

## Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

11 June 2021

### Sub-Committee of Experts on the Transport of Dangerous Goods

#### Fifty-eighth session

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Item 4 (f) of the provisional agenda

**Electric storage systems: miscellaneous**

## Cells and batteries installed in cargo transport units and 2.9.4

### Transmitted by the expert from Switzerland

#### *Summary*

**Executive summary:** Cells and batteries installed in cargo transport units shall meet all the requirements of 2.9.4 and shall be included in the list of those referred to in the first sentence of 2.9.4.

**Action to be taken:** Amend the text of the first sentence of 2.9.4 and the second sentence of SP389.

### Introduction

1. During the review of the exemption possibilities of the entry UN 3536 for land transport in RID/ADR/ADN, we noted a contraction that we believe should be removed. UN 3536 is designated as "LITHIUM BATTERIES INSTALLED IN CARGO TRANSPORT UNIT" and the assigned special provision 389 in turn defines the scope as applying to lithium batteries that meet the requirements of 2.9.4 (a) to (g):

« 389 This entry only applies to lithium ion batteries or lithium metal batteries installed in a cargo transport unit and designed only to provide power external to the cargo transport unit. The lithium batteries shall meet the requirements of 2.9.4 (a) to (g) and contain the necessary systems to prevent overcharge and over discharge between the batteries ... ».

2. We suspect that the reason for initially targeting paragraphs (a) to (g) of 2.9.4 and excluding the introductory paragraph of 2.9.4 was that the experts who drafted these texts were primarily concerned with resolving the issue of cargo transport units containing lithium batteries rather than defining the provisions for cells and batteries themselves. In the view of the authors, it was not obvious that the concept of cargo transport unit could be assimilated to that of batteries and cells, and it was therefore inconceivable that objects that are generally containers and objects that are batteries and cells should be included in the same level in the first sentence of 2.9.4. Therefore, the text of the first sentence of 2.9.4, which refers only to "cells and batteries contained in equipment" or "cells packed with equipment", has not been adapted to the new entry UN 3536.

3. Now that the texts are definitive and the same provisions (a) to (g) of 2.9.4 are applicable to UN 3536 it becomes clear that this entry should be considered as one additional lithium cells and batteries entry and listed in the first sentence of 2.9.4.

4. Taking into account that UN 3536 and SP 389 are indeed intended for lithium batteries, that they meet all the requirements of 2.9.4 (a) to (g) and considering the wording

of the first paragraph of 2.9.4, it is not clear why UN 3536 should not be listed among the entries listed there.

5. If the experts are of the same opinion, we propose to add the reference to UN 3536 in the first paragraph of 2.9.4.

## Proposal

6. Amend the text of the first sentence of 2.9.4 as follows (new text underlined is marked in bold, deleted text as stricken through):

“Cells and batteries, **cells and batteries installed in cargo transport units**, cells and batteries contained in equipment, or cells and batteries packed with equipment, containing lithium in any form shall be assigned to UN Nos. 3090, 3091, 3480, ~~or 3481~~ **or 3536** as appropriate. ...”.

7. Amend the text of the first sentence of 2.9.4 as follows:

« 389 This entry only applies to lithium ion batteries or lithium metal batteries installed in a cargo transport unit and designed only to provide power external to the cargo transport unit. The lithium batteries shall meet the requirements of 2.9.4 ~~(a) to (g)~~ and contain the necessary systems to prevent overcharge and over discharge between the batteries ... ».

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