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**ECONOMIC COMMISSION FOR EUROPE**

**INLAND TRANSPORT COMMITTEE**

Meeting of the Multidisciplinary Group  
of Experts on Safety in Tunnels (rail)  
(Second session, 25-26 November 2002,  
agenda item 2)

**QUESTIONNAIRE ON SAFETY IN RAIL TUNNELS**

Transmitted by the Government of Austria

**REGULATIONS AND GENERAL DATA ON RAIL TUNNEL SAFETY**

**Question 1.** Are there any legislation, regulations, recommendations on safety in rail tunnels in your country (dealing with geometry, infrastructure, equipment, signalling, operation, traffic, train operator education and training, etc.)? If yes, please give details and provide all documents.

In Austria there are special regulations for the construction of tunnels. The so-called "HL-Richtlinien", what means "Guidelines for Routes of High Performance". These regulations deal with geometry, basic infrastructure, signalling and basic tunnel equipment.

Further on there are recommendations of the authority and others of the fire brigades, which are even mandatory and deal with infrastructure, equipment and operation ("Guidelines for Construction and Operation of Railway Tunnels"). Austrian Federal Railways (ÖBB) has also regulations for training of train staff.

**Question 2.** Do you consider the above texts sufficient? If not, please give details.

In general the regulations and recommendations mentioned above seem to be sufficient. But there is a certain necessity of harmonization.

**Question 3.** Is your authority considering any changes in the above texts? If yes, please give details and provide the current drafts.

At the moment the authority does not consider any changes.

**Question 4.** Is there any specific methodology for risk assessment and risk management for tunnels in your country? If yes, please provide details.

Yes, it is the method of Ernst Basler and Partner (planning safety measures footing on risk based approach by considering cost-efficiency of the possible measures).

**Question 5.** Does your country classify rail tunnels, or envisage doing so in future, by the risk of accident associated with them? If yes, please provide details and documents.

Yes, Austrian Federal Railways (ÖBB) classifies tunnels by the general risk of accidents according to tunnels weighted by specific risk factors (e.g. length, infrastructure, equipment, traffic density, number of passengers).

**Question 6.** Please provide any existing data and statistics on fires, accidents, breakdowns in rail tunnels in your country.

We have data on fires and accidents in tunnels, but not on breakdowns.

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