



WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-NINTH MEETING

Montréal, 13 to 17 November 2023

Agenda Item 2: Managing air-specific safety risks and identifying anomalies (*Ref: REC A DGS 2025*)

2.2: Develop proposals, if necessary, for amendments to the Technical Instructions for the *Safe Transport of Dangerous Goods by Air* (Doc 9284) for incorporation in the 2025-2026 Edition

**AMENDMENTS TO PART 8 OF THE TECHNICAL INSTRUCTIONS DEVELOPED BY
DGP-WG/22 AND DGP-WG/23**

(Presented by the Secretary)

SUMMARY

This working paper contains consolidated draft amendments to Part 8 of the Technical Instructions developed by the Working Group of the DGP in 2022 (DGP-WG/2022) and 2023 (DGP-WG/2023) to:

- a) manage aviation specific risks; and
- b) address issues related to lithium batteries.

The DGP is invited to agree to the draft amendments in this working paper.

Part 8

PROVISIONS CONCERNING PASSENGERS AND CREW

Chapter 1

PROVISIONS FOR DANGEROUS GOODS CARRIED BY PASSENGERS OR CREW

1.1 DANGEROUS GOODS CARRIED BY PASSENGERS OR CREW

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1.1.2 Except for the reporting provisions of 7;4.4 and 7;4.5, the provisions of these Instructions do not apply to the dangerous goods permitted by Table 8-1 when those dangerous goods are:

- a) carried by passengers or crew for personal use only;

Amendments to manage aviation specific risks

Paragraph 4.2.2.4 of DGP-WG/22 report:

- b) contained in baggage that has been separated from its owner during transit (e.g. mishandled baggage such as lost baggage or improperly routed baggage); or

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1.1.9 Except for the reporting provisions of 7;4.4 and 7;4.5, the provisions of these Instructions do not apply to the dangerous goods permitted in accordance with Table 8-2 when those dangerous goods are:

- a) carried by staff members of the OPCW on official travel or government agencies listed in Table 8 2 on official travel;

Amendments to manage aviation specific risks

Paragraph 4.2.2.4 of DGP-WG/22 report:

- b) contained in baggage that has been separated from its owner during transit (e.g. mishandled baggage such as lost baggage or improperly routed baggage); or

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Amendments to battery provisions

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

<i>Dangerous Goods</i>	<i>Location</i>		<i>Approval of the operator(s) is required</i>	<i>Restrictions</i>
	<i>Checked baggage</i>	<i>Carry-on baggage</i>		
Batteries				
1) Lithium batteries (including portable electronic devices)	Yes (except for g) and h))	Yes	(see c) and d))	<p>a) each battery must be of a type which meets the requirements of each test in the UN <i>Manual of Tests and Criteria</i>, Part III, subsection 38.3;</p> <p>b) each battery must not exceed the following: — for lithium metal batteries, a lithium content of 2 grams; or — for lithium ion batteries, a Watt-hour rating of 100 Wh;</p> <p>c) each battery may exceed 100 Wh but not exceed 160 Wh Watt-hour rating for lithium ion with the approval of the operator;</p> <p>d) each battery may exceed 2 grams but not exceed 8 grams lithium content for lithium metal for portable medical electronic devices with the approval of the operator;</p> <hr/> <p>Paragraph 4.4.3 of DGP-WG/22 report and Addendum No. 1 to the 2023-2024 Edition of the Technical Instructions.</p> <p>The text below was further modified for inclusion in the addendum by DGP-WG/22 and then by the ANC. DGP-WG/22 decided to only include provision for active devices in the addendum and not the requirement for all devices to be protected from damage and inadvertent activation when carried in the cabin. It considered the latter premature, given that the panel had not thoroughly discussed the potential impact on States and industry. It agreed it could be given future consideration.</p> <hr/> <p>e) batteries contained in portable electronic devices <u>[must be protected from damage and unintentional activation. Devices containing batteries exceeding]:</u> — <u>for lithium metal batteries, a lithium content of 0.3 grams;</u> <u>or</u> — <u>for lithium ion batteries, a Watt-hour rating of 2.7 Wh</u> should be carried as carry-on baggage; however, if carried as checked baggage, <u>the devices must be completely switched off (not in sleep or hibernation mode).</u>:-</p>

Dangerous Goods	Location		Approval of the operator(s) is required	Restrictions
	Checked baggage	Carry-on baggage		
				<p>measures must be taken to prevent unintentional activation and to protect the devices from damage; and</p> <p>the devices must be completely switched off (not in sleep or hibernation mode);</p> <p>f) batteries and heating elements must be isolated in portable electronic devices capable of generating extreme heat, which could cause a fire if activated, by removal of the heating element, battery or other components;</p> <p>g) spare batteries, including power banks:</p> <ul style="list-style-type: none"> — must be carried as carry-on baggage; and — must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch); <p>h) baggage equipped with a lithium battery(ies) exceeding:</p> <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>must be carried as carry-on baggage unless the battery(ies) is removed from the baggage, in which case the battery(ies) must be carried in accordance with g);</p> <p>i) no more than two spare batteries meeting the requirements of c) or d) may be carried per person.</p>
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<p>4) Mobility aids (e.g. wheelchairs) powered by:</p> <ul style="list-style-type: none"> – spillable batteries; – non-spillable wet batteries; – dry batteries; – nickel-metal hydride batteries; or – lithium ion batteries 	Yes	(see e))	Yes	<p>a) for use by passengers whose mobility is restricted by either a disability, their health or age, or a temporary mobility problem (e.g. broken leg);</p> <p>b) the passenger should make advance arrangements with each operator and provide information on the type of battery installed and on the handling of the mobility aid (including instructions on how to isolate the battery);</p> <p>c) in the case of a dry battery or nickel-metal hydride battery, each battery must comply with Special Provision A123 or A199, respectively;</p> <p>d) in the case of a non-spillable wet battery:</p> <ul style="list-style-type: none"> i) each battery must comply with Special Provision A67; and ii) a maximum of one spare battery may be carried per passenger; <p>e) in the case of a lithium ion battery:</p> <ul style="list-style-type: none"> i) each battery must be of a type which meets the requirements of each test in the <i>UN Manual of Tests and Criteria</i>, Part III, subsection 38.3;

	Location		Approval of the operator(s) is required	Restrictions
	Checked baggage	Carry-on baggage		
Dangerous Goods				<p>ii) when the mobility aid does not provide adequate protection to the battery:</p> <ul style="list-style-type: none"> — the battery must be removed in accordance with the manufacturer's instructions; — the battery must not exceed 300 Wh; — the battery terminals must be protected from short circuit (by insulating the terminals, e.g. by taping over exposed terminals); — the battery must be protected from damage (e.g. by placing each battery in a protective pouch); and — the battery must be carried in the cabin; <p>iii) a maximum of one spare battery not exceeding 300 Wh or two spare batteries not exceeding 160 Wh each may be carried. Spare batteries must be carried in the cabin.</p> <hr/> <p>Paragraph 4.4.1.9 of DGP-WG/23 report:</p> <hr/> <p><i>Note.— When the lithium battery(ies) remain installed in the mobility aid, there is no Watt-hour limit.</i></p>

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