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

QUESTIONNAIRE ON SAFETY IN RAIL TUNNELS

Transmitted by the Government of Spain

REGULATIONS AND GENERAL DATA ON RAIL TUNNEL SAFETY

<u>Question 1</u> - 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.

There is a law, for Roads and Railways Tunnels regulations of 19 November 1998: "Instruction for project, construction and development of underground works for terrestrial transportation (IOS 98)". The text of the Law in Spanish is available for consultation from the secretariat.

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

It is not sufficient, it is a basic document.

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

Yes, there is a group of experts, in the Public Works Ministry, where we work towards the development of the new document.

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Question 4 - Is there any special methodology for risk assessment and risk management for tunnels in your country?

Yes, it is considering qualitative risk.

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, there are classified in three levels:

Level III:	No need for specific installations.
Level II:	Need some installations
Level I:	With special conditions

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

ACCIDENTS IN TUNNELS Renfe - Spain

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	TOTAL
ACCIDENTS	1	1	1	0	0	2	0	3	0	0	0	2	0	1	0	0	11
WITH FIRE	0	1	0	0	0	2	0	2	0	0	0	1	0	1	0	0	7
INJURY	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4
DEAD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0