

**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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Geneva, 30 November – 9 December 2009  
Item 4 of the provisional agenda

**ELECTRIC STORAGE SYSTEM**

Comments on ST/SG/AC.10/C.3/2009/31 (United Kingdom)  
Revision of Packing Instruction 903

Transmitted by the expert from Sweden

1. Sweden appreciates the document 2009/31 concerning packing instruction P903. We support the document in principle, but we have a few comments regarding some articles which are affected by the requirements.
2. At the previous session the proposal in INF.20 from Switzerland was adopted. This proposal addressed special provision SP188 (e), which states that cells and batteries in equipment shall be equipped with effective means of preventing accidental activation. The adopted provision indicates that the requirement in SP188 (e) does not apply to devices which are intentionally active in transport and which are not capable of generating a dangerous evolution of heat.
3. It has come to our knowledge that attaché cases incorporating cash boxes or cash bags may contain lithium batteries and will be assigned to UN 3091, Lithium metal batteries contained in equipment. These batteries contain more than 1 gram lithium and, thus, SP 188 is not applicable. Therefore, P903 is applicable for the transport of these attaché cases incorporating cash boxes or cash bags.
4. With the proposed new text in P903 it is suggested that the attaché cases incorporating cash boxes or cash bags shall be packed in strong outer packagings in such a manner as to prevent accidental operation during transport. Sweden believes this requirement will be difficult to fulfil, since the attaché cases incorporating cash boxes or cash bags is designed to operate during transport. We also believe it is unnecessary to require strong outer packagings for equipment whose construction itself is strong, for example as for attaché cases incorporating cash boxes or cash bags.
5. We, therefore, propose to add text in line with the text adopted in special provisions 188 (e). Sweden also proposes to add attaché cases incorporating cash boxes or cash bags as an example. We would like to suggest that the phrase “accidental operation” is replaced by “accidental activation” to harmonize the wording with SP188.

6. Additionally, we believe the text under paragraph 2 in P903 could be clarified and would like to propose a different wording. We suggest including similar requirements for batteries packed with equipment as for batteries transported exclusively.

### Proposal

7. Amend P903 to read as follows (new text is bold and underlined):

P903	PACKING INSTRUCTION	P903
This instruction applies to UN Nos. 3090, 3091, 3480 and 3481.		
<p>The following packagings are authorized, provided that the general provisions of <b>4.1.1</b> and <b>4.1.3</b> are met:</p> <p><b>(1) For UN 3090 and 3480:</b></p> <p style="padding-left: 40px;"><b>(a) Packagings</b></p> <p>Drums (1A2, 1B2, 1N2, 1H2, 1D, 1G);            Jerricans (3A2, 3B2, 3H2);            Boxes (4A, 4B, 4C1, 4C2, 4D, 4F, 4G, 4H2)</p> <p>Packagings shall conform to the packing group II performance level.</p> <p>Cells and batteries shall be packed in packagings so that the cells and batteries are protected against damage that may be caused by the movement or placement of the cells or batteries within the packaging.</p> <p style="padding-left: 40px;"><b>(b) Batteries exceeding 12kg gross mass</b></p> <p>Batteries or cells of a gross mass of 12kg or more, employing a strong, impact resistant outer casing, and assemblies of such batteries or cells, may be:</p> <p style="padding-left: 80px;">(i) packed in strong outer packagings, in protective enclosures (e.g., in fully enclosed or wooden slatted crates); or</p> <p style="padding-left: 80px;">(ii) unpackaged on pallets or other handling devices</p> <p>Batteries or cells shall be secured to prevent inadvertent movement, and the terminals shall not support the weight of other superimposed elements. Packagings need not meet the requirements of 4.1.1.3</p> <p><b>(2) For UN 3091 and 3481</b></p> <p style="padding-left: 40px;"><b>(a) Cells or batteries packed with equipment</b></p> <p>When batteries or cells are packed together with equipment, <b><u>the provisions stated in part 1 of this instruction shall apply.</u></b> <del>they shall be packed in packagings as permitted for UN 3090 and 3480.</del></p> <p><del>The packagings containing the cells and batteries shall conform to the packing requirements in part 1(a) of this packing instruction</del></p> <p><del>Cells and batteries shall be packed in packagings so that the cells and batteries are protected against damage that may be caused by the movement or placement of the cells or batteries within the packaging.</del></p> <p style="padding-left: 40px;"><b>(b) Cells or batteries contained in equipment</b></p> <p>When cells and batteries are contained in equipment, the equipment shall be packed in strong outer packagings in such a manner as to prevent accidental <b><u>activation operation during transport.</u></b> <b><u>Equipment which are intentionally active in transport (RFID transmitters, watches, sensors, attaché cases incorporating cash boxes and cash bags etc.) and which are not capable of generating a quantity of heat sufficient to be dangerous to packaging or personal safety shall be packed in strong outer packagings, but need not be packed to prevent accidental activation. Equipment whose construction itself (i.e attaché cases incorporating cash boxes or cash bags), is strong need not have a strong outer packaging.</u></b> Packagings for batteries or cells contained in equipment need not meet the requirements of 4.1.1.3.</p>		
<p><b>Additional requirement:</b></p> <p>Cells and batteries shall be protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to a short circuit.</p>		