

## 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

Thirty-first session  
Geneva, 2-6 July 2007  
Item 3(a) of the provisional agenda

### LISTING, CLASSIFICATION AND PACKING

#### Criteria for classifying an article as non-explosive

Transmitted by the expert from the United States of America

This paper is intended only to facilitate discussion. No decision by the Sub-Committee is requested. The expert from the United States of America is seeking comments from members of the Sub-Committee on the idea of developing criteria for classifying an article as a non-explosive article.

#### **Background**

Many articles contain a very small amount of an explosive/pyrotechnic material. In many cases the articles are constructed in such a manner that if the article is initiated, the majority of the explosive effects will be contained inside the casing of the article. Currently there are a number of such articles that are not considered as dangerous articles by different competent authorities around the world.

#### **Harmonized Criteria**

Currently there are no criteria in the Model Regulations addressing this issue. Internationally harmonized criteria would help competent authorities to make consistent decisions on non-explosive articles which would in turn facilitate transport. The expert from the United States of America is considering submitting a proposal to Sub-Committee in the near future with tentative criteria described below.

#### **Prospective Criteria**

- (a) Articles shall be tested unpackaged.
- (b) Number of unpackaged articles to be tested: 3 to 5 articles per design type.
- (c) **General criteria**: Observation shall be made for evidence of disassembly and/or production of excessive heat, smoke, noise or excessive mechanical movement after initiation.

(d) **Specific criteria:**

- (i) The casing of the article (or component) housing pyrotechnic or explosive composition within the unit is not ruptured or fragmented; and
  - (ii) The surface temperature of the unit in the vicinity of the component housing pyrotechnic or explosive composition does not exceed 150 degrees Celsius with little or no smoke generation; and
  - (iii) The audible report from initiation does not exceed 100 decibels within 1 meter of the test unit; and
  - (iv) The unit does not mechanically move more than 1 meter in any direction.
-