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**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****Thirty-seventh session**

Geneva, 21–30 June 2010

Item 4 of the provisional agenda

**Electric storage systems****Amendments to Special Provision 310****Transmitted by The Portable Rechargeable Battery Association  
(PRBA)<sup>1</sup>****Introduction**

1. At the twenty-second meeting of the International Civil Aviation Organization (ICAO) Dangerous Goods Panel (DGP), several changes to the packaging requirements applicable to prototype and “low production” lithium ion and lithium metal batteries were approved. The DGP approved these changes in order to align Special Provision A88 in the ICAO Technical Instructions with Special Provision 310 of the United Nations Model Regulations and to facilitate the growing need to transport larger lithium batteries.
2. Based on changes approved by the DGP, PRBA proposes consequential changes to Special Provision 310 in order to maintain consistency. The changes apply to prototype and low production lithium batteries and will facilitate the transport of larger lithium batteries.
3. At present Special Provision 310 does not permit shipments of prototype and low production lithium ion or lithium metal batteries contained in equipment. With applications for lithium ion batteries expanding rapidly, there often is a need to ship prototype and low production batteries in equipment. To authorize transport of low production and prototype batteries contained in equipment, PRBA proposes to amend Special Provision 310 and to add Special Provision 310 to Column 6 of the Dangerous Goods List for the entries

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<sup>1</sup> In accordance with the programme of work of the Sub-Committee for 2009-2010 approved by the Committee at its fourth session (refer to ST/SG/AC.10/C.3/68 para. 118(b) and ST/SG/AC.10/36, para. 14).

“Lithium ion batteries contained in equipment” (UN3481) and “Lithium metal batteries contained in equipment” (UN3091).

4. PRBA proposes to amend Special Provision 310 to allow lithium ion and lithium metal cells and batteries, battery assemblies and equipment containing such batteries or battery assemblies with a mass of 12 kg or greater and having a strong, impact resistant outer casings, to be packed in strong outer packagings or protective enclosures. This type of packaging is authorized in Packing Instruction P903 and PRBA believes it should be extended to Special Provision 310 for prototype and low production batteries. A similar provision was adopted at the twenty-second meeting of the ICAO DGP.

5. PRBA also proposes several minor editorial changes to Special Provision 310, to improve consistency with ICAO Special Provision A88. We propose to limit production runs to not more than 100 lithium cells or batteries *annually*.

## Proposal

6. Amend Special Provision 310 as shown below:

310 The testing requirements in Chapter 38.3 of the *Manual of Tests and Criteria* do not apply to production runs consisting of not more than 100 lithium cells and batteries annually, or to preproduction prototype cells and batteries. The following packaging requirements shall be met for prototype and low production cells and batteries and equipment containing such cells and batteries: when these prototypes are transported for testing, if:

(a) Except as provided in paragraph (c), the cells, ~~and~~ batteries and equipment shall ~~are~~ be transported in an outer packaging that is a metal, plastics or plywood drum or a metal, plastics or wooden box and that meets the criteria for packing group I packagings; and

(b) Except as provided in paragraph (c), each cell and battery ~~is~~ shall be individually packed in an inner packaging inside an outer packaging. Cells, batteries and equipment shall be ~~and is~~ surrounded by cushioning material that is non-combustible, and non-conductive and protected from short circuits;

(c) Cells, batteries and battery assemblies, or equipment containing such cells, batteries or battery assemblies with a mass of 12 kg or greater and having a strong, impact resistant outer casing, may be packed in strong outer packagings or protective enclosures unpackaged or on pallets. The cells, batteries and battery assemblies or equipment shall be protected against short circuits.