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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 the Netherlands

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.

At present there is no specific law on rail tunnel safety. In a general law on safe building some general prescriptions on ventilation and escape possibilities are mentioned. But a draft of a law on tunnel safety, both for rail and for road tunnels, is in preparation. Current (recent) practice is that for each tunnel to be built careful procedures are followed before a building licence is applied for. The procedures contain: Quantitative and qualitative risk analyses, determination of basic measures, determination of ALARP measures, setting up of a safety management system, including contingency plans.

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

The Ministries of Transport and of Interior Affairs have decided to draft a law on tunnel safety. Element in this Law will be:

- Files on safety of the tunnel considered: a documentation of the decisions taken in the course of the project;

- Description of the roles and responsibilities of stakeholders;
- Functional safety requirements;
- Safety Management when the tunnel is in operation.

More details cannot be given before the end of 2002.

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

See the answer to Question 2.

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

The application of quantitative risk assessment to rail tunnels is developed to a great extent to enable decision makers to compare the safety level of the tunnels with other safety levels. The decision about what levels have to be reached is the responsibility of the project considered. Another method of risk assessment is the deterministic or scenario analysis, in which the possible causes and developments of a number of scenarios are analysed and means to diminish the causes and to mitigate the consequences are studied.

Documentation: HSL.

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.

For new tunnels there is a clear distinction between tunnels for freight transport and tunnels for people transport. In tunnels for freight transport emphasis is laid on conservation of the construction in case of fires, in tunnels for people transport emphasis is on self-rescue and fire brigades and ambulances.

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

Not yet available.
