



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
MEETING OF THE WORKING GROUP OF THE WHOLE**

Atlantic City, United States, 4 to 8 April 2011

- 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 2013-2014 Edition**
- 2.3: Part 3 — Dangerous Goods List, Special Provisions and Limited and Excepted Quantities**

**TABLE 3-1 REQUIREMENT FOR LITHIUM BATTERIES PACKED WITH, AND
CONTAINED IN EQUIPMENT**

(Presented by D. Brennan)

SUMMARY

This paper proposes that the permitted net mass for lithium batteries packed with equipment, and contained in equipment as shown in Table 3-1 and the applicable packing instructions be aligned with the way that fuel cell cartridges are shown.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 This working paper continues the theme set out in working papers DGP-WG/11-WP/36 and DGP-WG/11-WP/37 in standardising the way that the net mass limits are shown in Table 3-1 and the applicable packing instructions.

1.2 Currently lithium batteries packed with equipment and contained in equipment are shown in Table 3-1 with “see xxx” across columns 10/11 and 12/13, where “xxx” is the applicable packing instruction.

1.3 For UN 3091 and UN 3481, lithium metal batteries packed with equipment and lithium ion batteries packed with equipment the limits shown in Packing Instructions 969 and 966 respectively apply to the net mass of lithium batteries contained in a single package. However, for lithium ion batteries contained in equipment and lithium metal batteries contained in equipment the limits shown in Packing Instructions 967 and 970 respectively apply to the net mass of lithium batteries per piece of equipment.

2.2 If the proposal to revise Table 3-1 is adopted, the DGP-WG is invited to revise Packing Instructions 966, 967, 969 and 970 as shown:

Packing Instruction 966
Passenger and cargo aircraft for UN 3481 (packed with equipment) only

...

General requirements

Part 4;1 requirements must be met.

<i>Contents</i> <u>UN Number and Name</u>	<i>Package quantity</i> <i>(Section I)</i>	
	<i>Passenger</i>	<i>Cargo</i>
Quantity of lithium ion cells and batteries per package, excluding equipment <u>UN 3481 Lithium ion batteries packed with equipment</u>	5 kg of <u>lithium ion cells or batteries</u>	35 kg of <u>lithium ion cells or batteries</u>

...

Packing Instruction 967
Passenger and cargo aircraft for UN 3481 (contained in equipment) only

...

General requirements

Equipment must be packed in strong outer packagings that conform to Part 4;1.1.1, 1.1.3.1 and 1.1.9 (except 1.1.9.1).

<i>Contents</i> <u>UN Number and Name</u>	Net quantity per piece of equipment <i>Package quantity</i> <i>(Section I)</i>	
	<i>Passenger</i>	<i>Cargo</i>
<u>UN 3481 Lithium ion batteries contained in equipment</u>	5 kg of <u>lithium ion cells or batteries</u>	35 kg of <u>lithium ion cells or batteries</u>

...

Packing Instruction 969

Passenger and cargo aircraft for UN 3091 (packed with equipment) only

...

General requirements

Part 4;1 requirements must be met.

<i>Contents</i> <u>UN Number and Name</u>	<i>Package quantity</i> <i>(Section I)</i>	
	<i>Passenger</i>	<i>Cargo</i>
Quantity of lithium metal cells and batteries per overpack, excluding equipment <u>UN 3091 Lithium metal batteries packed with equipment</u>	5 kg <u>of lithium metal cells or batteries</u>	35 kg <u>of lithium metal cells or batteries</u>

...

Packing Instruction 970

Passenger and cargo aircraft for UN 3091 (contained in equipment) only

...

General requirements

Equipment must be packed in strong outer packagings that conform to Part 4;1.1.1, 1.1.3.1 and 1.1.10 (except 1.1.10.1).

<i>Package contents</i> <u>UN Number and Name</u>	Not quantity per piece of equipment <i>Package quantity</i> <i>(Section I)</i>	
	<i>Passenger</i>	<i>Cargo</i>
Lithium metal batteries <u>UN 3091 Lithium metal batteries contained in equipment</u>	5 kg <u>of lithium metal cells or batteries</u>	35 kg <u>of lithium metal cells or batteries</u>

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