



**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)**

**TWENTY-SECOND MEETING**

**Montréal, 5 to 16 October 2009**

**Agenda Item 2: Development of recommendations for amendments to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284) for incorporation in the 2011-2012 Edition**

**SPECIAL PROVISION FOR LITHIUM CELLS AND BATTERIES PACKED WITH OR CONTAINED IN EQUIPMENT**

(Presented by J. Rui)

**SUMMARY**

This paper invites the DGP to consider a new special provision for UN 3091 **Lithium metal batteries packed with equipment** or **Lithium metal batteries contained in equipment** and UN 3481 **Lithium ion batteries packed with equipment** or **Lithium ion batteries contained in equipment**.

**Action by the DGP:** The panel is invited to discuss a proposed new special provision as presented in the appendix. The panel is also invited to add an explanation in Part 2 of the Lithium batteries shipping guidance document ([http://www.icao.int/anb/FLS/DangerousGoods/ICAO\\_Lithium\\_Battery\\_Guidance/ICAO\\_Lithium\\_Battery\\_Guidance.pdf](http://www.icao.int/anb/FLS/DangerousGoods/ICAO_Lithium_Battery_Guidance/ICAO_Lithium_Battery_Guidance.pdf)).

**1. INTRODUCTION**

1.1 The possibility of a package containing a combination of lithium batteries contained in equipment and lithium batteries packed with equipment and the ensuing difficulties in assigning a proper shipping name was discussed at the DGP Working Group of the Whole meeting in Auckland (DGP-WG09, 4 to 8 May 2009). A proposal was made to add a note to each of the relevant packing instructions specifying that the most appropriate proper shipping name and associated packing instruction must be used. Some members considered that the Instructions already catered for such a situation in that the shipper was instructed to use the most restrictive proper shipping name that applied. Others suggested that the more restrictive shipping name was that for “packed with equipment” but that additional text might need to be developed to allow for batteries packed in equipment. It was agreed that guidance material should be developed, circulated to panel members for approval and then placed on the ICAO website. In addition, a new working paper incorporating a new special provision which would clarify the correct name(s) should be prepared for DGP/22.

1.2 In researching the most appropriate proper shipping name for a package containing lithium batteries in and with equipment as described above, the following possibilities were isolated:

- a) UN 3091 Lithium **metal** batteries contained in equipment; or/and
- b) UN 3091 Lithium **metal** batteries packed with equipment; or/and
- c) UN 3481 Lithium **ion** batteries contained in equipment; or/and
- d) UN 3481 Lithium **ion** batteries packed with equipment; and any combination thereof.

1.3 If one considers “packed with equipment” as more restrictive conditions, the above possibilities could be narrowed to:

- a) UN 3091 Lithium metal batteries packed with equipment, or
- b) UN 3481 Lithium ion batteries packed with equipment.

but this still leaves the shipper with limited guidance on how to choose between the above two possibilities.

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APPENDIX

AMENDMENTS TO THE TECHNICAL INSTRUCTIONS

Part 3

DANGEROUS GOODS LIST,  
SPECIAL PROVISIONS AND  
LIMITED AND EXCEPTED QUANTITIES

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Chapter 2

ARRANGEMENT OF THE  
DANGEROUS GOODS LIST (TABLE 3-1)

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Table 3-1. Dangerous good list

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Add AXX to column 7 for:

UN 3091 **Lithium metal batteries contained in equipment**  
UN 3091 **Lithium metal batteries packed with equipment**  
UN 3481 **Lithium ion batteries contained in equipment**  
UN 3481 **Lithium ion batteries packed with equipment**

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Chapter 3

SPECIAL PROVISIONS

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Table 3-2 lists the special provisions referred to in column 7 of Table 3-1 and the information contained in them is additional to that shown for the relevant entry. Where the wording of the special provision is equivalent to that in the UN Model Regulations, the UN special provision number is shown in parentheses.

Table 3-2. Special provisions

<i>TIs</i>	<i>UN</i>
<u>AXXX</u>	<u>When a package contains a combination of lithium batteries contained in equipment and lithium batteries packed with equipment any of which has been determined to meet the criteria for assignment to Class 9, the most appropriate of the following UN number and proper shipping name must be selected:</u>  <u>UN 3091 Lithium metal batteries packed with equipment; or</u> <u>UN 3481 Lithium ion batteries packed with equipment.</u>  <u>In such a case, the shipper must ensure that the provisions of the packing instructions applicable to lithium batteries contained in equipment as well as those applicable to lithium batteries packed with equipment are followed.</u>

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