



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
WORKING GROUP MEETING (DGP-WG/17)**

Montreal, 24 to 28 April 2017

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 2019-2020 Edition

2.4: Part 4 — Packing Instructions

APPLICABILITY OF SECTION IA

(Presented by B. Carrara)

SUMMARY

This working paper invites the DGP-WG/17 to amend the actual introduction paragraph related to Packing Instructions 965 and 968 as shown in the appendix.

Action by the DGP-WG: The DGP is invited to review the applicability of Section IA in the introduction part of Packing Instructions 965 and 968 as shown in the appendix to this working paper.

1. INTRODUCTION

1.1 At the sixteenth working group meeting of the Dangerous Goods Panel (DGP-WG/16, Montreal, 17 to 21 October 2016), there was a discussion about the applicability of Section IA of Packing Instructions 965 and 968 (see paragraph 3.5.3.12 of the DGP-WG/16 Report). The working paper presented brought to the attention of the working group the fact that Section IA could be interpreted to mean that shippers would not be permitted to package their cells or batteries in accordance with Section IA if the Watt hour rating or lithium metal content did not exceed the limits established for that section.

1.2 Although it was not the intent to preclude anyone from applying more restrictive requirements and the working group had agreed that an anomaly had inadvertently been introduced, no changes were made to the current text, which means the inconsistency still exists.

1.3 Section IB of Packing Instruction 965 applies to lithium ion cells with a Watt-hour rating not exceeding 20 Wh and lithium ion batteries with a Watt-hour rating not exceeding 100 Wh packed in quantities that exceed the allowance permitted in Section II, Table 965-II.

1.4 Despite not being explicitly stated in the Section IA text, paragraph 1 (Introduction) of Packing Instruction 965 establishes that Section IA applies to lithium ion cells with a Watt-hour rating in excess of 20 Wh and lithium ion batteries with a Watt-hour rating in excess of 100 Wh.

1.5 Considering that the weight limit for Section IB is 10 kg and for Section IA is 35 kg, it is possible to figure out that a package containing lithium ion batteries with a Watt-hour rating not exceeding 100 Wh but weighing more than 10 kg should be prepared in accordance to Section IA. However, the applicability of Section IA requirements in this situation would be in contradiction of the introduction text of Packing Instruction 965 since it determines Section IA applies to lithium ion batteries with a Watt-hour rating in excess of 100 Wh.

1.6 The same foregoing explanation is applicable to lithium metal cells and batteries prepared in accordance with Packing Instruction 968.

1.7 For this reason, and following the discussions of DGP-WG/16, this paper presents two different options to fix those inconsistencies in Packing Instructions 965 and 968.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to express opinions about Options 1 and 2 as presented in the appendix to this working paper.

APPENDIX

PROPOSED AMENDMENT TO PART 4 OF THE TECHNICAL INSTRUCTIONS

OPTION 1

Part 4

PACKING INSTRUCTIONS

...

Chapter 11

CLASS 9 — MISCELLANEOUS DANGEROUS GOODS

...

Packing Instruction 965

Cargo aircraft only for UN 3480

1. Introduction

This entry applies to lithium ion or lithium polymer batteries. This packing instruction is structured as follows:

- Section IA applies to lithium ion cells with a Watt-hour rating in excess of 20 Wh and lithium ion batteries with a Watt-hour rating in excess of 100 Wh or lithium ion cells and batteries packed in quantities that exceed the allowance permitted in Section IB, Table 965-IB, which must be assigned to Class 9 and are subject to all of the applicable requirements of these Instructions;
- Section IB applies to lithium ion cells with a Watt-hour rating not exceeding 20 Wh and lithium ion batteries with a Watt-hour rating not exceeding 100 Wh packed in quantities that exceed the allowance permitted in Section II, Table 965-II; and
- Section II applies to lithium ion cells with a Watt-hour rating not exceeding 20 Wh and lithium ion batteries with a Watt-hour rating not exceeding 100 Wh packed in quantities not exceeding the allowance permitted in Section II, Table 965-II.

...

...

Packing Instruction 968

Cargo aircraft only for UN 3090

1. Introduction

This entry applies to lithium metal or lithium alloy batteries. This packing instruction is structured as follows:

- Section IA applies to lithium metal cells with a lithium metal content in excess of 1 g and lithium metal batteries with a lithium metal content in excess of 2 g or lithium metal cells and batteries packed in quantities that exceed the allowance permitted in Section IB, Table 968-IB, which must be assigned to Class 9 and are subject to all of the applicable requirements of these Instructions;
- Section IB applies to lithium metal cells with a lithium metal content not exceeding 1 g and lithium metal batteries with a lithium metal content not exceeding 2 g packed in quantities that exceed the allowance permitted in Section II, Table 968-II; and
- Section II applies to lithium metal cells with a lithium metal content not exceeding 1 g and lithium metal batteries with a lithium metal content not exceeding 2 g packed in quantities not exceeding the allowance permitted in Section II, Table 968-II.

...

...

OPTION 2

Chapter 11

CLASS 9 — MISCELLANEOUS DANGEROUS GOODS

...

<p>Packing Instruction 965 Cargo aircraft only for UN 3480</p>
<p>1. Introduction</p> <p>This entry applies to lithium ion or lithium polymer batteries. This packing instruction is structured as follows:</p> <ul style="list-style-type: none">— Section IA applies to lithium ion cells with a Watt-hour rating in excess of 20 Wh and lithium ion batteries with a Watt-hour rating in excess of 100 Wh, which must be assigned to Class 9 and are subject to all of the applicable requirements of these Instructions;— Section IB applies <u>may apply</u> to lithium ion cells with a Watt-hour rating not exceeding 20 Wh and lithium ion batteries with a Watt-hour rating not exceeding 100 Wh packed in quantities that exceed the allowance permitted in Section II, Table 965-II; and— Section II applies <u>may apply</u> to lithium ion cells with a Watt-hour rating not exceeding 20 Wh and lithium ion batteries with a Watt-hour rating not exceeding 100 Wh packed in quantities not exceeding the allowance permitted in Section II, Table 965-II.
<p>...</p>

...

<p>Packing Instruction 968 Cargo aircraft only for UN 3090</p>
<p>1. Introduction</p> <p>This entry applies to lithium metal or lithium alloy batteries. This packing instruction is structured as follows:</p> <ul style="list-style-type: none">— Section IA applies to lithium metal cells with a lithium metal content in excess of 1 g and lithium metal batteries with a lithium metal content in excess of 2 g, which must be assigned to Class 9 and are subject to all of the applicable requirements of these Instructions;— Section IB applies <u>may apply</u> to lithium metal cells with a lithium metal content not exceeding 1 g and lithium metal batteries with a lithium metal content not exceeding 2 g packed in quantities that exceed the allowance permitted in Section II, Table 968-II; and— Section II applies <u>may apply</u> to lithium metal cells with a lithium metal content not exceeding 1 g and lithium metal batteries with a lithium metal content not exceeding 2 g packed in quantities not exceeding the allowance permitted in Section II, Table 968-II.
<p>...</p>

...

— END —