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### Inland Transport Committee

#### Working Party on Road Traffic Safety

##### Group of Experts on Improving Safety at Level Crossing

##### Fifth session

Geneva, 15-16 June 2015

## Report of the Group of Experts on Improving Safety at Level Crossing on its fifth session

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## **I. Attendance**

1. The Group of Experts on Safety at Level Crossing (GE.1) held its fifth session in Geneva from 15-16 June 2015, chaired by Mr. Martin Gallagher (United Kingdom of Great Britain and Northern Ireland). Representatives of the following UNECE member States participated: Austria, Belgium, Finland, France, Hungary, Ireland, Italy, Norway, Poland, Portugal, Romania, Russian Federation, Spain, Sweden, Switzerland, Turkey and United Kingdom of Great Britain and Northern Ireland.
2. The representatives of a non-ECE member State also participated: India.
3. The following non-governmental organizations were represented: European Railway Agency (ERA), International Union of Railways (UIC) and Operation Lifesaver Estonia. A private company also attended: Community Safety Partnerships Ltd (CSP).

## **II. Adoption of the agenda (agenda item 1)**

4. The Group of Experts adopted the annotated provisional agenda for the fifth session (ECE/TRANS/WP.1/GE.1/9) with the following amendments:
  - the title of ECE/TRANS/WP.1/GE.1/9 be amended to "fifth" session; and
  - International Level Crossing Awareness Day (ILCAD) 2015 of UIC update and a discussion of the timeframes/extension of GE.1 be included under "Other Business".

## **III. Programme of Work (agenda item 2)**

### **A. A review and analysis of the economic costs of level crossing accidents based on data provided by countries**

5. Instead of Informal document No. 1, Poland presented the feedback provided by two countries to the supplementary questionnaire. The Russian Federation and the United Kingdom informed that they would provide their data to Poland by 3 July 2015. Austria, Finland, Hungary, Sweden and Switzerland, will provide partial datasets by 3 July 2015. GE.1 requested all other attending member States (Estonia, France, India, Ireland, Norway, Portugal, Romania, Spain and Turkey,) to explain to Poland why this information is not collected (also by 3 July 2015). GE.1 also requested that UIC seek the permission of its members to provide the subgroup with the level crossing accident costs data which it has.
6. For the next session, GE.1 requested:
  - GE.1 members to provide to the subgroup national case studies and average or typical costs of level crossing accidents, or alternatively to explain why this information is not collected. All information is to be provided by 3 July 2015;
  - the subgroup to analyse the costs provided by GE.1 members, as well as the examples of case studies or policy decisions taken by Governments to improve the safety of level crossings where there was no compelling business case; and
  - the subgroup to prepare a document reflecting the above.

## **B. An evaluation and analysis of the safety performance of types of level crossings in UNECE member States and in selected non-UNECE member States such as Australia, India, New Zealand and South Africa**

7. The subgroup (led by CSP) proposed a list of the most suitable indicators of safety performance at level crossings, and recommended that UIC hosts and publishes the level crossing safety data annually in connection with ILCAD (see Informal document No. 2).

8. GE.1 also discussed the applicability of a number of the common safety indicators related to level crossings as contained in EU Directive 2014/88/EU. GE.1 agreed to adopt the common safety indicators to guide the work of all of the subgroups. GE.1 also agreed to consider the relevant safety indicators being used in selected non ECE member States such as Australia, India, New Zealand and South Africa.

9. For the next session, GE.1 requested the subgroup:

- to finalize the proposed data input sets as listed in Informal document No.2;
- to incorporate EU Directive common safety indicators related to level crossings as discussed during the session as an annexure to the document to be prepared for the next session;
- to collect the data for Australia, India, New Zealand and South Africa;
- to populate the recommended safety performance inputs for ECE member States where possible; and
- to prepare a document reflecting the above.

## **C. A summary of good practices including education**

10. Instead of an updated Informal document No. 3, Finland presented its compilation of the table of good practices based on the feedback provided by GE.1 members on the types of safety improvements or good practices which have been shown to provide incremental improvement in safety levels.

11. For the next session, GE.1 requested that the subgroup:

- review the format of the table;
- increase the content to include more options, particularly on the technology and the technological solutions being tested;
- identify where evaluation of identified good practices had taken place and where it had not;
- incorporate labour intensive practices in countries where technology is relatively expensive;
- identify the benefits and constraints of each good practice; and
- prepare a document reflecting the above.

## **D. A survey of prevailing national legislation and/or legal arrangements at level crossings**

12. The subgroup (led by ERA) proposed various amendments to the level crossings-related provisions in the 1968 Convention on Road Signs and Signals (Articles 33 to 36) (Informal document No. 4), including the proposal that a modernized sign ("A, 26c")

replace the existing signs A, 26a and A, 27 (which warn of an upcoming level crossing). The subgroup also proposed a completely new sign to indicate that if a driver is trapped between lowered gates, and a train is approaching, that the driver should drive through/break the gat(e/s).

13. GE.1 was of the view that paragraph 12 of Article 23 of the 1968 Convention on Road Signs and Signals should be deleted. It also discussed that sign A, 25 might not necessarily convey the warning message of an upcoming level crossing with gates.

14. For the next session, GE.1 requested that:

- GE.1 members review and revert to the proposed amendments as well as to comment on the rest of Articles 33 to 36 as they presently are and revert to the subgroup with further proposed amendments (if any) by 15 July 2015;
- The subgroup prepares a formal document based on an updated Informal document No. 4 to reflect the feedback received from GE.1 members during the session (see above), as well as the feedback provided to the subgroup by GE.1 members post-session; and
- The subgroup defines the requirements for the completely new sign based on the discussion during the fifth session, also in the document for the next session.

#### **E. A survey of technology and technological solutions to improve safety at level crossings**

15. Informal document No. 5 was not submitted.

16. To ensure that the subject of technology is included in the final report of GE.1, GE.1 agreed that information on existing and emerging good practices in technology and the technological solutions being tested be provided for inclusion in the table of good practices under item 2(c).

17. The Chair also undertook to draft a short document containing a summary of the global position based on current knowledge for the next session.

#### **F. Identification of the key causes and possible solutions related to human factors contributing to unsafe conditions at level crossings**

18. The subgroup (led by Austria) provided a summary of its work to date as well as a list of the gaps in its research on human factors. The subgroup will endeavour to provide a copy of its draft toolbox by the next session.

19. For the next session, GE.1 requested the subgroup to:

- expand the proposed toolbox beyond the category of vehicle drivers to include other level crossing users;
- document the proposed toolbox with or without testing/validation;
- identify the key human factors related to level crossing accidents; and
- prepare a document reflecting the above.

## **G. Enforcement**

20. Instead of Informal document No. 7, the subgroup (led by the United Kingdom) presented its completed analysis of the responses provided by GE.1 members in response to its second questionnaire. The key findings were that a small number of countries measured the effectiveness of detections and their long term impact on user behaviour, but that this analysis did not go deep enough. The subgroup recommended that a consistent methodology for analysing human factors pre and post implementation of technology (ie red light cameras and speed cameras) be developed to fully measure success and sustained behavioural change. Further, this methodology should be agreed and adopted by countries seeking to deploy technologies to improve safety at level crossings.

21. GE.1 requested the subgroup to commence an evaluation of the effectiveness of fixed enforcement cameras at level crossings by analysing and comparing non-compliance data pre and post installation, and for the next session, to provide a document on their evaluation to date.

## **H. Development of a road/rail interface strategy with recommendations**

22. As noted at the third session of GE.1, a road/rail interface strategic report would reflect the completion of the work of the subgroups in relation to items 2(a) to 2(g) above. The Chair indicated that at the next session, he and the secretariat would present a high level structure of the draft report. The Chair also noted that it might be possible to present an incomplete first draft depending on the progress of the work of the subgroups.

# **IV. Other Business (agenda item 3)**

## **A. Risk management of level crossings**

23. Instead of Informal document No. 8, the United Kingdom gave a presentation on the benefits of implementing a risk-based approach and process to the management of safety at level crossings. The current process used in the United Kingdom was outlined by way of an example, with support from Finland, Portugal and ERA.

24. For the next session, GE.1 requested Portugal to join the United Kingdom to prepare a document outlining a risk management process and the benefits of adopting a risk-based approach, together with examples.

25. GE.1 endorsed the decision to include this topic in the programme of work of GE.1 as an additional item.

## **B. International Level Crossing Awareness Day 2015**

26. UIC shared that ILCAD 2015 successfully took place in Istanbul on 3 June 2015. It showed its new short film "Take your time, don't risk your life". UIC advised that ILCAD 2016 is tentatively scheduled to take place on 9-10 June 2016 in Riga, Latvia.

## **C. Extension of the timeframe of the Group of Experts**

27. The secretariat advised that, at the seventieth session of the Working Party on Road Traffic Safety (WP.1), the parent body of GE.1, WP.1 had expressed its appreciation for the

work of GE.1 and had agreed to recommend the extension of its mandate into 2016 should it prove necessary for completion of their work programme. GE.1 agreed that a one-year extension was necessary. The secretariat will make the necessary administrative arrangements to extend the mandate of GE.1 accordingly.

28. The secretariat also advised that the deadline for the submission of formal documents (for translation into the UNECE languages) for the next session is 27 August 2015.

## **V. Date and Place of Next Meeting (agenda item 4)**

29. The Group of Experts was informed that its sixth session will be on 5-6 November 2015 in Geneva.

## **VI. Adoption of the Report (agenda item 5)**

30. GE.1 adopted the report of its fifth session.

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