## **Economic Commission for Europe**

### **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 Bern, 22–26 March 2010 Item 2 of the provisional agenda Tanks

# **Interpretation of elliptical cross-section in 6.8.2.1.20 and in EN 13094**

#### Transmitted by the government of Sweden

Summary

Executive summary: Sweden would like to have the view of the Joint Meeting concerning the

interpretation of elliptical cross-section

Action to be taken: Discussion

- 1. If tanks are constructed according to 6.8.2.1.20 (b) in ADR and RID, a protection against damage through lateral impact or overturning is provided according to 6.8.2.1.19, and the shell thickness may be reduced. The conditions for reduction of shell thickness are also specified in the standards EN 13094:2004 (Section 6.8.2) and EN 13094:2008 (Section 6.9.2). In these four references elliptical cross-sections is mentioned.
- 2. Some manufacturers of tanks intended for the carriage of liquid petroleum products of Class 3, seem to interpret the wording "elliptical cross-section" in a way that also covers box-shaped shells.
- 3. The government of Sweden is of the opinion that an elliptical cross-section means a shell with a cross-section of a shape of an ellipse. The term ellipse is well defined. The shape of a tank could easily be evaluated from the drawings of the tank shell.
- 4. For shells of forms other than circular or elliptical cross-sections e.g. box shaped shells, there is specific conditions in 6.8.2.2 c) in EN 13094:2004 and in 6.9.2.2 g) and i) in EN 13094:2008 when the wall thickness can be reduced.
- 5. The government of Sweden would like to have the opinion of the Joint Meeting on this matter.