

## **Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals**

Sub-Committee of Experts on the Transport of Dangerous Goods

6 June 2011

**Thirty-ninth session**

Geneva, 20–24 June 2011

**Item 5 (b) of the provisional agenda**

**Miscellaneous proposals of amendments to the Model Regulations  
on the Transport of Dangerous Goods; portable tanks**

### **Interpretation to the requirements of the framework test, specified in ISO 1496-3:1995, mentioned in chapter 6.7**

#### **Transmitted by the expert from Germany**

1. In connection with the application of the test requirements of the frame of portable tanks (including MEGCs), the use of the technical standard ISO 1496-3:1995 is required; see 6.7.2.17.5 (d) and 6.7.2.18.2. It is also prescribed for tanks for gases.
2. Part 6 in this technical standard describes the test conditions (loads, forces, lifting points etc.) for the prototype test of the portable tank. Usually these tests are physical tests like stacking, racking, lifting and so on.
3. In the meantime (from the point of publication of the standard up to now) different methods to simulate such physical tests have been developed. Today it is possible, with help of the “Finite elements methods” (FEM), to analyze exactly the properties of the test object after testing.
4. The information resulting from such simulations can be more detailed than the results of a test in accordance with ISO 1496-3. German tank-manufacturers work together with technical universities and have good experience in application a simulation procedure for this. The German competent authority for tanks could agree to this change of the appraisal of the tests.
5. Thus, Germany is interested to hear if there are similar experiences in the other member states and what is the Sub-Committee’s opinion on these simulations as a substitute or equivalent method within the framework of the ISO-standard.