

**Working Party on the Transport  
of Dangerous Goods**  
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agenda item 4)

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UNITED NATIONS  
ECONOMIC COMMISSION FOR EUROPE  
INLAND TRANSPORT COMMITTEE

Ad hoc Multidisciplinary Group of  
Experts on Safety in Tunnels

# RECOMMENDATIONS OF THE GROUP OF EXPERTS ON SAFETY IN ROAD TUNNELS

FINAL REPORT

Version 1.5

# DRAFT

### Measure D1.06

**Instruction of drivers of vehicles carrying dangerous goods should include specific aspects of behaviour in tunnels.**

All drivers of vehicles transporting dangerous goods already have to undergo special instruction leading to a test, and successful candidates are awarded a certificate. They are required to attend a follow-up course and take another test every five years in order to renew this certificate. The initial training of new drivers as well as the follow-up courses for experienced drivers should include instruction on safety in tunnels.

### Measure D1.07

**Regulations governing the transport of dangerous goods through tunnels should be rationalized at the international level.**

OECD and PIARC are currently completing a proposal to:

1. create **five dangerous goods cargo groupings** accepted at the international level and which should be used to regulate the authorization of the transport of dangerous goods in road tunnels.
2. propose **a quantitative risk analysis be carried out**, taking into account both the itinerary including the tunnel and any alternative itinerary(ies), and a decision supporting model, allowing the authorization or not of all or part of the transport of the dangerous goods through each tunnel.

It is recommended:

- (a) **to include the five dangerous goods cargo groupings proposed by OECD and PIARC in the appropriate UN and/or UN ECE legal instruments so that their use becomes compulsory for tunnel regulations regarding dangerous goods.**
- (b) to create a new sign to be placed at tunnel entrances indicating which groupings of dangerous goods are allowed/prohibited, with reference to the five dangerous goods cargo groupings to be created.
- (c) to perform a quantitative risk analysis as proposed by OECD and PIARC before deciding on tunnel regulations regarding dangerous goods.
- (d) to study the possibility of classification as dangerous goods of certain liquids or easily liquefied substances with calorific values comparable to that of hydrocarbons.
- (e) to consider operating measures for reducing the risks involved in the transport of dangerous goods in tunnels (declaration before entering, escort, etc.), on a case-by-case basis. Regulations may require the formation of convoys and accompanying vehicles for the transport of certain types of particularly dangerous goods; however, these measures are also dependent on sufficient space being available in front or in advance of the tunnel as well as available operational means.
- (f) to study the possibility of introducing automatic detection of dangerous goods transport (e.g. by electronic devices carried on vehicles).