



WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-NINTH MEETING

Montréal, 13 to 17 November 2023

Agenda Item 4: Managing safety risks posed by the carriage of lithium batteries by air (Ref: Job Card DGP.003.04)

CLARIFICATION OF THE NEW EXCEPTIONS INCORPORATED IN TABLE 8-1

(Presented by L. Cascardo)

SUMMARY

This working paper proposes that a note be added to the new provision added to Table 8-1 through Addendum No. 1 to the 2023-2024 Edition of the Technical Instructions that excepts the requirement for portable devices containing lithium batteries to be turned off when in checked baggage if the lithium batteries are within established limits. The note is intended to clarify the scope of the provision.

Action by the DGP: The DGP is invited to consider the proposed amendment to Table 8-1 presented in the appendix to this working paper.

1. INTRODUCTION

1.1 An amendment to Table 8-1 was incorporated into the 2023–2024 Edition of the Technical Instructions through Addendum No. 1 (published 27 March 2023). It introduces an exception from the requirement for portable devices containing lithium batteries to be turned off when in checked baggage, provided the lithium batteries are within established limits.

1.2 Potential for different interpretations of the provision was discussed at the 2023 Working Group meeting (DGP-WG/23, 15 to 19 May 2023, Rio de Janeiro, Brazil) (see paragraph 4.4.1.6 of the DGP-WG/23 report). The initial concern was that, without any clarifications, the provisions could be interpreted in two different ways. The first interpretation was that the limits of 2.7 Wh or 0.3 grams apply to the device, meaning that the total energy of all batteries contained in devices would have to observe those limits. The second interpretation was that each battery installed in the device would, individually, observe the limits.

1.3 If the latter interpretation is accurate, a safety issue would arise, since a device with an unlimited number of batteries, each one with less than 2.7 Wh or 0.3 g of lithium content, could be transported in active mode in passengers' checked baggage.

1.4 During the discussion, different panel members agreed that the limits should apply to the total amount of energy in the device and not to each battery contained in the device (first interpretation). The report from the meeting states: *"Panel members agreed that the limits applied to the whole device and not to the individual cells or batteries for this particular provision. The author suggested this needed to be clarified in the provision and would consider whether there was a way to do so"*.

1.5 This working paper introduces a proposal to clarify the regulations, aiming to prevent divergent interpretations that could lead to unintended consequences.

2. ACTION BY THE DGP

2.1 The DGP is invited to consider the proposed amendment to Table 8-1 presented in the appendix to this working paper.

APPENDIX

PROPOSED AMENDMENTS TO PART 8 OF THE TECHNICAL INSTRUCTIONS

Part 8

PROVISIONS CONCERNING
PASSENGERS AND CREW

Chapter 1

PROVISIONS FOR DANGEROUS GOODS
CARRIED BY PASSENGERS OR CREW

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Table 8-1. Provisions for dangerous goods carried by passengers or crew

Dangerous Goods	Location		Approval of the operator(s) is required	Restrictions
	Checked baggage	Carry-on baggage		
Batteries				
1) Lithium batteries (including portable electronic devices)	Yes (except for g) and h))	Yes	(see c) and d))	<p>...</p> <p>e) portable electronic devices containing batteries should be carried as carry-on baggage; however, if carried as checked baggage:</p> <ul style="list-style-type: none"> — measures must be taken to prevent unintentional activation and to protect the devices from damage; and — the devices must be completely switched off (not in sleep or hibernation mode) if the batteries exceed <ul style="list-style-type: none"> — for lithium metal batteries, a lithium content of 0.3 grams; or — for lithium ion batteries, a Watt-hour rating of 2.7 Wh.; <p><u>Note.— The limits mentioned above apply to the device (i.e. the total amount of energy contained in the device) and not individually to each battery contained in the device.</u></p> <p>...</p>

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