



Secretariat

Distr.  
GENERAL

ST/SG/AC.10/C.3/2006/89  
10 September 2006

Original: ENGLISH

---

**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

Thirtieth session  
Geneva, 4-12 (a.m.) December 2006  
Item 2(a) of the provisional agenda

**PROPOSALS OF AMENDMENTS TO THE RECOMMENDATIONS  
ON THE TRANSPORT OF DANGEROUS GOODS**

Model Regulations on the Transport of Dangerous Goods

Proposed amendment of lithium ion battery size limit in SP 188

Transmitted by the Portable Rechargeable Battery Association (PRBA)

1. At its twenty-ninth session, the Sub-Committee considered a proposal from PRBA in document ST/SG/AC.10/C.3/2005/44 to increase the exception limit in Special Provision 188 for lithium ion batteries to 200 Watt-hours provided the batteries were shipped at no more than 50% state-of-charge. Based on comments received from members of the Sub-Committee, PRBA has chosen to submit a simplified proposal increasing the exception limit to 150 Wh for road, rail, and sea transport while retaining the existing limit of 100 Wh for air transport.
2. As explained in ST/SG/AC.10/C.3/2005/44, there is an increasing demand for more powerful portable consumer electronic equipment, which prompted PRBA to ask the Sub-Committee to reconsider the existing exception limits for lithium ion batteries. Some equipment manufacturers are already using two batteries in certain equipment in order to avoid having to consign their portable electronic equipment as dangerous goods. Use of two batteries is more costly, is less efficient than having a single battery and is less convenient to the user. Further,

having two batteries directly adjacent to one another in the equipment provides little or no safety benefit over one single larger battery.

3. The alternative of using larger fully regulated batteries in consumer electronic devices is not practical. At present, transporting consumer electronic devices with batteries containing more than 100 Wh (8 grams equivalent lithium content) would require that such equipment be transported under UN 3091 as dangerous goods. The consumer electronics distribution chain is not accustomed to handling dangerous goods and changes needed to accommodate larger batteries as dangerous goods will not be considered cost effective. Furthermore, consumers frequently have occasion to offer portable electronic equipment for transport. Consumers transporting batteries larger than the SP 188 exception limit would be subject to all of the requirements applicable to consignors of dangerous goods (e.g.; training, transport document, packaging, labeling and marking). Thus, the impracticality of using batteries exceeding the SP 188 limit for consumer product purposes is apparent.

4. PRBA understood comments at the 29<sup>th</sup> session in opposition to the proposed increase to 200 Wh stemmed from concerns regarding air transport. To satisfy these concerns, PRBA proposes to maintain the current limit of 100 Wh (equal to 8 g equivalent lithium content) for purposes of air transport while proposing a more modest increase to 150 Wh for other modes.

5. An increase in the SP 188 exception limit to 150 Wh, for modes other than air, is needed in order to continue to meet the rising power demand in portable consumer electronic equipment, facilitate transport of consumer electronic devices, and promote innovation in notebook computers, cordless power tools, and batteries. The increase will provide distributors, retailers, and consumers with a practical and safe means to transport portable electronic equipment containing larger lithium ion batteries that inevitably will be used in such products.

## Proposal

On the basis of the above discussion, PRBA proposes the following amendment to Special Provision 188. This proposal is based on the text adopted by the Sub-Committee at the twenty-ninth session:

“188 Cells and batteries offered for transport are not subject to other provisions of these Regulations if they meet the following:

- (b) For a lithium metal or lithium alloy battery the aggregate lithium content is not more than 2 g, and for a lithium ion battery, the Watt-hour rating is not more than ~~400~~ 150 Wh, **except that for air transport, the Watt-hour rating is not more than 100 Wh.** Lithium ion batteries subject to this provision shall be marked with its Watt-hour rating on the outside case;”
-