



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
WORKING GROUP MEETING (DGP-WG/21)**

Virtual Meeting, 24 to 28 May 2021

Agenda Item 2: Managing air-specific safety risks and identifying anomalies

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 2023-2024 Edition

REVISIONS TO PASSENGER PROVISIONS FOR MOBILITY AIDS IN TABLE 8-1

(Presented by D. Brennan)

SUMMARY

This working paper proposes revision to the provisions related to mobility aids powered by batteries in Table 8-1 to include the condition of when the batteries must be removed.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 At the Twenty-Sixth Meeting of the Dangerous Goods Panel (DGP/26, 16 to 27 October 2017), a proposal was made to revise the passenger provisions for battery-powered mobility aids and incorporate all operator responsibilities relating to mobility aids in the storage and loading chapter of Part 7 (see paragraph 2.8.3 of the DGP/26 report). The rationale behind separating certain provisions from Table 8-1 was that they were believed to be beyond passengers' control and could only be applied by the operator. The proposal was agreed with amendments and Part 7;2.13 was introduced into the 2019-2020 Edition of the Technical Instructions.

1.2 One of the provisions that was moved from Table 8-1 to Part 7;2.13 is the condition of when the battery(ies) must be removed. Operators can assist in removing the battery(ies) from the battery-powered mobility aids, but removing the battery(ies) in accordance with the manufacturer's instructions should not be solely considered as the responsibility of the operators, especially when it is not mandatory to provide the instructions to the operators. Furthermore, even in Part 7;2.13, the operator's responsibility is to verify that the battery(ies) are either securely attached to the mobility aid or removed but not necessarily securing the battery(ies) or removing them, and the relevant actions have to take place prior to be able to verify.

1.3 Additionally, it was recognized that the provisions related to removing lithium battery(ies) from the mobility aids were included in Table 8-1 while the same requirements for other battery types were excluded.

1.4 To avoid the potential misunderstanding that the removal of batteries, other than lithium batteries, is beyond the control of the passengers or their companion(s), it is proposed to reproduce and revise the battery(ies) removal criteria in Table 8-1.

1.5 When reviewing Table 8-1, some essential actions related to protecting the battery(ies) were identified to be missing, which are therefore also proposed to be added.

2. **ACTION BY THE DGP-WG**

2.1 The DGP-WG is invited to consider revising Table 8-1 as shown in the appendix to this working paper.

APPENDIX

PROPOSED AMENDMENT TO THE PASSENGER PROVISIONS FOR MOBILITY AIDS IN
PART 8 OF THE TECHNICAL INSTRUCTIONS

Part 8

PROVISIONS CONCERNING
PASSENGERS AND CREW

...

Chapter 1

PROVISIONS FOR DANGEROUS GOODS
CARRIED BY PASSENGERS OR CREW

...

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

	Location		Approval of the operator(s) is required	Restrictions
	Checked baggage	Carry-on baggage		
Dangerous Goods				
Batteries				
...				
≠ 4)	Mobility aids (e.g. wheelchairs) powered by:	Yes	(see e))	Yes
	<ul style="list-style-type: none"> – spillable batteries; – non-spillable wet batteries; – dry batteries; – nickel-metal hydride batteries; or – lithium ion batteries 			<ul style="list-style-type: none"> 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); 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); <u>c) the battery is either:</u> <ul style="list-style-type: none"> <u>i) securely attached to the mobility aid and the electrical circuits are isolated following the manufacturer's instructions; or</u> <u>ii) removed by the user, if the mobility aid is specifically designed to allow it to be, following the manufacturer's instructions;</u> <u>d) the battery terminals must be protected from short circuits (e.g. by being enclosed in a battery container);</u> <u>e) all removed and spare batteries must be protected from damage (e.g. by placing each battery in a strong, rigid packaging);</u>

Dangerous Goods	Location		Approval of the operator(s) is required	Restrictions
	Checked baggage	Carry-on baggage		
				<p><u>f) in the case of a spillable battery, if the mobility aid cannot be loaded, stowed, secured and unloaded always in an upright position, the battery must be removed and carried in a strong, rigid packaging;</u></p> <p>e)g) 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>e)h) 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)i) 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; ii) when the mobility aid does not provide adequate protection to the battery; <p>the battery must be removed in accordance with the manufacturer's instructions;</p> <p>the battery must not exceed 300 Wh;</p> <p>the battery terminals must be protected from short circuit (by insulating the terminals, e.g. by taping over exposed terminals);</p> <p>the battery must be protected from damage (e.g. by placing each battery in a protective pouch); and</p> <p>the battery must be carried in the cabin; <u>where the battery is removed:</u></p> <ul style="list-style-type: none"> — it must not exceed 300 Wh; and — it 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>

— END —