



DANGEROUS GOODS PANEL (DGP) WORKING GROUP MEETING (DGP-WG/15)

Montreal, 27 April to 1 May 2015

Agenda Item 5: Development of mitigating measures to address risks associated with the transport of lithium batteries including measures that address recommendations from the Second International Multidisciplinary Lithium Battery Transport Coordination Meeting

5.1: "Bulk" shipments of excepted lithium batteries and cells

ADDITIONAL CONSIDERATIONS FOR SECTION II OF THE LITHIUM BATTERY PACKING INSTRUCTIONS — COMMENTS ON DGP-WG/15-WP/6 AND DGP-WG/15-WP/7

(Presented by M. Paquette)

SUMMARY

The working group is invited to discuss the points raised in this paper while considering the proposals in DGP-WG/15-WP/6 and DGP-WG/15-WP/7.

1. INTRODUCTION

1.1 Working paper DGP-WG/15-WP/6 proposes changes to Section II of all lithium battery packing instructions to include the types of strong packaging to be used, the number of packages on the airwaybill, and the name and address of the shipper and the consignee on the packages. DGP-WG/15-WP/7 proposes to limit the use of overpacks (to contain no more than 4 packages) for Section II of Packing Instructions 965 and 968, to restrict shippers from loading packages in unit load devices, and to remove the ability of freight forwarders from consolidating multiples shipments of these packages.

1.2 Section II is meant to be a standalone exception that is simple and easy to use. However, requirements of the Technical Instructions for fully regulated dangerous goods continue to be incorporated in Section II.

1.3 The following table identifies similarities and differences between what is proposed in DGP-WG/15-WP/6 and DGP-WG/15-WP/7 and what is currently found in the 2015-2016 edition of the Technical Instructions for Section IB of Packing Instruction 965 (lithium-ion batteries). Section IB and Section II cover the same size/range of cells ($\leq 20\text{Wh}$) and batteries ($\leq 100\text{Wh}$). What differentiates Section IB from Section II is the quantity of cells or batteries inside a package (≤ 8 cells or ≤ 2 batteries or

≤2.5kg of cells with less than 2.7Wh each). The underlined text represents the additions found in DGP-WG/15-WP/6 and DGP-WG/15-WP/7.

	Packing Instruction 965 Section 1B	Packing Instruction 965 Section II
MARKING AND LABELLING		
Class 9 hazard class label	X	-
Lithium battery handling label	X	X
<u>Name and address of shipper and consignee</u>	X	<u>X</u>
Shipping name	X	-
UN number	X	-
DOCUMENTATION		
Dangerous goods transport document	X	-
Each consignment accompanied by document with indication of what it contains, how to handle, telephone #, etc.)	X	X
<u>Number of packages indicated on the document</u>	X	<u>X</u>
PACKAGING		
Strong outer packaging	X	X
<u>Types of strong outer packaging specified</u>	-	<u>X</u>
<u>Rigid outer packaging</u>	-	<u>X</u>
Not subject to provisions of Part 6	X	X
Cells and batteries packed in inner packagings that completely enclose cell or battery and inner packagings placed in strong outer packaging	X	X
Cells and batteries protected as to prevent short circuits	X	X
Each package capable of withstanding a 1.2m drop test	X	X
SHIPPING		
<u>Limit number of packages in overpack</u>	-	<u>X</u>
<u>Offered to the operator separately from other dangerous goods or non dangerous goods (mentioned twice –in preamble (ref. 5;1.1j) and in the text)</u>	X	<u>X</u>
<u>Must not be loaded in unit load device</u>	X	<u>X</u>

	Packing Instruction 965 Section IB	Packing Instruction 965 Section II
<u>before being offered to operator (mentioned twice –in preamble (ref. 5;1.1g) and in the text)</u>		
TRANSPORTING		
Reporting of dangerous goods incidents and accidents	X	X
Reporting of misdeclared/undeclared dangerous goods	X	-
Acceptance check	X	-
Notification to Captain (NOTOC)	X	-
TRAINING		
In accordance with Part 1;4	X	- but person must receive adequate instructions
“X” means required “-” means not required		

1.4 The major differences between Section IB and Section II relate to requirements for:

- a) Class 9 labels;
- b) Shipping name and UN number marked on packages;
- c) Transport documents;
- d) Training;
- e) Acceptance checks; and
- f) Notification to Captain (NOTOC).

1.5 Section II of Packing Instructions 965 and 968 was developed to permit a shipper to ship a package of no more than 8 cells / 2 batteries to one consignee (e.g. retailer to a consumer or from one individual to another). However, multiple packages are overpacked and consolidated resulting in large quantities of lithium batteries being loaded in one location in an aircraft.

1.6 The Second International Multidisciplinary Lithium Battery Transport Coordination Meeting recommended that “measures should be taken to prohibit packages of such cell/batteries from being overpacked or consolidated”. DGP-WG/15-WP/7 proposes to limit the number of packages in an overpack to [4]. This would result in multiple small packages entering the system or several overpacks containing [4] packages entering the system; the same number of batteries / cells enters the transportation system. While the configuration of the shipment has changed, the total number of cells / batteries remains the same. For example: one overpack with 4 packages = 4 individual packages = maximum of 32 cells.

1.7 DGP-WG/15-WP/7 also proposes to prohibit the offering for transport to the operator of Section II lithium batteries in Packing Instructions 965 and 968 with other dangerous goods or non-dangerous goods, and prohibits the loading of Section II lithium batteries in unit load devices before offering them to an operator. This will result in the operator “accepting”/receiving the packages/overpacks separately and raises the following questions:

- a) Will the operator continue to treat Section II lithium batteries as regular cargo because there are no requirements for loading, securing, segregating, inspecting, etc?
- b) Will the operator load large quantities of Section II lithium battery packages/overpacks in one unit load device?
- c) Will the DGP develop additional text in Section II of Packing Instructions 965 and 968? In Part 7?
- d) Will it be up to the operator to develop procedures on how to “accept”/process Section II lithium batteries to ensure that they are not concentrated in one area of the aircraft?

1.8 The panel is asked to consider why Section II needs to continue to be amended:

- a) Is Section II not providing enough information to operators (and pilots)?
- b) Is the packaging specified in Section II not as robust as it should be? Are the conditions of Section II not being complied with? Is Section II not used as intended (e.g. are overpack provisions being abused)?
- c) Are large quantities of lithium batteries being loaded in one area of an aircraft without the pilot being aware?
- d) Is there an increased danger associated with consolidating and overpacking Section II packages?
- e) What practical benefits does Section II bring given its evolution and further proposed amendments?

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