



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

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Item 4 (c) of the provisional agenda

Electric storage systems:

Transport provisions

Alignment between the requirements of 2.0.5.6 and special provision 301

Submitted by the expert from China*

I. Introduction

1. It was pointed out in document ST/SG/AC.10/C.3/2023/54 submitted by China at the sixty-third session of Sub-Committee, which was intended to discuss the transport provisions for articles containing both lithium batteries and other types of dangerous goods, that the enclosing requirements in paragraph 2.0.5.6 and special provision 301 in the *Model Regulations* are different from each other.

2. The relevant sentence in paragraph 2.0.5.6 reads “If the article contains more than one item of dangerous goods and these could react dangerously with one another during transport, each of the dangerous goods shall be enclosed separately (see 4.1.1.6)”, which indicates only dangerous goods that can react dangerously should be enclosed separately. However, special provision 301 reads “If the articles contain more than one item of dangerous goods, the individual dangerous goods shall be enclosed to prevent them reacting dangerously with one another during transport (see 4.1.1.6)”, which indicates different dangerous goods in the same article should be enclosed separately anyway, regardless of whether they will undergo dangerous reactions.

3. During the sixty-third session, some experts echoed the perspective of the expert from China on the necessity to align the statements in the two paragraphs with each other (see paragraph 47 of the report ST/SG/AC.10/C.3/126). Although paragraph 2.0.5.6 and special provision 301 applied to articles assigned to different UN numbers, there seems no sufficient reason to support the existing differences in the regulation.

4. Considering that one of the principles underlying the regulation of transport of dangerous goods is to promote rather than impede the global movements of these goods, the requirements in the *Model Regulations* should be capable of minimizing the risk in transport, while not being too strict. Therefore, the expert from China considers that the principle in 2.0.5.6 (i.e. that only dangerous goods capable of reacting dangerously need to be enclosed

* A/78/6 (Sect. 20), table 20.5.

separately) is sufficient. However, China would prefer to slightly modify the language to ensure better implementation and therefore proposes to amend the requirement to state “If the article contains more than one item of dangerous goods, the individual dangerous goods shall be enclosed separately, unless it can be demonstrated, by testing, assessment, experience etc., that they will not react dangerously with one another during transport (see 4.1.1.6)”. It is firstly required to enclose each dangerous goods separately, following by an exemption when the possibility of dangerous reactions can be eliminated. This modification of language will not make the requirement more stringent essentially, but can help improve transport safety by reminding users of the *Model Regulations* to consider more carefully the need for a separate enclosure.

II. Proposal

5. It is proposed to amend paragraph 2.0.5.6 (chapter 2.0) and special provision 301 (chapter 3.3) of the *Model Regulations* as follows (deleted text appears in strikethrough and new text in **bold underlined**):

“2.0.5.6 Subsidiary hazards shall be representative of the primary hazard posed by the other dangerous goods contained within the article. When only one item of dangerous goods is present in the article, the subsidiary hazard(s), if any, shall be the subsidiary hazard(s) identified in column 4 of the Dangerous Goods List. If the article contains more than one item of dangerous goods ~~and these could react dangerously with one another during transport, each of the~~ **individual** dangerous goods shall be enclosed separately, **unless it can be demonstrated, by testing, assessment, experience etc., that they will not react dangerously with one another during transport** (see 4.1.1.6).”

“301 This entry only applies to articles such as machinery, apparatus or devices containing dangerous goods as a residue or an integral element of the articles. It shall not be used for articles for which a proper shipping name already exists in the Dangerous Goods List of chapter 3.2. Articles transported under this entry shall only contain dangerous goods which are authorized to be transported in accordance with the provisions of chapter 3.4 (Limited quantities). The quantity of dangerous goods in articles shall not exceed the quantity specified in Column 7a of the Dangerous Goods List of chapter 3.2 for each item of dangerous goods contained. If the articles contain more than one item of dangerous goods, the individual dangerous goods shall be **enclosed separately, unless it can be demonstrated, by testing, assessment, experience etc., that they will not react** ~~to prevent them reacting~~ dangerously with one another during transport (see 4.1.1.6). When it is required to ensure liquid dangerous goods remain in their intended orientation, orientation arrows shall be displayed on at least two opposite vertical sides with the arrows pointing in the correct direction in accordance with 5.2.1.7.1. The competent authority may exempt from regulation articles which would otherwise be transported under this entry.”

III. Sustainable development goals

6. These proposed amendments can help enhance the conformity among provisions in the *Model Regulations* and raise the awareness to ensure safe transport. This could facilitate the achievement of targets 16.6 “develop effective, accountable and transparent institutions at all levels” and 12.4 “achieve the environmentally sound management of chemicals and all wastes throughout their life cycle” of the Sustainable Development Goals.