



**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)  
WORKING GROUP MEETING (DGP-WG/18)**

**Montréal, 1 to 5 October 2018**

**Agenda Item 1: Harmonizing ICAO dangerous goods provisions with UN Recommendations on the Transport of Dangerous Goods**

**1.3: Develop proposals, if necessary, for amendments to the *Supplement to the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284SU)* for incorporation in the 2021-2022 Edition**

**AMENDMENT TO PACKING INSTRUCTION 910**

(Presented by P. Privitera)

**SUMMARY**

This working paper proposes an amendment to Packing Instruction 910 in the Supplement to the Technical Instructions (Part S-4;11) regarding equipment containing lithium batteries not subject to Part 6 of the Technical Instructions.

**Action by the DGP-WG :** The DGP-WG is invited to provide their views and consider the proposed amendment to Packing Instruction 910 presented in the appendix to this working paper.

**1. INTRODUCTION**

1.1 Packing Instruction 910 applies to pre-production prototypes of lithium cells or batteries when transported for testing. The section “Cells and batteries contained in equipment” requires equipment to be packed in an outer packaging of a tested design type. Exceptions from this requirement are provided under “*Equipment or batteries not subject to Part 6 of these Instructions*”.

1.2 The title of the section “*Equipment or batteries not subject to Part 6 of these Instructions*” implies that exceptions from packaging testing requirements for equipment and batteries are provided, yet the actual provisions refer only to lithium batteries with a mass of 12 kg and not to the equipment. It would appear that this would exclude, for example, the possibility of excepting large equipment powered by lithium batteries with a mass under 12 kg from packaging testing. How could we pack large equipment with a 4 kg lithium battery installed?

1.3 Packing Instructions 965 and 968, which apply to UN 3480 — **Lithium ion batteries** and UN 3090 — **Lithium metal batteries** respectively, refer to exceptions from Part 6 for batteries with a mass of 12 kg or greater, but there is no reference to 12 kg in the packing instructions for lithium batteries packed with or contained in equipment (i.e. Packing Instruction 966-967 and 969-970).

## 2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to consider the proposed amendment to Packing Instruction 910 in Part S-4;11 of the Supplement to the Technical Instructions as presented in the appendix to this working paper.

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APPENDIX

PROPOSED AMENDMENT TO PART S-4 OF THE SUPPLEMENT

Chapter 11

CLASS 9 — MISCELLANEOUS DANGEROUS GOODS

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Packing Instruction 910

Cargo aircraft only

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**ADDITIONAL PACKING REQUIREMENTS**

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*Equipment or batteries not subject to Part 6 of ~~these~~ the Technical Instructions*

Equipment containing lithium cells/batteries and Lithium-lithium cells/batteries with a mass of 12 kg or greater and having a strong, impact-resistant outer casing, or assemblies of such batteries, may be packed in strong outer packagings or protective enclosures not subject to the requirements of Part 6 of these Instructions under conditions specified by the appropriate national authority. Additional conditions that may be considered in the approval process include, but are not limited to:

- 1) The equipment or the battery must be strong enough to withstand the shocks and loadings normally encountered during transport, including trans-shipment between cargo transport units and between cargo transport units and warehouses as well as any removal from a pallet for subsequent manual or mechanical handling; and
- 2) The equipment or the battery must be fixed in cradles or crates or other handling devices in such a way that it will not become loose during normal conditions of transport.

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