSG finally agreed that informal document No. 2 with the specifications of the alternative headform would be considered during the next session. The secretariat was requested to distribute it with an official symbol.

36. During the discussion of document TRANS/WP.29/GRSG/1997/2/Rev.1, the expert from Belgium proposed to introduce some amendments to annex 3, paragraph 3.2.23., the table, concerning calibration procedure. In order not to delay the presentation of the amended document TRANS/WP.29/GRSG/1997/2/Rev.1 to WP.29, GRSG suggested that he should prepare a concrete proposal for consideration at the next session.

37. The expert from Japan expressed some concerns regarding the variation of the drop height for different thicknesses of glass and concerning the value of the burning rate. For the same reason, as in the preceding paragraph, he was invited to present a concrete proposal for consideration at the next session.

DEVELOPMENT OF REGULATION No. 97 (Vehicle alarm systems)

Documentation: TRANS/WP.29/GRSG/1998/11.

38. After discussion of the outstanding items (TRANS/WP.29/GRSG/53, para. 36), GRSG agreed to amend the document as follows:

Paragraph 31.7, should be deleted:

Paragraph 32.4.1, amend to read:

"...
- a maximum of 5 minutes after ..."

Paragraphs 32.5.1 and 32.5.1.3., shall read the text as contained in document TRANS/WP.29/GRSG/1998/11.

39. GRSG agreed to transmit the amended document TRANS/WP.29/GRSG/1998/11 to WP.29 and AC.1 for consideration. The experts from OICA and CLEPA were invited to consider appropriate transitional provisions and communicate the proposal either to the secretariat or directly to WP.29 for the March 1999

session.

DEVELOPMENT OF REGULATION No. 26 (External projections)

Documentation: TRANS/WP.29/GRSG/1998/18, informal document No. 4 of annex 1 to this report.

40. As agreed at its seventy-fourth session (TRANS/WP.29/GRSG/53, para. 52), GRSG considered the proposal presented by the expert from the Czech Republic.

41. The expert from the United Kingdom expressed his reservation to the proposal, and suggested that no decisions should be taken because the issue was being considered in the European Community.

42. The expert from OICA presented informal document No. 4. He proposed to modify the angle of 15° proposed by the Czech Republic to 60°, which in his view conformed more to the current design of vehicles concerned.

43. GRSG agreed to resume consideration of this issue during the next session, taking into account the modification proposed by OICA (see para. 42 above).

DRAFT REGULATION ON THE PROTECTION OF M1 AND N1 CATEGORIES OF VEHICLES
AGAINST UNAUTHORISED USE

Documentation: TRANS/WP.29/GRSG/1998/6; TRANS/WP.29/GRSG/1998/19; informal document No. 5 of annex 1 to this report.

44. Opening the discussion, the Chairman pointed out that, whilst the proposal of document TRANS/WP.29/GRSG/1998/19 followed the ideas of TRANS/WP.29/GRSG/1998/6, it covered all categories of vehicles and not only M1 and N1.

45. Some corrections and modifications of the proposal (TRANS/WP.29/GRSG/1998/19) were suggested, including those presented by OICA in informal document No. 5. OICA agreed to prepare their compilation as an addendum to the document.

46. The most important item considered was the elimination of part II of the proposal, which would align the text with EC Directive 95/56/EC (amending EC Directive 74/61/EEC), but would eliminate the provisions based on existing Regulation No. 18 and covering categories of vehicles other than M1 and N1. Delegations were invited to consider the implications of this, more particularly for countries not members of the European Community.

OTHER BUSINESS

- (a) Consolidated Resolution on the Construction of Vehicles (R.E.3) - Annex 7 - Classification of Vehicles

Documentation: TRANS/WP.29/GRSG/1998/16; TRANS/WP.29/GRSG/1998/17; informal document No. 11 of annex 1 to this report.

47. GRSG considered and approved document TRANS/WP.29/GRSG/1998/16 with the following modifications:

Annex 7, paragraph 2.5.4, amend to read:

"... including coolant, oils, 90 per cent of fuel, 100 per cent of other liquids except used waters, tools, spare wheel, driver (75 kg) and for buses ..."

The reference to insert new paragraphs "6.8. to 8.2." should read "8. to 8.2."

48. GRSG also considered and adopted document TRANS/WP.29/GRSG/1998/17 with modifications concerning the references to paragraphs 2.4.4. and 2.4.5. which should read:

Annex 7, insert new paragraphs 2.4.4 and 2.4.5., to read:

(The text of paragraphs 2.4.4. and 2.4.5. not modified - see document TRANS/WP.19/GRSG/1998/17).

49. GRSG agreed to transmit the adopted documents (see paras. 47 and 48 above) to WP.29 for consideration during the session of March 1999.

- (b) Development of Regulation No. 105 (ADR vehicles)

Documentation: Informal documents Nos. 1 and 6 of annex 1 to this report.

51. Recalling the results of the seventy-fourth session (TRANS/WP.29/GRSG/53, paras. 46 to 48), GRSG analysed the situation both in the EC (Directive 78/548/EEC proposed to be amended to incorporate N1 category of vehicles) and with respect to the ADR, Appendix B.2, entering into force on 1 January 1999.

52. GRSG agreed to incorporate new prescriptions of Appendix B.2 to ADR into the Regulation and to transmit the proposal based on informal document No. 6 to WP.29 and AC.1 for consideration at the session of March 1999. Informal document No. 6 was approved as follows:

Paragraph 5.1., add at the end a reference to footnote "2/", and insert a footnote "2/" to read:

"2/ In this Regulation, references to other ECE Regulations shall be deemed to refer also to any other international rules that apply the same technical requirements as the respective ECE Regulation. References to specific sections of the respective ECE Regulations shall be interpreted accordingly."

Paragraph 5.1.2.7.1., amend to read:

"5.1.2.7.1. (Reserved)"

Paragraphs 5.1.2.4., 5.1.2.5. and 5.1.2.7.2., add at the end a reference to footnote "3/" to read:

"3/ Compliance with these requirements shall be verified on the completed vehicle."

53. The expert from the United Kingdom expressed a reservation to the adopted modifications to Regulation No. 105, with the exception of that to paragraph 5.1.

54. GRSG also agreed to continue the consideration of this Regulation during its session of April 1999 and proposed to invite a member of the secretariat of WP.15 in order to examine the pending issues.

(c) Computerized system of ECE Regulations

55. The secretariat informed GRSG that the computerized system continued to operate without any substantial change.

(d) Pending projects of ECE Regulations

56. Outside of the agenda, and referring to document TRANS/WP.29/1998/40, the expert from the United States of America informed GRSG that several European manufacturers had petitioned the National Highway Traffic Safety Administration (NHTSA) to use EC Directives as functional equivalents to the prescriptions for windscreen wipers and washers and for de-frosting and de-misting systems. He noted that a difference existed in the swept area (8-16 per cent) and asked the experts for their opinion. He also informed GRSG that steps were being taken in his country to align identification of controls and tell-tales with ISO symbols.

(e) Tribute to Mr. P. Frederiksen

57. Mr. P. Frederiksen, the expert from Denmark announced his forthcoming retirement. He thanked all his colleagues in the GRSG and also in the secretariat for their collaboration. The Chairman thanked Mr. Frederiksen for the valuable contributions he had made to the Working Party and wished him a happy and long retirement. All the delegates fully endorsed the thanks and wishes extended to Mr. Frederiksen.

AGENDA FOR THE NEXT SESSION

58. The following agenda was agreed for the seventy-sixth session to be held in Geneva from 19 April (14.30 h) to 23 April (12.30 h) 1998 1/:

1. Regulation No. 36 (Public service vehicles), development
2. Regulation No. 52 (Small capacity public service vehicles), development
3. Regulation No. 107 (Double-deck large passenger vehicles), development
4. Regulation No. 66 (Strength of superstructure), development
5. Regulation No. 43 (Safety glazing), development
6. Regulation No. 26 (External protections)
7. New draft Regulation on the protection of M1 and N1 category vehicles against unauthorized use
8. Other business
 - 8.1. Regulation No. 34 (Prevention of fire risk)
 - 8.2. Regulation No. 105 (ADR vehicles) - development
 - 8.3. Regulation No. 100 (Safety of electric vehicles)

1/ As part of the secretariat's efforts to reduce expenditure, all the official documents distributed prior to the session by mail will not be available in the conference room for distribution to session participants. Delegates are kindly requested to bring their copies of documents to the meeting.

Annex 1

LIST OF INFORMAL DOCUMENTS DISTRIBUTED WITHOUT A SYMBOL DURING THE SESSION

No.	Transmitted by	Agenda item	Language	Title
1.	Chairman	9.2	E	Draft proposal of amendment to Regulation No. 105 (Vehicles intended for the carriage of dangerous goods)
2.	OICA, CLEPA	5.	E	Proposed amendment to proposal for draft amendment (Supplement 4) to Regulation No. 43
3.	Japan	1.	E	Measures for safety of buses concerning the improvement of collision safety of drivers and passengers in Japan
4.	OICA	7.	E	Proposal for a draft amendment to Regulation No. 26 (External projections)
5.	OICA	8.	E	Proposal for a new draft Regulation: Uniform technical prescriptions concerning the protection of motor vehicles against unauthorised use
6.	OICA	9.2.	E	Draft amendments to ECE Regulation No. 105 (Approval of vehicles intended for the carriage of dangerous goods)
7.	IRU	1.	E	CIS Proposals on Trolleybuses
8.	Belgium	1.	E	Comments on Regulation No. 36 (Large passenger vehicles)
9.	Belgium	4.	E	Comments on Regulation No. 66 (Strength of superstructure)
10.	Belgium	5.	E/F	Proposal for draft amendments to Regulation No. 43 (Safety glazing materials)
11.	Japan	9.1.	E	Classification of use of motor vehicles.
12.	European Caravan Federation (ECF)	5.	E	Proposal for draft amendments (Supplement 4) to Regulation No. 43

No.	Transmitted by	Agenda item	Language	Title
13.	Netherlands	1.	E	Proposal for a draft corrigendum to Regulation No. 36 (Public service vehicles)
14.	Netherlands	3.	E	Proposal for draft amendments to Regulation No. 107
15.	Belgium	5.	E/F	Proposal for draft amendments to Regulation No. 43 (Safety glazing materials)
-	Secretariat	-	E	Pending projects of ECE Regulations (TRANS/WP.29/1998/40)
-	Secretariat	5.	E	Anthropomorphic test device (TRANS/WP.29/GRSP/R.163, annex 8) <u>*/</u>
-	Hungary	1.	E	Report on bus fires and evacuation tests (TRANS/SC1/WP29/GRSA/R.93)
-	Secretariat	9.2.	E	ADR Annex B with amendments thereto up to 1 January 1999 (ECE/TRANS/130(Vol.II))

*/ This document has been replaced by TRANS/WP.29/GRSP/1998/17 (see para. 34 of the report).

Annex 2

POSITIONS OF GRSG WITH RESPECT TO FUTURE WORK
OF THE INFORMAL GROUP CHARGED WITH THE DEVELOPMENT OF REGULATION No. 66
(Annotations correspond to document TRANS/WP.29/GRSG/1998/15)

- (Ad.1) Scope of the Regulation should only cover single-deck vehicles of classes II and III, keeping therefore the Regulation aligned with Regulation No. 36.
- (Ad.2) Further considerations are needed in order to address adequately the question of the influence on vehicle structure of the mass of belted passengers. The expert from the United Kingdom agreed to provide relevant information for consideration at the next session of GRSG.
- (Ad.3) Further study is needed to address the question of the mass of luggage located in the luggage compartments.
- (Ad. 4) The complete vehicle should be presented to the Technical Service by the applicant for approval; OICA made a reservation to this decision by GRSG.
- (Ad. 5) For the seating arrangement the "worst case" should be tested for approval.
- (Ad. 6) The pendulum test should only be deleted if it is proved that it does not represent a rollover accident and that it cannot be modified to do so.
- (Ad. 7) For the residual space the informal group shall work along the two principles which it had formulated.
- (Ad. 8) The Regulation shall require all necessary data for tests and/or calculation to be submitted by the manufacturer.
- (Ad. 9) GRSG agreed that the depth of the ditch specified in Regulation No. 66 (800 mm) is one of its fundamental requirements and should not be changed.
- (Ad. 10) Direction of the rollover test should examine the "worst case" situation.
- (Ad. 11) The wheel support at rollover test on the tilting platform should be as agreed by the informal group.
- (Ad.12) For the definition of types and number of bays to be tested the informal group should follow the principles it had formulated.
- (Ad. 13) For determining the energy, the expert from Italy expressed his concern that in fact an additional static test is being proposed to check the plastic deformation. GRSG did not make any conclusions.
- (Ad. 14) Factor 0.75 was agreed to be kept for the energy equation.
- (Ad. 15) Distribution of absorbed energy to be addressed along the principles which had been set in the informal group; the requirement could be put in the text of the Regulation.

(Ad. 16) Improvements or modifications of the calculation method were agreed to be the most difficult part of the informal group assignment. GRSG suggested that any modifications should first be verified. The expert from the Netherlands signalled his intention to cooperate with the informal group on the calculation method development.
