

# UN/SCETDG/26/INF.20

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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

Twenty-sixth session  
Geneva, 29 November – 7 December 2004  
Item 3 (c) of the agenda

Comments ON ST/SG/AC.10/C.3/2004/96  
regarding changes to Special Provision 188 for lithium ion batteries

Transmitted by the Portable Rechargeable Battery Association (PRBA)

### **Introduction**

1. The Portable Rechargeable Battery Association (PRBA) submitted proposal ST/SG/AC.10/C.3/2004/96 for consideration by the Sub-Committee of Experts that would amend Special Provision 188 (SP 188) of the UN Recommendations to provide new exemptions for lithium ion cells and batteries. In light of the concerns expressed to PRBA by the Experts from the United States regarding the proposal, PRBA is submitting the following comments and proposed changes to ST/SG/AC.10/C.3/2004/96.

2. PRBA proposed in ST/SG/AC.10/C.3/2004/96 to raise the 1.5 g and 8 g exemption limits on lithium ion cells and batteries under SP 188. PRBA now believes that a more reasonable proposal for the Subcommittee to consider at this time would be to amend SP 188 to allow lithium ion batteries with an equivalent lithium content greater than 8 g but not more than 16 g that are packed with or installed in equipment to be exempt from regulation provided certain packaging, marking, and shipping paper requirements are met.

3. Under these proposed changes, lithium ion batteries with an equivalent lithium content greater than 8 g but not more than 16 g that are packed with equipment must be placed in packaging that conforms to the Packing Group II performance requirements. Equipment containing these batteries must be placed in a strong outer packaging, secured within the outer packaging, and packed as to effectively prevent moving, short circuits, and accidental operation during transport. Therefore, these packaging requirements provide an equivalent level of safety to what currently is required under the UN Recommendations for lithium ion batteries containing the same amount of equivalent lithium content when packed with or installed in equipment and thus present no additional risk in transport.

4. Therefore PRBA proposes the following changes to ST/SG/AC.10/C.3/2004/96:

SP 188 Amend to read as follows:

~~In 188 (a), add:~~

~~“and not more than 3 g when the state of charge is not more than 50% of the design rated capacity” just before the last “;”.~~

~~In 188 (b), add:~~

~~“and not more than 16 g when the state of charge is not more than 50% of the design rated capacity” just before the last “;”.~~

~~In 188(e)(iv), add the following paragraph immediately following 188 (e)(iv):~~

~~“(f) Each shipment containing lithium ion cells or batteries requiring a reduced state of charge of not more than 50% of the design rated capacity shall be accompanied with a document stating the existing state of charge.”~~

UN Manual of Tests and Criteria, Part III, sub-section 38.3, amend to read as follows:

~~In 38.3.2.2, immediately following the definition of *Small cell*, add:~~

~~“*State of charge* means the available capacity in a cell or battery, after a charge or discharge operation, usually expressed as a percentage of the cell or battery’s rated capacity.”~~

After paragraph (e)(iv), insert the following:

(f) For a lithium ion battery with an aggregate equivalent lithium content greater than 8 g but not more than 16 g when packed with or installed in equipment, shall meet the following requirements:

(i) Each battery packed with equipment shall be placed in packaging that conforms to the Packing Group II performance requirements.

(ii) Equipment containing a battery shall be placed in strong outer packaging. The equipment shall be secured within the outer packaging, and packed as to effectively prevent movement, short circuits, and accidental operation during transport.

(iii) Each outer package shall be marked indicating that it contains lithium batteries and that special procedures should be followed in the event that the package is damaged. Each shipment shall be accompanied with a document indicating that packages contain lithium batteries and that special procedures should be followed in the event a package is damaged.