

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

13 June 2019

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

**Fifty-fifth session,**

Geneva, 1-5 July

Item 4 (f) of the provisional agenda,

**Electric storage systems: miscellaneous**

**Correction and clarifications on Packing Instruction P903**

**Transmitted by PRBA - the Rechargeable Battery Association, and the  
Advanced Rechargeable & Lithium Batteries Association  
(RECHARGE)**

**Introduction**

1. Packing Instruction P903 authorizes the use of strong outer packaging for batteries and battery assemblies with a gross mass of more than 12 kg and have an impact resistant outer casing. PRBA has determined the language in P903 is not consistent with similar language in the ICAO TI, which has caused confusion for some competent authorities issuing approvals under the ICAO TI Packing Instruction 965, Section IA. This Informal document is intended to correct this inconsistency and to clarify the use of this provision for larger lithium batteries and assemblies exceeding 12 kg that have impact resistant outer casings.
2. Paragraph (2) in P903 includes the following text:

“In addition, for cells or batteries with a gross mass of 12 kg or more employing a strong, impact resistant outer casing, and assemblies of such cells or batteries:

  - (a) Strong outer packaging;
  - (b) Protective enclosures (e.g., fully enclosed or wooden slated crates); or
  - (c) Pallets or other handling devices.”
3. The phrase “and assemblies of such cells or batteries” is not consistent with the ICAO TI, Packing Instruction 965 Section IA, which states “or assemblies of such cells or batteries.” (Emphasis added.)
4. The general structure of paragraph (2) in P903 is also causing confusion for how it can be utilized by battery manufacturers. The industry has always operated under the following three scenarios for larger batteries, battery modules, or assembly of batteries over 12 kg.
  - (a) Cells electrically connected to form a battery or battery module with a gross mass of more than 12 kg and has a strong, impact resistant outer casing may be packaged and transported in accordance with paragraph (2) in P903.

- (b) Batteries or battery modules – regardless of weight or outer casing – that are electrically connected to form an assembly of batteries with a gross mass of more than 12 kg and a strong, impact resistant outer casing also may be packaged and transported in accordance paragraph (2) in P903.
  - (c) Batteries or battery modules, each of them having a gross mass of more than 12 kg and a strong, impact resistant outer casing, that are electrically connected to form an assembly of batteries, also may be packaged and transported in accordance paragraph (2) in P903.
5. We understand one competent authority is interpreting paragraph (2) in P903 to require an assembly of batteries *and* the battery modules within the assembly to *both* have a gross mass of more than 12 kg and strong, impact-resistant outer casings. The industry has never interpreted paragraph (2) in P903 to require both the battery modules and the assembly of such modules to have a gross mass of more than 12 kg and strong, impact resistant out casings. To therefore help clarify this provision, we have proposed below minor modifications to paragraph (2) in P903.
6. We would appreciate comments on the proposal below from members of the Sub-Committee to prepare a Working document for the fifty-sixth session.

## Proposal

7. Paragraph (2) in P903 shall be amended as follows:
- “In addition, for ~~a cells, or batteries, or assembly of batteries~~ with a gross mass of 12 kg or more employing a strong, impact resistant outer casing, ~~and assemblies of such cells or batteries, or an assembly of batteries comprised of batteries each with a gross mass of 12 kg or more and employing a strong, impact resistant outer casing:~~
- (a) Strong outer packaging;
  - (b) Protective enclosures (e.g., fully enclosed or wooden slated crates); or
  - (c) Pallets or other handling devices.”
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