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IRU STANDPOINT ON THE PROPOSAL FOR AN EU DIRECTIVE ON MINIMUM SAFETY REQUIREMENTS FOR TUNNELS IN THE TRANS-EUROPEAN ROAD NETWORK

Adopted by the IRU General Assembly on 24 April 2003

The Members of the IRU are kindly requested to take note of this standpoint, as unanimously adopted by the IRU General Assembly on 24 April 2003.

1. CONTENT OF THE PROPOSAL

All tunnels longer than 500 meters and belonging to the Trans European Road Network will be subject to new harmonised minimum safety requirements. In most countries, tunnels should comply with the new standards within ten years of the entry into force of the Directive. In the first 6-year period, 50% of tunnels will need to comply.

The Directive sets minimum standards for the organisation, and the roles and responsibilities of bodies in charge of safety in tunnels, as well as technical standards for tunnel infrastructure, operation, traffic rules and user information. It requires in particular that every country designate an administrative authority responsible for safety in tunnels and one or more inspection bodies to carry out evaluation tests or inspections.

Structural, technical and organisational road safety measures need to be taken, in order to prevent incidents and keep their impact to a minimum. All safety measures have to be in line with the latest technical developments and apply to all factors concerned, i.e. road users, emergency services, infrastructure and vehicles.

The number one priority is the prevention of incidents. The actions proposed mainly cover:

- The definition of main tasks for the Tunnel Manager to secure safety, both under normal conditions (prevention) and in the event of an incident, to monitor the efficient performance of all installations (including ventilation, lighting, etc.) during normal operation and adjust them as required in the event of an incident and to properly maintain all structural and electromechanical installations;
- The improvement of road users' understanding of tunnel safety, e.g. through information campaigns at national level;
- The construction of twin-tube tunnels offering greater safety in the event of a fire. The Commission proposes that single-tube tunnels should only be built if a long-term forecast estimates that traffic will remain below 50% of the saturation level;
- The obligation of setting-up emergency plans in close co-operation with emergency services.

The secondary objective is to minimise possible consequences. The measures envisaged cover:

- Improving communication between the Tunnel Manager and road users inside the tunnel, whereby appropriate information and road signs enable people involved in an incident to reach safety by themselves;
- **Allowing the immediate intervention of road users to prevent greater damage.** The key issues will be the obligation for all heavy goods vehicles, buses and coaches entering tunnels to be equipped with a fire extinguisher, and the requirement that any additional diesel tanks on heavy-duty vehicles be empty when passing through tunnels. (N.B. the Draft Directive does not include a provision relating to heavy goods vehicles carrying dangerous goods or goods of calorific values greater than 30 MW);
- Strict standards in tunnels, for instance for emergency exits or the distance between lay-bys or the number of tubes.

Recognising that the costs of refurbishing road tunnels in accordance with the full set of requirements could be very high for Member States, the Commission proposes to allow Member States, after a risk analysis has been conducted, to implement less costly alternative safety measures achieving a sufficient safety level.

2. IRU POSITION

2.1 Justification for action at Community level

One may wonder whether action at Community level is appropriate. Tunnels falling within the scope of the Directive (512 in total by 2010) are mainly situated in Italy (48%), Austria (12.5%), followed by Greece (9%), France (7%) and Spain (5%). The UNECE is working on recommendations for all tunnels with a length over 1.000 m, whether part of the TEN or not. Some Member States are likely to invoke the subsidiarity principle, both for tunnel infrastructure and tunnel management.

It is to the road transport industry's advantage to have safe tunnels. The EU standards are likely to have more positive effects than negative. Compliance with standards for non-TERN tunnels also, possibly only at a later date, is a more likely outcome than national dualism in this field. **The IRU therefore supports Community action.**

2.2 Need for Pan-European co-ordination

The Commission refers to UNECE activities on tunnel safety and is building on its results to a considerable extent. In order to facilitate international transport operations, conditions applied to heavy goods vehicles using tunnels should be the same all over Europe. **The IRU therefore stresses the need for co-ordination with UN activities**, including the ADR Convention, also in the case of possible adaptation of the EU Directive for technical progress (Art. 15 & 16).

2.3 Swiss tunnels

The Commission, in its Explanatory Memorandum, announces that it intends to ensure good co-operation with third countries, in particular Norway and Switzerland. The latter will not be affected by EU legislation but is, however, heavily involved in the UNECE work on this matter. This notwithstanding, particularly in view of restrictions that may be applied to heavy goods vehicles and the need for the best alternative routes should tunnels be closed, **the IRU points out the need to ensure that the requirements of the future Directive are really incorporated into the Agreement(s) between the EU and Switzerland**, to ensure optimum safety, facilitate international traffic and guarantee a consistent Alpine transit policy.

2.4 Cost of the measure, depending on derogation possibilities

Expenditure related to tunnel infrastructure improvement and management is estimated at EUR 4.8 bio if all tunnels in operation are brought up to the new standards, and EUR 2 bio if full use is made of derogations foreseen in the Directive. Traffic delays would increase those costs by one third.

According to the Commission Proposal, Member States will bear these costs. Clearly, the costs will be unevenly spread among the Member States. Advantages are equally unevenly spread, however. The proposed time scale should reduce the annual bill to acceptable proportions, even in the case of Italy (EUR 100-250 mio/year). Hence, **the IRU considers the investment to be worthwhile, taking into consideration the safety gains, and therefore calls for reduced possibilities for derogation.**

2.5 Refurbishment and equipment of tunnel infrastructure

Article 3 and Annex I relate to the construction, refurbishment and equipment of tunnels.

The draft Directive confirms the view already strongly expressed by the IRU that twin-tube tunnels offer much higher safety potential and that single-tube tunnels should only be built if a long-term forecast shows that traffic will remain at less than 50% of saturation level.

It also confirms that, in the interests of safety and traffic fluidity, the same number and width of road lanes should be maintained in the tunnel as on the rest of the corresponding road network.

The IRU also considers it important for road safety that complete or partial planned closure of lanes in tunnels should always begin and end outside the tunnel and that traffic lights inside tunnels should be permitted only in the event of accidents/incidents.

Twin-tube tunnels should be so constructed that, in the event of the prolonged closure of one of the tubes, the other can be used for bi-directional traffic.

The IRU stresses the importance of ensuring minimum disturbance of traffic flows during refurbishing works, including the adequate provision of properly equipped parking areas which may be needed on a temporary basis.

Finally, the IRU welcomes the strict requirements regarding tunnel equipment, including **standards for the location of emergency telephones and adds that no derogations should be granted in relation to tunnel user information.**

2.6 Fewer derogations

In many cases, the proposed Directive will not lead to present single tube tunnels being upgraded to twin tube tunnels. Some of the busiest existing tunnels would remain single tube, and risk reduction measures (speed reduction, goods vehicle limitations, etc.) would remain if Art. 3, as proposed, is maintained.

The IRU calls for the upgrading of all existing tunnels in accordance with the minimum requirements as set out in the Directive, and proposes that special arrangements be made under the EU TERN policy to make this financially feasible, possibly only for tunnels over 1.000 m.

As regards the time schedule (Art.11), the IRU opposes the additional time for implementation foreseen in Art. 11.7. The criterion for granting 50% more time relates to the part of the TERN network on a Member State's territory, which may be irrelevant from the angle of total road length in that country. Also, up to 5 years more delay could simply be unacceptable if this is applied to main EU arteries.

2.7 Cross-border tunnel co-ordination

Concerning the bodies in charge of safety assessment and the tunnel management, the IRU draws particular attention to the case of tunnels linking two Member States, or a Member State and a non-Member. Welcoming the proposal to recognise one single Tunnel Manager and nominate one Safety Officer, **the IRU considers however, that the proposal should include an obligation for Administration Authorities in both countries to harmonise any measures taken.**

2.8 Specific requirements for commercial vehicles

Annex I to the Proposal, chapter 3, contains specific requirements for commercial vehicles. **The proposed compulsory installation of fire extinguishers in heavy goods vehicles, buses and coaches is acceptable for the industry, if a cost-benefit analysis is favourable, and if care is taken to apply this obligation to all vehicles, regardless of the country of origin.** Compulsory fire extinguishers on road vehicles, including private cars, is already in force in some Member States' national legislation, and an evaluation of costs and benefits can and should be made.

The IRU has major doubts on the practicability and enforceability of the proposal that heavy goods vehicle additional diesel tanks should be empty when travelling through tunnels on the Trans European Road Network. This may lead to these vehicles taking less safe roads of lesser quality and travelling longer distances, as long as diesel fuel prices differ so much from one country to another mainly due to different excise rates. The need for the use of additional diesel tanks will increase from 2004 onwards, when, following the introduction of Euro 4 and 5, low sulphur diesel and/or blue additive will have to be carried by those vehicles driving in countries where such products are not available.

In the Explanatory Memorandum, the Commission announces that the safety problem posed by high diesel tank capacity will be dealt with by the regulatory body responsible for legislation applicable to motor vehicles. For the IRU, legal technical requirements ensuring that additional diesel tanks are as safe as other tanks are a better approach to reducing specific safety risks in tunnels, or on any other road infrastructure, on board ferries, etc. Therefore, **the IRU proposes that, instead of requiring that additional diesel tanks be empty, adequate minimum technical standards for such tanks should be adopted.**

The IRU questions the proposed general requirement of a specific 100 metre distance between heavy goods vehicles and the vehicle preceding them, which was rejected by the UNECE Multidisciplinary Group of Experts on the grounds that setting such a limit was neither necessary nor advisable. The normal prescribed distance between vehicles (generally 20 to 50 metres) permitting them to stop if the vehicle in front should suddenly brake should equally apply in tunnels.

It will be especially difficult to implement the requirement that half of this distance be respected when traffic comes to a standstill unless special road or tunnel markings are provided. The UNECE Group concluded that the applicability and effectiveness of introducing a minimum compulsory distance between vehicles should be examined on a case-by-case basis.

2.9 Road users

Finally, with regard to road users generally, **the IRU proposes that driving in tunnels be given specific attention, at least in the theory part of driver licence training and examination.**

Considering the importance of information to tunnel users, the IRU is willing to participate in corresponding campaigns aimed at the road transport industry.

2.10 Transport of dangerous goods

Annex 1, item 2.7.1 addresses this issue.

The proposals in the Directive must be aligned with the ADR Agreement, mainly as regards the obligation to notify international bodies of restrictions.

Since UNECE Working Party N° 15 has established a sub-group to examine all the subjects mentioned in item 2.7.1, partly based on the OECD/PIARC recommendations, the IRU considers that it would be preferable to await the outcome of this work.

3. CONCLUSION

The International Road Transport Union, as the representative of the road transport industry in the enlarged European Union and beyond, trusts that it will be invited to participate in the working group of experts on tunnel safety to be set up by the EU Commission.
