RID Committee of Experts: Working Group on tank and vehicle technology  
(Duisburg-Wedau, 24 and 25 June 2004)

Subject: Acrylonitrile leak from a tank wagon in Amersfoort (Netherlands)

Communication transmitted by the Netherlands

Date: 20 August 2002.  
Time: Starting at about 11.00.  
Location: Near Amersfoort passenger station (central Netherlands).  
Facts: Leakage of acrylonitrile (UN 1093) from upper valve; evacuation of station; no fire; leak stopped by emergency services.

(American) news extract:

*Parts of central Dutch town evacuated after toxic chemicals leak from train*

AMERSFOORT, Netherlands (AP) - Police and fire department officials evacuated parts of a central Dutch town on Tuesday after a train carrying toxic chemicals started leaking. Five police officers and two Dutch railway employees were treated in hospital for stinging eyes and noses, but were released shortly afterwards. A leak in the industrial shipment of around 50,000 litres of acrylonitrile, a toxic liquid that can cause respiratory problems and burn the skin, was found during a routine check in the town. After spending seven hours in Amersfoort, the goods train - intended to travel to Germany - was returned to the port of Rotterdam where it had originated.

Authorities sealed off the central train station, local businesses and a residential area in a radius of around 500 metres. City Hall was also emptied except for a skeleton emergency staff and the media.
The closure of the train station severely disrupted the national public transportation system because the city is a main transfer junction and tens of thousands of commuters faced delays of up to several hours. By late evening, police had unsealed the area and people were allowed to return to their homes. Residents had been instructed to keep windows and doors shut, although the acting mayor of Amersfoort said air samples indicated that "public health was never threatened."

The attached report by AEA Technology describes the in-depth investigation into the cause of the leakage. This study was commissioned by the national Council for Transport Safety. The study concentrated on the ball valve and the blank flange, from where the drops of acrylonitrile leaked.

**Note from the Dutch Ministry of Transport:** the internal damage (corrosion/abrasion) that was found by the investigators was qualified as unacceptable.

We do not wish in this document to quote or repeat the findings in the report. The results are clear and should serve as a warning, especially for organisations and persons working in the field of maintenance and wagon inspection. We can also learn from this incident that the wagon filler is as important as other parties for overall safety in the logistics chain.

Before discussing this report in the working group on tank and vehicle technology (May or June 2004), we would advise all experts of the Member States of OTIF to read the report attentively and to inform and warn the relevant organisations in their country.

The report by AEA Technology is only one in a series commissioned by the Council for Transport Safety (an independent committee of inquiry). The Council is not only investigating the direct cause of the leakage, but also the circumstances surrounding it. Therefore, in relation to the results, employees of the Council are for example visiting policy servants, RID inspectors and the maintenance staff of wagon workshops. The forthcoming reports about Amersfoort that we consider to be of relevance to the international situation will later be sent to OCTI as well.