

## 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 (a) of the provisional agenda

Electric storage systems:

Testing of lithium batteries

### Amendment to proposals within document ST/SG/AC.10/C.3/2024/39

Transmitted by the expert from the United Kingdom

#### I. Introduction

1. The expert from the United Kingdom has reviewed document ST/SG/AC.10/C.3/2024/39 tabled by the expert from China. Assuming the principles of the proposal are supported, the following suggestions to the proposals presented within document ST/SG/AC.10/C.3/2024/39 are offered to enhance clarity.

#### II. Proposals

2. Replace the proposals contained in document ST/SG/AC.10/C.3/2024/39, paragraph 7, Option 1 and paragraph 8, Option 2 as follows:

Amendment to Option 1:

(a) “ 38.3.4.6.3 ...

A cell or component cell is to be crushed between two flat surfaces, ***each having sufficient surface area to ensure the crushing force is applied evenly across the entire surface of the cell.*** The crushing is to be gradual with a speed of approximately 1.5 cm/s at the first point of contact. The crushing is to be continued until the first of the three options below is reached...”

Or

(b) “ 38.3.4.6.3 ...

A cell or component cell is to be crushed between two flat surfaces. ***Each of sufficient dimension to ensure its edges extend beyond the edges of the cell.*** The crushing is to be gradual with a speed of approximately 1.5 cm/s at the first point of contact. The crushing is to be continued until the first of the three options below is reached...”

Amendment to Option 2:

(a) ***“NOTE: The dimensions of the flat surfaces must have sufficient area to ensure the crushing force is applied evenly across the entire surface of the cell.”***

Or

(b) ***“NOTE: The dimensions of the flat surfaces must have sufficient dimension to ensure its edges extend beyond the edges of the cell.”***

### III. Justification

3. The proposals tabled by the expert from China in document ST/SG/AC.10/C.3/2024/39 may result in unintended consequences which the above proposals seek to avoid.

4. Firstly, dimensions of plates may become larger than required if the wording in document ST/SG/AC.10/C.3/2024/39 was adopted. For example, if *'the dimensions of the flat surfaces should be greater than the widest side of the cell'* as proposed, then some may think that in the case of a 400x100mm cell the two flat surfaces should be 400x400mm, as the widest dimension is 400mm. When in reality a surface of 400x100mm would suffice.

5. Secondly, within the *Manual of Tests and Criteria* 38.3.4.6.3, it is prismatic and pouch cells which have force applied on the widest part of the cell. As a result, some may think the proposed requirements for the two flat surfaces only apply to tests on these types of cells. While the issue articulated by China is unlikely to be an issue for coin/button and cylindrical cells it is our opinion that the text should cover them in any event. The proposals within this paper make no mention of *'widest side of the cell'* and this should remove any potential for confusion.

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