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ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on Rail Transport
(Fifty-fourth session, 3-5 October 2000,
agenda item 13)

DEVELOPMENTS IN VARIOUS RAILWAY FIELDS

Transmitted by the Governments of Norway and Turkey

At its fifty-third session, the Working Party asked Governments and international organizations to provide information on new relevant developments in the following items (TRANS/SC2/192, para. 65):

- (a) Environmental questions related to railway operations.
- (b) Safety in railway transport, particularly in the following areas: railway accidents, methodologies for risk assessment, and use of railway infrastructure for transport of dangerous goods.
- (c) Use of computers in rail transport operations, in particular in the management of rail goods traffic.
- (d) Introduction of new transport technologies and application of modern techniques to railway operations, in particular regarding the interface between rail transport and other transport modes.

The information received by the secretariat is reproduced below for consideration by the Working Party.

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1. NORWAY

(a) Environmental questions related to railway operations.

JBV develops an early Environmental Report for our activities, according to requirements settled in ISO 14 001. This Environmental Report includes a Green Account.

In addition, JBV work on a lot of different specific environmental projects such as development of alternative, more environmental friendly, eradicated.

(b) Safety in railway transport...

JBV is basing its activities upon analytic methods where risk situations are identified and controlled before a dangerous situation occurs. Experiences and risk analysis are also the basis to identify risk-related activities by alteration in our activities.

As a basis JBV is following the European Standard EN 50126 "railway applications- The specification and demonstration of reliability, availability, maintainability and safety (RAMS)" when preparing risk analysis for specific railway lines.

The method used in the risk analysis is as follows:

- Establish a description of the railway line identifying the length of bridges, tunnels, level crossings, areas with risk of landslide etc.
- Establish the number and type of trains, passengers etc.
- Identify all dangers experienced on the specific railway line.
- Evaluate the frequency and consequence for the accident events based upon the calculations of probability, experience data and engineering considerations. Fault and event trees are established.
- Establish the level of risk by use of risk matrix.
- Identify all safety critical functions related to technical elements and/or operational procedures.

Prior to the risk analysis, acceptance criteria have to be established.

(c) Use of computers.

A national traffic information system (TIOS) is under development. The TIOS is intended to be interoperable with the Swedish as well as the Danish systems.

(d) Introduction of new transport technologies...

No answer.

2. TURKEY

- (a) No new development has occurred in the field of environmental questions related to railway operations.
 - (b) No new development has occurred in the field of safety in railway transport.
 - (c) Monitoring of arriving and departing wagons and type and quantity of goods at our Kapikule border station is being made by use of computers. Moreover, studies for our Operation Management Information System (OMIS) are on-going.
 - (d) No new developments have occurred in this field
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