ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on Road Traffic Safety

REPORT OF THE WORKING PARTY ON ROAD TRAFFIC SAFETY
ON ITS FIFTY-SIXTH SESSION

(Geneva, 18-21 November 2008)

Addendum

REVISION OF THE CONSOLIDATED RESOLUTION ON ROAD TRAFFIC (R.E.1)

Safety at level-crossings

Note by the secretariat

1. The members of the WP.1 will find hereafter the text relating to safety at level-crossings (background document: ECE/TRANS/WP.1/2008/7) in the form adopted by the Working Party at its fifty-sixth session (see ECE/TRANS/WP.1/120, paragraph 31).

2. The contents of this text will be included in the Chapter 1 of the revised R.E.1 as section 1.9.
Revision of the Consolidated Resolution on Road Traffic (R.E.1)

Chapter 1 General rules concerning behaviour in traffic

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1.9 Safety at level-crossings

1.9.1 Context

A level-crossing means any level intersection between a road and a railway or tramway track with its own track formation. In some countries level-crossings include an intersection between a rail line and a pedestrian walkway. There are still tens of thousands all over the world. Rail traffic always has the right of way over road users. It is precisely because these crossings are level that they involve serious risks, notwithstanding the signals warning of their presence (see the danger warning signs prescribed under annex 1, section A, paragraphs 25, 26, 28 and 29, of the Convention on Road Signs and Signals, 1968) and, in some instances, the protective barriers or half-barriers preventing road users from crossing when one or more rail-borne vehicles are approaching or passing through. Generally, given the difference in mass between a train and a road vehicle, it is the road vehicle that is basically at risk. However, a collision with a heavy goods vehicle can have serious consequences for rail traffic, especially if the truck is carrying hazardous or flammable goods.

Despite all the measures taken to signal level-crossings and make them safe many road users are killed or injured at such crossings every year, because they fail to observe the rules or they are careless (failing to observe mandatory stop lights or audible alarms, for example, or venturing onto a level-crossing without first making sure that no rail traffic is approaching), or else they drive through or around the barriers or half-barriers. Contrary to what is generally thought, most accidents involve “regulars”, in particular those living near a level-crossing, as habit makes them less careful or more reckless, which may prove fatal.

The risk potential of a level-crossing is a function of the traffic densities on the road and the railway. Generally speaking, most level-crossings are located either where railways cross low-traffic roads, or on secondary railway lines. Still, in order to reduce the risk of collision at level-crossings, countries are making efforts to remove them, starting with the ones where the risk is highest, either by replacing them with split level-crossings or simply doing away with them. This is, however, a long-term undertaking because of the cost involved and the relatively long study and implementation times. Also, the topography of the sites does not always lend itself to such a solution.
1.9.2 Recommendations

In the light of the foregoing, the following measures are recommended:

1.9.2.1 Rules to observe when approaching and going through a level-crossing

(a) Rules of behaviour

All countries with rail networks should introduce into their legislation the provisions of article 19 of the Convention on Road Traffic, 1968, which establishes the rules to be followed by all road users, whether pedestrians, cyclists, moped or motorcycle riders, or drivers of motor vehicles with four or more wheels, when approaching and going through level-crossings.

Additionally, to ensure greater safety, countries should prohibit road users from moving beyond the level-crossing sign (see, for example, signs A, 28a and A, 28b, in the Convention on Road Signs and Signals, 1968) when a rail-borne vehicle is approaching the crossing.

Some countries supplement these rules with stricter provisions for the drivers of buses and coaches, which are obliged to stop at level-crossings not equipped with automatic warning devices such as barriers, half-barriers or flashing lights. In these countries the drivers of school buses are obliged to stop at level-crossings, whether or not they are equipped with barriers, half-barriers or flashing lights.

(b) Rules for overtaking

Similarly, countries should introduce into their legislation the provisions of article 11, paragraph 8, of the Convention on Road Traffic, 1968, which sets out the rules for overtaking just before and on level-crossings. They should ideally also introduce the provisions contained in the 1971 European Agreement Supplementing the 1968 Convention on Road Traffic, which are stricter.

1.9.2.2 Road-user awareness

Countries should also make road users aware of the dangers of such level-crossings, through information campaigns, emphasizing the importance of observing the rules in paragraph 1.9.2.1, for their own safety.

Over and above these rules, the following advice should be given to each category of road user.

(a) Pedestrians: to use the level-crossings only to cross the tracks and taking the shortest route;

(b) Cyclists, drivers of mopeds and motorcyclists: to always cross the track at right angles to the rails;

(c) Drivers of motor vehicles:

– to avoid changing gear when crossing the tracks;
– when approaching a level-crossing, to stop whenever they hear or see a rail-borne vehicle coming;

(d) *Drivers of vehicles for the transport of goods and passengers* more specifically:

– to get to know the level-crossings on your routes;

– to be well aware of your vehicle’s dimensions and load to be sure that it will have sufficient space to fully clear the track and get across safely;

1.9.2.3 **Infrastructure and equipment**

No level-crossing should be located on high-traffic thoroughfares (motorways and similar roads) or on railways where speeds can exceed 160 km/h.

Automatic level-crossings should be equipped with a red light signal, which requires vehicles to come to a complete stop, accompanied by a bell, and signalled in advance by appropriate signs that will vary depending on whether or not the level-crossing has barriers.

For greater safety and better enforcement, level-crossings can be fitted with technical systems that allow automatic checks. Such systems make it possible to detect and identify any vehicle which goes through the level-crossing after activation of the light signals prohibiting passage, in order to document the infringement and penalize the driver.