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REVISION OF THE CONSOLIDATED RESOLUTIONS ON ROAD TRAFFIC (R.E.1) AND ON ROAD SIGNS AND SIGNALS (R.E.2)

Safety in tunnels

Transmitted by Belgium, Bulgaria and the International Road Transport Union (IRU)

<u>Note</u>: At its thirty-second session, in light of the fire in the Mont Blanc Tunnel, the Working Party invited Governments to transmit relevant sections of their national legislation to the secretariat so that the Working Party could discuss the issue of safety in tunnels and decide whether there is a need to add provisions to any of its legal instruments.

The following contributions have been received from Belgium, Bulgaria and the International Road Transport Union (IRU).

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BELGIUM

Since the Belgian road network does not include any very long tunnels, no specific regulations have been introduced up to now. The following are, however, relevant:

- **S** prohibition from stopping or parking on the carriageway in tunnels;
- S the normal requirement to use dipped headlights and rear red tail lights in reduced visibility;
- S the application of special rules in force in the case of motorways and highways;
- **S** the possibility of local regulations by adequate signs.

The existence of a number of large urban tunnels should be noted which have special characteristics (frequent entrances and exits, speed limits, access forbidden to vehicles of a certain tonnage (e.g. more than 3.5 or 5 tonnes)).

It is possible that specific tunnel rules will be developed in the medium term and this point will therefore be followed closely.

BULGARIA

Accidents in tunnel in Bulgaria account for under 0.5 per cent of all road accidents.

Nevertheless in the new Bulgarian Law on Road Traffic (in force from 1 September 1999) a special Section on "Special regulations for traffic in tunnels" is included.

Excerpt of the new Bulgarian Law on Road Traffic:
"......
Chapter II
ROAD TRAFFIC RULES
......
Section XV
Special regulations for traffic in tunnels
ARTICLE 63

During movement in tunnels, signposted as such, drivers must:

- (i) switch on passing or driving lamp(s);
- (ii) switch off the engine in case of prolonged stoppage in the tunnel.

ARTICLE 64

During movement in tunnels, drivers are forbidden to reverse, make a U-turn, stand and park."

Tunnels in Bulgaria are signposted by:

- 1. Danger warning sign named "Tunnel" equilateral triangle with white ground, red border and containing the symbol of sign E,11a.
- 2. Special regulation signs the same as signs E,11a and E, 11b of the Convention on Road Signs and Signals.

IRU

Attached is a diagram concerning the correlation between accident occurrence in tunnels and the presence of trucks in such tunnels. From this diagram it is clear that there is little or no positive correlation between the share of trucks in total traffic through tunnels and the number of accidents occurring in them. On the contrary, while the Fréjus tunnel has an extremely high proportion of heavy duty vehicles (almost 60%), but a low number of accidents per year (only 6), the Elbtunnel, with a moderate share of goods vehicles (approximately 15%) has an extremely high number of accidents per year (125). These are the results of the most recent and comprehensive investigation of European tunnels conducted by the German automobile association (ADAC).

To improve safety in European tunnels, the best possible safety devices in terms of modern construction and monitoring techniques must be used. Measures that improve tunnel safety are: separate tubes for each direction, well-lighted tunnels, proper escape tubes, an efficient emergency service which can be activated without delay, and the indication, well before vehicles enter them, of the existence of road works in tunnels.

(FIGURE OFF-SET)