



**Secretariat**

Distr.  
GENERAL

ST/SG/AC.10/2000/12  
21 September 2000

ORIGINAL : ENGLISH

---

**COMMITTEE OF EXPERTS ON THE TRANSPORT  
OF DANGEROUS GOODS**

(Twenty-first session,  
4-13 December 2000,  
agenda item 5)

**PROGRAMME OF WORK**

**Programme of work for the 2001/2002 biennium and related proposals**

**Shortcomings of existing technical requirements for UN testing of different types of packagings and IBCs used for the transport of various classes of liquids, in relation with resistance against perforation and permanent deformation due to any type of impact during transport**

**Transmitted by the expert from Spain**

For several years, various facts which influence negatively the safety of the transport of dangerous goods for different modes of transport have been observed.

One of these facts is the progressive weight lessening of determined types of packaging or IBCs such as metallic drums, the weight of which have been reduced of 35% over the last 12 years in some specific cases.

For plastics packagings and IBCs it has been observed that, in specific cases, serially produced drums, with respect to weight, composition and other properties, are made of more economical plastics and consequently have poorer properties and weight than those of plastics that should be used for reasons of chemical compatibility with the product to be transported.

GE.00-

Another aspect, fully confirmed by experience, is that the used materials, in the case of metal drums, for example steel, show inferior hardness values than steel used 20 or 25 years ago. On the other hand such

materials possess now other properties and show elasticity values (A%) higher than 40 or 45%, which allow design types with lower wall thickness to pass the drop tests without damage.

Consequently, the expert from Spain considers that during the next two year period, the work should be focussed on developing a UN test for packagings and IBCs which can prove and guarantee that packagings and IBCs are, irrespective of the materials used, the manufacturer, the quality control system and the quality of welds or closure, sufficiently resistant against any perforation and permanent deformation due to any kind of impact that might occur during transport under normal conditions, always taking account of the characteristics and of the requirements for different types of transportation.

---