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

Sixty-second session
Geneva, 3-7 July
Item 4 (f) of the provisional agenda

Electric storage systems: miscellaneous

Classification provisions for lithium batteries and sodium ion batteries

Transmitted by the International Air Transport Association (IATA)*

I. Introduction

1. Paragraphs 2.9.4 and 2.9.5 in the Model Regulations describe the requirements that apply to the classification of lithium cells and batteries and sodium ion cells and batteries, respectively, for the cells or batteries to be transported.

2. Included in the wording of paragraphs 2.9.4 and 2.9.5 is a statement on the UN numbers to which the cells or batteries shall be assigned. For paragraph 2.9.4 this is “UN Nos. 3090, 3091, 3480 or 3481 as appropriate”. For paragraph 2.9.5, it is “UN Nos. 3551 or 3552 as appropriate”.

3. However, there are references in special provisions 310, 363, 388 and 389 that lithium cells or batteries or sodium ion cells or batteries shall meet the provisions of 2.9.4 or 2.9.5, as applicable, where the cells or batteries are in articles, engines, machines or vehicles that are not assigned to one of the UN numbers stated in the opening paragraph of 2.9.4 or 2.9.5.

4. The reference in these special provisions to paragraph(s) 2.9.4 and/or 2.9.5, which are assigned to UN numbers other than UN Nos. 3090, 3091, 3480 or 3481 creates a conflict with some consignors challenging the requirements set out in subparagraphs 2.9.4 (a) to (g) as not applying to articles, engines or vehicles as the applicable UN numbers are not referenced in paragraph 2.9.4 or 2.9.5.

II. Proposal

5. The Sub-Committee is invited to amend the wording of paragraphs 2.9.4 and 2.9.5 to remove the reference to specific UN numbers.

* A/77/6 (Sect. 20), table 20.6
6. Amend the wording of 2.9.4 as follows (new text is *underlined*, deleted text in *strikethrough*):

   "2.9.4 Lithium batteries

   Cells and batteries, cells and batteries contained in *articles, engines, equipment or vehicles*, or cells and batteries packed with equipment, containing lithium in any form shall be assigned to UN Nos. 3090, 3091, 3480 or 3481 as appropriate. They may be transported under these entries if they meet the following provisions:

   …"

7. Amend the wording of 2.9.5 as follows (new text is *underlined*, deleted text in *strikethrough*):

   "2.9.5 Sodium ion batteries

   Cells and batteries, cells and batteries contained in *articles, engines, equipment or vehicles*, or cells and batteries packed with equipment containing sodium ion, which are a rechargeable electrochemical system where the positive and negative electrode are both intercalation or insertion compounds, constructed with no metallic sodium (or sodium alloy) in either electrode and with an organic non aqueous compound as electrolyte, shall be assigned to UN Nos. 3551 or 3552 as appropriate. They may be transported if they meet the following provisions:

   **NOTE:** Intercalated sodium exists in an ionic or quasi-atomic form in the lattice of the electrode material.

   They may be transported under these entries if they meet the following provisions:

   …"