

GRSG – Ad-hoc working group
Safety of Wheelchair Passengers in Road Vehicles
Monday 15 December 2003 & Tuesday 16 December 2003

Minutes (Unconfirmed)

Attending

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| Donald Macdonald (DM)(Chair) | DfT (United Kingdom) |
| Jan Petzäll (JP) | SNRA (Sweden) |
| Göran Eriksson (GE) | SNRA (Sweden) |
| Anna Ferner (AF) | SNRA (Sweden) |
| Anders Lindberg (AL) * | Ministry of Industry, Employment and Communications (Sweden) |
| Jerzy Kownacki (JK) | ITS (Poland) |
| Antonio Rodriguez (AR) | INSIA (Spain) |
| Michael Becker (MB) | Evobus GmbH (Germany) |
| Hans Ammerlaan (HA) | RDW (Netherlands) |
| Allan McKenzie (AM) | SMMT (United Kingdom) |
| Asbjørn Hagerupsen (AH) | Public Roads Administration (Norway) |
| Jim Hand (JH) | DfT (United Kingdom) |

* Present for day 2 only.

Apologies

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| Ann Frye | DfT (United Kingdom) |
| Christian Pichon | UTAC (France) |
| Martin Hellung-Larson | Traffic Ministry (Denmark) |
| Giulio Mendogni | Iveco (Italy) |
| Jean-Baptiste Avrillier | Ministry of Transport (France) |
| Juan Ramos-Garcia | UNECE Transport Division |

1. Welcome and Introductions

- 1.1 The expert from Sweden opened the meeting, welcomed the delegates and provided a brief background as to the role and function of the SNRA.
- 1.2 This was followed by brief introductions from each of the group members.
- 1.3 The Chairman welcomed the group and thanked the SNRA for offering to host the second ad-hoc group meeting on the safety of wheelchair passengers in road vehicles.

2. Objectives

- 2.1 Following the previous meeting, papers had been prepared by Spain, Germany, Sweden and the UK. These papers varied in scope but outlined proposals for amendments to Annex 8 of UNECE Reg 107 and Annex VII of Directive 2001/85/EC.
- 2.2 The group agreed that its work should be carried out in two stages.
 - 2.2.1 Firstly, the group would urgently develop clarifications deemed essential to address difficulties with Annex VII requirements of the Directive. These would be submitted to GRSG as formal documents, specifying proposed amendments to Reg 107.
 - 2.2.2 Secondly, the group's future discussions on the safety of wheelchair users may impact on Regs 14, 16, 17, 21 and 25, in addition to 107. The expertise in these areas lies within GRSP and it was therefore essential they should be involved. The group agreed that following further consideration, a package of formal documents would be submitted to GRSG, and copied to GRSP. Nevertheless, it was considered appropriate that the group should approach GRSP during the interim.
[Following this meeting, the minutes from the October GRSG confirmed that the GRSG secretariat had been requested to advise GRSP of the work of this group and invite participation]

3. Presentation by University Research Institute for Automotive Safety (INSIA) - Spain

- 3.1 In support of the papers previously submitted by the expert from Spain, INSIA presented on further research they had undertaken to develop a test method suitable for the assessment of wheelchair and occupant restraint systems. A copy of the presentation is attached.
- 3.2 The group were supportive of using a surrogate wheelchair to load the anchorages, although some discussion took place regarding the precise loads. The earlier work carried out in the UK by TRL, had made

recommendations for anchorage loadings however, these had been derived from rigid sled tests and did not take account of the attenuating effect of a deformable vehicle floor. The UK was considering further research using vehicle body shells to establish the precise nature of this effect and results should be available for the next scheduled meeting of the group. In addition, the earlier work by TRL used the same, more rigorous deceleration pulse for M2 vehicles up to 3.5 tonnes as specified for M1. This was based on previous work however, the Chairman asked that group members consider their position on this issue for the next meeting. It was further suggested that this might be a topic on which the group could seek the expert advice of GRSP.

- 3.3 The Chairman reminded the group that irrespective of these requirements, ISO 10542 is structured around a 20g deceleration and therefore the majority of equipment was likely to be manufactured to withstand this load. The variable factor was how this equipment was subsequently installed within a specific vehicle.

4. **Presentation by Evobus - Germany**

- 4.1 The expert from Germany advised that their paper had been approved by the German Government body, KBA. It contained some recommended changes and certain clarifications to the requirements currently specified in Annex VII of Directive 2001/85/EC. They proceeded to present the key points.
- 4.2 The expert from the SMMT highlighted the importance of adopting a parallel approach to implementing amendments and a need to submit a proposal to the MVWG as well as GRSG.

5. **Presentation by SNRA - Sweden**

- 5.1 The expert from Sweden presented their paper that contained recommendations for amendments to Annex VII of the Directive. It was based on discussions with bus manufacturers.

6. **Presentation by DfT - UK**

- 6.1 The paper submitted by the UK contained proposals intended to improve and clarify the technical provisions of Reg 107. It was structured as an amendment to document TRANS/WP.29/2003/70.

7. **First stage amendments**

- 7.1 As had previously been agreed, the group considered each of the proposals and the views of other group members to establish an agreed position regarding those amendments immediately necessary to the requirements contained within Directive 2001/85/EC.

7.2 The consolidated document agreed during the meeting was subsequently circulated to obtain any final comments. Comments were received from Germany, Poland, Sweden and UK. The final document is attached which will form the basis of proposals to GRSG and MVWG.

8. Interpretations

8.1 The expert for the Netherlands requested some clarification on the marking requirements of Annex I, para 7.3 of the Directive. The Chairman advised that in the UK this requirement was met by marking two loading configurations. The first configuration was based on a situation where the vehicle carried the maximum number of wheelchair users, and then the respective maximum seated passengers and standees. The second situation was based on a vehicle with no wheelchairs on board and once again, the respective maximum number of seated passengers and standees.

8.2 A further point raised by the expert from the Netherlands was in respect of Annex I, para 7.5.2.3. The chair advised that the items of equipment listed did not require a fuse or circuit breaker. In addition, other items operated on a single circuit were not restricted by the 16A maximum capacity. This applied only where a common fuse or breaker protected more than 1 circuit.

9. Date of next meeting

9.1 The expert from Spain offered to host the next meeting on 2/3 June 2004 in Madrid.

Attachments:

Consolidated and agreed proposals to GRSG and MVWG
Ad-hoc group document register