INLAND TRANSPORT COMMITTEE
Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

Geneva, 15-19 September 2008

Agenda Item 2

### **TANKS**

### Use of materials for the construction of shells in connection with standards

## **Transmitted by Germany**

# **Background**

Until the introduction of the standard EN 14025, tanks in Germany were normally constructed according to the "AD-Regelwerk" as a technical code in accordance with 6.8.2.1.4 of RID/ADR.

In this code, certain unalloyed mild steels are mentioned with reference to EN 10025-2. Also, characteristic values are given for the calculation at higher design temperatures. These types of steel are therefore approved for pressure tanks.

## **Problem**

As stated in 6.8.2.1.4 of RID/ADR (2009), "Shells shall be designed and constructed in accordance with the requirements of standards listed in 6.8.2.6 or of a technical code..." For pressure tanks the standard EN 14025 applies.

Regarding the materials which can be used this standard refers normative to the European standard EN 13445-2 "Unfired pressure vessels". This again refers normative to the material standard EN 10028 "Flat products made of steels for pressure purposes" (part 3: Weldable fine grain steels, normalized).

However, the standard EN 10025 "Hot rolled products of structural steels" is neither referred to in EN 14025 nor in EN 13445.

Some tank manufactures, especially manufactures of rail tank wagons, would still like to use steels according to the standard EN 10025.

## Proposal for a procedure

In accordance with EN 13445, the German approach to approve EN 10025 steels for the manufacturing of shells in Germany is as follows:

If steels which are not specified in the standards listed in 6.8.2.6 of RID/ADR are used for shells, a single appraisal is required in accordance with paragraph 4.3.3 of EN 13445-2.

If this single appraisal approach is used for materials which are standardised but not listed in EN 10028, the minimum material data of the current version of the material standard have to be complied with.

This approach has been discussed in the RID group "Exchange of experience for recognised experts" in May of this year. The approach was confirmed by the group. It was agreed that the problem should be discussed in the tank working group of the Joint Meeting as it concerns all types of tanks.

Germany would like to ask the opinion of the Member States regarding this problem.