



**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****Fifty-eighth session**

Geneva, 28 June-2 July 2021

Item 2 (e) of the provisional agenda

Explosives and related matters: review of packing instructions for explosives**Amendment to PP70 in packing instruction P137****Transmitted by the expert from the United Kingdom*****Introduction**

1. For the fifty-seventh session of the Sub-Committee of Experts on the Transport of Dangerous Goods the United Kingdom submitted document ST/SG/AC.10/C.3/2020/53 which was duly considered by the Working Group on Explosives. The expert from the United Kingdom took note of the various interpretations of the text and was also given several illustrations and diagrams of packing methods that are in use. The proposal below is the result of these comments.

**Outcome from the discussions of issues raised by document
ST/SG/AC.10/C.3/2020/53**

2. Regarding whether “packed singly” meant in outer packaging or inner packaging there was no clear answer and both variations were found in practice. On the wording “packed in pairs, the conical cavities shall face inwards” it was generally taken to mean that pairs faced each other. However, most common practice is to arrange multiple charges in individually segmented trays with a single orientation, the tray is then enclosed in an inner packaging. The inner packagings are then packed in the outer packaging in alternating layers by orientation. Thus, the inner packagings are paired but the charges inside each inner packaging are not paired. On other issues raised in document ST/SG/AC.10/C.3/2020/53 it was agreed that these could not be answered without doing research and testing which was not appropriate at this time. These issues were also not relevant to understanding how the text was currently being applied.

3. Using the information provided at the last session, the expert from the United Kingdom proposes the following changes to PP70 of P137 to clarify current practice in the regulatory text and to assist new users of this text to understand what is required.

* A/75/6 (Sect.20), para. 20.51

4. The current text of PP70 of P137 of the twenty-second edition of the Model Regulations reads as follows:

“**PP70** For UN Nos. 0059, 0439, 0440 and 0441, when the shaped charges are packed singly, the conical cavity shall face downwards and the package shall be marked as illustrated in figures 5.2.3 or 5.2.4. When the shaped charges are packed in pairs, the conical cavities shall face inwards to minimise the jetting effect in the event of accidental initiation.”

Proposal

5. Amend in 4.1.4.1 the text of PP70 of P137 as follows (new text is underlined, deleted text is ~~struck out~~):

“**PP70** For UN Nos. 0059, 0439, 0440 and 0441, when ~~the shaped charges are packed singly~~ either a single shaped charge is packed in an outer packaging, or shaped charges are individually packed in inner packagings, the conical cavity shall face downwards and the package shall be marked as illustrated in figures 5.2.3 or 5.2.4 on two opposite sides. When ~~the shaped charges are packed in pairs~~, two shaped charges are packed as a pair in an outer packaging or as a pair in an inner packaging, the conical cavities shall face towards each other to minimise the jetting effect in the event of accidental initiation.

When multiple shaped charges are individually packed in an inner packaging or a dividing layer the conical cavities shall face downwards and the package shall be marked as illustrated in figures 5.2.3 or 5.2.4 on two opposite sides. When an inner packaging or dividing layer is directly paired with an identical inner packaging or dividing layer, the paired inner packagings or dividing layers shall be arranged so that the conical cavities of each pair of inner packagings or dividing layers face towards each other.”