



Secretariat

Distr.
GENERAL

ST/SG/AC.10/C.3/2009/9
26 March 2009

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

Thirty-fifth session
Geneva, 22–26 June 2009
Item 4 of the provisional agenda

ELECTRIC STORAGE SYSTEMS

Revision of Packing Instruction 903

Transmitted by the expert from the United Kingdom¹

Introduction

1. During the last biennium considerable work has been carried out on amending the Model Regulations for the transport of lithium metal and lithium ion batteries and cells. The ICAO Dangerous Goods Panel has undertaken even more work, notably in developing detailed packing instructions to differentiate between the provisions for batteries and cells, for batteries and cells packed with equipment and for batteries or cells contained in equipment. These new packing instructions, designated 965 to 970, are very detailed but the principal difference is that the packaging

¹ 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(e) and ST/SG/AC.10/36, para. 14)

required for batteries or cells packed with equipment or batteries and cells contained in equipment do not have to be UN tested, whilst batteries and cells alone must continue to be packed in packaging subject to the full UN testing requirements. The ICAO packing instructions were circulated at the thirty-second session of the UN Sub-Committee as informal document (INF.48).

2. The existing text in Packing Instruction P903 in the Model Regulations does not make this clear distinction. However, the way in which the text is written seems to indicate that whilst batteries and cells alone or batteries and cells packed with equipment must meet the Packing Group II performance levels, packaging for batteries and cells contained in equipment need only be packed in strong outer packagings. This has caused some confusion between the modes of transport, especially when trying to move such goods away from airports.

3. The expert from the United Kingdom believes that the intentions set out in the new ICAO packing instructions are clearer in presentation and more logical in intent than the current UN P903. He agrees that for batteries and cells alone in transport they must be carried in UN approved packaging meeting the PGII performance level. However, for packages containing equipment with the batteries fitted or batteries or cells packed together with the equipment, the UN tests would seem to be over burdensome. The requirements for the carrying out of the UN tests are that the package shall be tested as prepared for transport. Clearly such equipment can be delicate and expensive and will usually be packaged with cushioning material to protect the equipment during transport and handling. The equipment itself will protect fitted batteries or cells whilst those packed with the equipment will be fitted in the protective material in such a way that it additionally protects the batteries or cells themselves. Thus UN tests of packaging containing equipment batteries or cells could lead to significant damage to the equipment whilst having no effect on the battery or cell.

Proposal

4. It is proposed, therefore, to restructure UN Packing Instruction P903 so that it is more closely aligned with the principles adopted for the new ICAO Technical Instructions, as follows in the attached annex.

P903	PACKING INSTRUCTION	P903
<p>This instruction applies to UN Nos. 3090, 3091, 3480 and 3481.</p>		
<p>The following packagings are authorized, provided that the general provisions of 4.1.1 and 4.1.3 are met:</p>		
<p>For UN 3090 and 3480:</p>		
<p>Packaging conforming to the packing group II performance level.</p>		
<p>In addition, batteries or cells employing a strong, impact resistant outer casing of a gross mass of 12 kg or more, and assemblies of such batteries or cells, may be packed in strong outer packagings, in protective enclosures (e.g., in fully enclosed or wooden slatted crates) unpackaged or on pallets. Batteries or cells shall be secured to prevent inadvertent movement, and the terminals shall not support the weight of other superimposed elements.</p>		
<p>For UN 3091 and 3481:</p>		
<p>When batteries or cells are packed together with equipment, they shall be packed in inner fibreboard packagings. 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 operation during transport. Packagings for batteries or cells together with equipment or in equipment need not meet the requirements of 4.1.1.3.</p>		
<p>Additional requirement:</p>		
<p>Batteries or cells shall be protected against short circuit.</p>		
