International Civil Aviation Organization

DGP-WG/26-WP/29
14/10/26

WORKING PAPER

DANGEROUS GOODS PANEL (DGP) WORKING GROUP MEETING (DGP-WG/26)

Centurion, South Africa, 26 to 30 October 2026

Agenda Item 4: Managing safety risks posed by the carriage of energy storage devices by air (Ref: Job Card DGP.006)

REPORT OF THE ICAO DGP TASK FORCE ON BATTERY-POWERED MOBILITY AIDS

(Presented by T. Muller)

SUMMARY

This working paper reports on the work of the ICAO DGP Task Force on Battery-Powered Mobility Aids (DGP-TF/MA). It recalls the work undertaken during the previous biennium and the outcome of the thirtieth meeting of the Dangerous Goods Panel (DGP/30), reports on work undertaken following DGP/30, including inter-panel coordination and stakeholder engagement, and distinguishes between the short-term measures developed by the DGP and the longer-term systemic work required to address the vulnerabilities identified through the safety risk assessment.

Action by the DGP-WG is in paragraph 9.

1. INTRODUCTION

1.1 The Dangerous Goods Panel (DGP) has been considering the safety risks associated with the carriage of lithium battery-powered mobility aids aboard aircraft over several meetings. At the 2024 Dangerous Goods Panel Working Group Meeting (DGP-WG/24), the panel discussed the absence of a Watt-hour rating limit for batteries remaining installed in mobility aids, the increasing energy capacity of lithium-ion batteries and differences in the safety approach applied to batteries carried as cargo and those carried under the passenger provisions.

1.2 Following DGP-WG/24, the DGP Task Force on Mobility Aids (DGP-TF/MA) was established to assess the safety risks associated with the air transport of passenger lithium-ion battery-powered mobility aids, determine whether amendments to the existing provisions and guidance were required and report its findings and proposals to the panel.

1.3 During the previous biennium, the DGP-TF/MA developed and implemented a plan of action, undertook a safety risk assessment using bowtie and Systems-Theoretic Process Analysis (STPA)

methods and developed amendments to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284). The panel considered the results of this work at DGP/30.

2. OUTCOME OF DGP/30

2.1 At DGP/30, the panel considered the DGP-TF/MA report, the bowtie analysis and the STPA report (see paragraph 4.2 of the DGP/30 report). The panel strongly supported the outcome of the STPA and the task force's recommended approach. Following extensive discussion on the balance between safety and passenger accessibility rights, an amended version of the proposed changes was agreed with the understanding that the proposed amendments would be vetted with relevant ICAO panels and working groups, stakeholders and particularly representatives of persons with reduced mobility. It was further identified that mobility aid manufacturers should be involved in the future process.

2.2 The panel unanimously supported the amendments to Part 7, with a minor change to replace references to "aeroplane" with "aircraft". The amendments established requirements for operators to set criteria and associated operating procedures for approvals required under Part 8 and to make relevant approval information available to passengers. The panel supported the amendments to Part 8 and developed revisions to Table 8-1 after extensive discussion on the provision of information to operators and on establishing a Watt-hour rating limit.

2.3 On information provision, all members agreed that the operator needed the necessary information. The requirement was therefore amended to focus on the need for the operator to have that information while providing flexibility as to how it was obtained, rather than imposing a rigid advance-arrangement process on the passenger.

2.4 On battery energy capacity, the majority favoured a Watt-hour rating of 300 Wh because it was considered clearer, easier to implement and easier to enforce. The panel recognized that the existing 300 Wh limit for batteries removed from mobility aids and carried in the cabin had originally been established to facilitate the travel needs of persons with reduced mobility and was not based on safety data. The purpose of applying the same value to batteries remaining installed in mobility aids was therefore not to establish a scientific boundary between "safe" and "unsafe", but to arrest continued growth in the energy capacity of batteries powering mobility aids carried on aircraft.

2.5 The panel agreed on an approach under which, when the mobility aid provides adequate protection to the lithium-ion battery or batteries and they remain installed, the battery or batteries would not exceed 300 Wh per mobility aid unless a higher Watt-hour rating is authorized by the operator under the conditions of its existing approval. The operator authorization exception did not extend to batteries removed from the mobility aid and carried in the cabin or to spare batteries. The detailed text developed by DGP/30 is reproduced in Appendix A to this working paper.

2.6 The panel further acknowledged that the short-term amendments represented a first step. It developed Recommendation 4/1 calling for an inter-panel working group involving DGP, the Flight Operations Panel Specific Working Groups on the Safe Carriage of Goods (FLTOPSP-SCGSWG) and Cabin Safety (FLTOPSP-CSSWG) and the Facilitation Panel (FALP), and for proactive engagement with representatives of persons with reduced mobility, mobility aid manufacturers, airline operators and regulatory authorities to address the broader vulnerabilities identified through the safety risk assessment for the longer term.

3. CONSIDERATION BY THE AIR NAVIGATION COMMISSION

3.1 Following DGP/30, the report of the meeting, including Recommendation 4/1 and the outcome of the panel's consideration of battery-powered mobility aids, was reviewed by the Air Navigation Commission (ANC).

3.2 Recommendation 4/1 was supported by the ANC. The recommendation provided the basis for coordinated involvement of DGP, FALP, FLTOPSP-SCGSWG and FLTOPSP-CSSWG to address the vulnerabilities identified through the safety risk assessment and for proactive engagement with representatives of persons with reduced mobility, mobility aid manufacturers, airline operators and regulatory authorities to review the proposed amendments and to address the identified vulnerabilities while ensuring harmonization with passenger accessibility provisions.

4. CONSIDERATION BY THE FACILITATION PANEL

4.1 The subject of battery-powered mobility aids was brought to the attention of FALP in view of the accessibility and facilitation dimensions associated with the carriage of mobility aids and the need identified by DGP/30 for coordinated work. A working paper was presented to the fourteenth meeting of the FALP (FALP/14, 20 to 24 April 2026) which summarized the safety risks identified by DGP, outlined the proposed amendments to the Technical Instructions as a near-term mitigation measure and invited the panel to support the need to address the identified risks, support the proposed amendments as a short-term measure and participate in coordinated inter-panel work (see paragraph 6.2.2 of the FALP/14 Report). In its consideration of the paper, the panel noted the safety risks identified by DGP regarding the carriage of lithium battery-powered mobility aids and agreed to collaborate with DGP and other relevant expert groups from the viewpoint of facilitation.

5. ACTIVITIES OF THE DGP TASK FORCE FOLLOWING DGP/30

5.1 The DGP-TF/MA met at the end of May 2026 to review developments following DGP/30 and to consider the work required during the new biennium. The task force was informed of the discussions within FALP and considered its strategy for both the short-term and longer-term work. For the short term, the task force focused on progressing the amendments developed by DGP/30, stakeholder engagement, particularly with representatives of persons with reduced mobility, and preparation for further consideration of the amendments at the 2026 Dangerous Goods Panel Working Group Meeting (DGP-WG/26).

5.2 For the longer term, the task force recognized that the broader vulnerabilities identified through the safety risk assessment would require coordinated input extending beyond dangerous goods expertise. This work would need to involve DGP, FALP, flight operations and cabin safety expertise, together with mobility aid manufacturers and other relevant stakeholders. The task force therefore identified the establishment of an inter-panel working arrangement as an important next step and recognized the need to develop an appropriate coordinated work programme for the longer-term work.

6. DGP/FLTOPSP/FALP INTER-PANEL WORKING GROUP

6.1 The first meeting of the Inter-Panel Working Group on Battery-Powered Mobility Aids was held virtually on 18 August 2026. Participants included representatives of DGP, FALP, FLTOPSP-SCGSWG and FLTOPSP-CSSWG, industry organizations and the ICAO Secretariat. The meeting was intended as the kick-off meeting of the inter-panel working arrangement. Its objective was to establish a common understanding of the challenges associated with the carriage of battery-powered mobility aids by air and to agree on a practical way forward through coordinated work between DGP, FALP, FLTOPSP-SCGSWG and FLTOPSP-CSSWG.

6.2 The meeting was informed that the short-term work focused on addressing the safety concern associated with increasing battery energy capacities and on stakeholder engagement concerning the amendments developed at DGP/30, particularly engagement with representatives of persons with reduced mobility. Longer-term work would address the broader regulatory, operational and facilitation vulnerabilities identified through the Task Force's safety risk assessment. It was clarified that the DGP task force would continue to support the dangerous goods technical work, including refinement of the proposed amendment related to energy-capacity limits and longer-term mitigation of safety risks, while the inter-panel working structure would provide broader coordination and input from facilitation, flight operations and cabin safety experts.

6.3 Participants discussed stakeholder engagement, communications, safety and technical considerations and testing initiatives. The task force co-rapporteurs reiterated that the safety risk assessment had identified multiple vulnerabilities spanning acceptance and inspection, information and communication, handling and storage, fire detection, fire suppression and fire containment. Participants agreed that cooperation among dangerous goods, facilitation, flight operations and cabin safety experts would be necessary to address these vulnerabilities in the long term.

6.4 The approach proposed and generally supported was to establish a smaller active working group to conduct detailed work and maintain a larger inter-panel group to provide broader oversight and guidance. The active working group was to begin stakeholder engagement activities associated with the proposed energy-capacity amendments immediately, while the DGP task force would continue work on safety-related technical issues. The longer-term work would be developed through a dedicated work programme and ANC job card process.

7. CONSEQUENTIAL AMENDMENTS TO PART 7

7.1 The ANC, during its review of the DGP/30 report, noted that a need for consequential amendments in Part 7 of the Technical Instructions would be necessary. The Secretariat identified a need for such amendments, which are presented in Appendix B.

8. IMPLEMENTATION OF THE SHORT-TERM AMENDMENTS

8.1 DGP/30 agreed the substantive amendments to Part 7, Part 8 and Table 8-1 reproduced in Appendix A, subject to the stakeholder and inter-panel engagement envisaged in Recommendation 4/1. That recommendation contemplated review and refinement of the amendments, as necessary, with a view to incorporating them into the 2027–2028 Edition of the Technical Instructions through an addendum.

DGP-WG/26 is therefore invited to determine the appropriate implementation approach, including whether the amendments should be introduced through an addendum with an applicability date of 1 January 2027.

8.2 In determining the implementation approach, DGP-WG/26 may also wish to consider whether a transitional period following the applicability date would facilitate implementation. Such a period could provide operators and other relevant stakeholders with additional time to adapt procedures, conditions of carriage, information systems and passenger communications, and could provide passengers with reduced mobility time to become familiar with the new provisions and, where necessary, obtain information concerning the batteries installed in their mobility aids. Any transitional arrangements should balance the need for timely implementation of the safety measures with the practical implications for operators and passengers.

9. ACTION BY THE DGP-WG

9.1 The DGP-WG is invited to:

a) note the progress made by the DGP Task Force on Battery-Powered Mobility Aids since DGP/30;

b) agree to the consequential amendments proposed for inclusion in Part 7 presented in Appendix B;

c) determine the implementation approach for the amendments to Part 7, Part 8 and Table 8-1 developed at DGP/30, including their introduction through an addendum, the appropriate applicability date and any transitional arrangements;

d) agree to continue coordinated work between DGP, FALP, FLTOPSP-SCGSWG and FLTOPSP-CSSWG to address the longer-term systemic vulnerabilities identified through the Task Force's safety risk assessment; and

e) agree to progress development of a longer-term coordinated work programme and associated ANC job card for future consideration.

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APPENDIX A

AMENDMENTS TO THE TECHNICAL INSTRUCTIONS DEVELOPED AT DGP/30

Part 7

OPERATOR'S RESPONSIBILITIES

Chapter 5

PROVISIONS CONCERNING PASSENGERS AND CREW

5.1 DANGEROUS GOODS PERMITTED WITH THE APPROVAL OF THE OPERATOR

5.1.1 The operator must establish criteria and associated operating procedures for approving a passenger or crew member to safely carry dangerous goods that are identified by Part 8 of the Technical Instructions as only being permitted with the approval of the operator. The criteria and associated operating procedures must ensure, to a reasonable certainty, that in the event of a fire involving the dangerous goods, it can be detected and sufficiently suppressed or contained until the aircraft makes a safe landing. The adequacy of the procedures must be demonstrated through a safety risk assessment conducted in accordance with the safety management system.

Note.— Dangerous goods carried on an aircraft as checked baggage are subject to the specific safety risk assessment on the transport of items in the cargo compartment required by Annex 6, Part I, Chapter 15.

5.~~1~~2 INFORMATION TO PASSENGERS

5.2.1 The operator must establish the requirements for passengers seeking approval for the transport of dangerous goods when so required by Table 8-1 within the operator's conditions of carriage.

~~5.1.1~~5.2.2 Operators must inform passengers about dangerous goods that passengers are forbidden to transport aboard an aircraft. The notification system must be described in their operations manual and/or other appropriate manuals. If the ticket purchase and/or boarding pass issuance can be completed by a passenger without the involvement of another person,
the notification system must include an acknowledgement by the passenger of having been presented with the information. The information must be provided to passengers:

a) at the point of ticket purchase or, if this is not practical, made available in another manner to passengers prior to boarding pass issuance; and

b) at boarding pass issuance, or when no boarding pass is issued, prior to boarding the aircraft.

Note.— The information may be provided in text or pictorial form, electronically, or verbally, as described in the operator's manuals.

~~5.1.2~~5.2.3 An operator or the operator's handling agent and the airport operator must ensure that information on the types of dangerous goods which passengers are forbidden to transport aboard an aircraft is communicated effectively to them. This information must be presented at each of the places at an airport where tickets are issued, boarding passes are issued, passenger baggage is dropped off and aircraft boarding areas are maintained, and at any other location where passengers are issued boarding passes and/or checked baggage is accepted. This information must include visual examples of dangerous goods forbidden from transport aboard an aircraft.

~~5.1.3~~5.2.4 An operator, of passenger aircraft, should have information on those dangerous goods which may be carried by passengers in accordance with 8;1.1.2 and on the process for seeking the operator's approval for carriage when so required by Table 8-1 made available prior to the boarding pass issuance process on their websites or other sources of information.

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Part 8

PROVISIONS CONCERNING PASSENGERS AND CREW

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Chapter 1

PROVISIONS FOR DANGEROUS GOODS CARRIED BY PASSENGERS AND CREW

Parts of this Chapter are affected by State Variations BR 10, MO 3, US 15, VE 9, VE 10; see Table A-1

1.1 DANGEROUS GOODS CARRIED BY PASSENGERS AND CREW

1.1.1 Passengers and crew are forbidden to carry dangerous goods either as or in carry-on baggage, checked baggage or on their person unless the dangerous goods are:

a) permitted in accordance with Table 8-1; ~~and~~

b) for personal use only~~.~~; and

c) approved for carriage by the passenger or crew member by the operator, when such an approval is required by Table 8-1.

Note.— The process for assessing and granting the approval of the operator is to be based upon considerations related to flight safety.

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1.1.2 Except for the criteria for granting operator approval required by 7;5.1; the loading requirements of 7;2.13; information to be provided to employees required by 7;4.2; and 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;

b) contained in baggage that has been separated from its owner during transit (for example, mishandled baggage such as lost baggage or improperly routed baggage); or

c) contained within items of excess baggage sent as cargo as permitted by 1;1.1.5.1 h).

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

Dangerous Goods	*Location*		*Approval of the operator(s) is required*	*Restrictions*
	Checked baggage	*Carry-on baggage*		
4) Mobility aids (e.g. wheelchairs) powered by: – spillable batteries; – non-spillable wet batteries; – dry batteries; – nickel-metal hydride batteries; or – lithium ion batteries	Yes	(see e))	Yes	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)~~information must be provided to the operator(s) in accordance with 7;5.2; c) in the case of a dry battery or nickel-metal hydride battery, each battery must comply with Special Provision A123 or A199, respectively; d) in the case of a non-spillable wet battery: i) each battery must comply with Special Provision A67; and ii) a maximum of one spare battery may be carried per passenger; e) in the case of a lithium ion battery: i) each battery must be of a type which meets the requirements of each test in the *UN Manual of Tests and Criteria*, Part III, subsection 38.3; ii) when the mobility aid provides adequate protection to the battery(ies) and they remain installed, the battery(ies) must not exceed a Watt-hour rating of 300 Wh per mobility aid, unless a higher Watt-hour rating is authorized by the operator under the conditions of its approval in accordance with 7;5.2; iii) when the mobility aid does not provide adequate protection to the battery(ies): — the battery(ies) must be removed in accordance with the manufacturer's instructions; — the battery(ies) must not exceed a Watt-hour rating of 300 Wh per mobility aid; — the battery terminals must be protected from short circuit (by insulating the terminals, e.g. by taping over exposed terminals); — the battery(ies) must be protected from damage (e.g. by placing each battery in a protective pouch); and — the battery(ies) must be carried in the cabin; and ~~iii~~iv) a maximum of one spare set of battery(ies) with a total Watt-hour rating not exceeding 300 Wh ~~or two spare batteries not exceeding 160 Wh each~~ may be carried. Spare batteries must be carried in the cabin. ~~*Note. — When the lithium battery(ies) remain installed in the mobility aid, there is no Watt-hour limit.*~~

APPENDIX B

CONSEQUENTIAL AMENDMENTS TO PART 7

Part 7

OPERATOR'S RESPONSIBILITIES

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Chapter 2

STORAGE, LOADING AND STOWAGE

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2.13 LOADING OF BATTERY-POWERED MOBILITY AIDS CARRIED UNDER THE PROVISIONS OF PART 8

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2.13.3 Loading of mobility aids powered by lithium ion batteries

2.13.3.1 An operator must secure, by use of straps, tie-downs or other restraint devices, a battery-powered mobility aid with installed battery(ies). The mobility aid, the battery(ies), electrical cabling and controls must be protected from damage including by the movement of baggage, mail or cargo.

2.13.3.2 An operator must verify that:

a) the battery terminals are protected from short circuits (such as by being enclosed within a battery container);

b) the battery(ies) is either:

1) adequately protected against damage by the design of the mobility aid and securely attached to the mobility aid. The electrical circuits must be isolated following the manufacturer's instructions; or

2) removed from the mobility aid, following the manufacturer's instructions; and

c) ~~each removed~~ the battery(ies) does not exceed a total Watt-hour rating of 300 Wh. A maximum of one spare set of battery(ies) with a total Watt-hour rating not exceeding 300 Wh ~~or two spare batteries each not exceeding 160 Wh~~ may be carried.

Note.— ~~When the lithium battery(ies) remain installed in the mobility aid, there is no Watt-hour limit.~~ The battery(ies) may have a higher Watt-hour rating when they are securely attached to the mobility aid if this was authorized by the operator under the conditions of its approval in accordance with 7;5.2.

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APPENDIX C

APPROVED ELEMENT ON ANC JOB CARD FOR ELECTRONIC STORAGE DEVICES AND PROPOSED NEW JOB CARD TO ADDRESS CHALLENGES LONG TERM

DGP.003.06	Mitigating safety risks posed by the carriage of lithium batteries by air
Source	DGP/25, Air Navigation Commission (200-13, 201-5 and 6), DGP/30
Problem Statement	The safety risks posed by uncontained thermal runaway of lithium batteries transported as cargo or carried by passengers on aircraft must be sufficiently mitigated.
Specific Details	Lithium batteries are capable of thermal runaway through cell defect, cell damage (including penetration, surge from outside), heat, rapid discharge or overcharging. The degree of risk is dependent on the battery chemistry, size, manufacturer, packaging, the total energy density of batteries loaded in a cargo compartment, and the cargo compartment configuration. These risks are compounded by the substantial increase in the number of batteries being transported (currently billions per year), increased energy density and upward trends for both. The FAA Office of Security and Hazardous Materials Safety reported 171 air incidents between 20 March 1991 and 15 January 2016 involving batteries and battery-powered devices (the majority of which were lithium) carried as cargo or in baggage involving smoke, fire, extreme heat or explosion. The United Arab Emirate's General Civil Aviation Authority (GCAA) final report on the fatal crash of a UPS cargo plane on 3 September 2010 near Dubai links the accident to lithium batteries and makes recommendations related to lithium batteries. Two other major aircraft accidents where lithium battery cargo shipments were implicated but not proven to be the source of the fire are Asiana Airlines 747 cargo flight near South Korea on 28 July 28 2011 and a UPS DC-8 cargo flight in Philadelphia, PA on 7 February 2006. The United States National Transportation Safety Board NTSB Issued Safety Recommendations About Lithium Batteries as Cargo on Aircraft (A-16-001 and -002) following the publication of the Report on the Asiana Airlines accident on 9 February 2016 and made safety recommendations related to lithium batteries and flammable liquids. The risks are compounded by non-compliance, both deliberate (to avoid extra costs and liability (no declaration signed)) and unintentional (complicated regulations). Deliberate non-compliance needs to be addressed through oversight, including enforcement when necessary. Oversight, however, is often limited for entities beyond CAA's authority, e.g. manufacturers. Consideration needs to be given to increasing the accountability of manufacturers for the safe design and manufacture of cells and batteries and their preparation for shipment"". There are also limitations for some CAAs with respect to oversight authority over shippers and freight forwarders. Unintentional non-compliance needs to be addressed through education, outreach, and simplified provisions. The ANC recommended (ANC Min. 201-5 and 6) that the carriage of lithium ion batteries as cargo on passenger aircraft be forbidden until controls are in place which establish an acceptable level of safety. Controls needed include: a) Performance-based packaging standards and any additional controls necessary to mitigate safety risks to an acceptable level; and b) Standards and supporting guidance material for operators to conduct safety risk assessments on the carriage of all dangerous goods, including lithium batteries The potential for increased non-compliance if batteries are forbidden for transport on passenger aircraft needs to be addressed. DGP is a supporting expert group for job card FLTOPSP.043.01. At the DGP/30 meeting, the panel discussed specifically the safety concerns related to lithium battery powered mobility aids carried on board of aircraft. The panel recommended (see Recommendation 4/1 b) 1) of the DGP/30 report) to address the immediate safety concerns through an amendment to the Technical Instructions (TI) at the earliest possibility (an addendum to the 2027-2028 edition of the TI). A corresponding WPE has therefore been included. Further work will be undertaken in collaboration with other expert groups to address the vulnerabilities identified through the STPA safety risk assessment in a more holistic manner (Recommendation 4/1 b) 2).
GANP/GASP Link	
Expected Benefits	Safe transport of lithium batteries by air on both passenger and cargo aircraft.
Reference	AN-WP/8817 (ANC Min 195-4), AN-WP/8860 (ANC Min 196-6), AN-WP/9034 (ANC Min 200-13), AN-WP/9034 (ANC Min 200-13), AN-WP/9021 and Addendum (ANC Min 201-5 and 6), DGP/25 Report, Agenda Item 5

Documents	FAA battery incident chart: https://www.faa.gov/hazmat/resources/lithium_batteries/media/Battery_incident_chart.pdf National Transportation Safety Board accident report, Inflight Cargo Fire UPS 1307, Philadelphia, Pennsylvania February 7, 2006 www.ntsb.gov/investigations/AccidentReports/Reports/AAR0707.pdf UAE GCAA final report on of UPS cargo plane on 3 September 2010 near Dubai: http://www.gcaa.gov.ae/en/ePublication/admin/iradmin/Lists/Incidents%20Investigation%20Reports/Attachments/40/2010-2010%20-%20Final%20Report%20-%20Boeing%20747-44AF%20-%20N571UP%20-%20Report%2013%202010.pdf Accident summary and link to Aviation and Railway Accident Investigation Board (ARAIB), Republic of Korea Aircraft Accident Report — Asiana Airlines Boeing 747-400F, HL7604: https://www.skybrary.aero/index.php/B744,_en-route,_East_China_Sea,_2011 National Transportation Safety Board Washington, DC 20594 Safety Recommendation http://www.ntsb.gov/safety/safety-recs/RecLetters/A-16-001-002.pdf
Primary Expert Group:	Dangerous Goods Panel (DGP)

	WPE No.	Document Affected or Actions Needed	Description of Amendment proposal or Action	Supporting Expert Group	Status	Expected dates:		
						Delivery	Effective	Applicability
✓	9413	Tech Ins for the ST of DG by Air (Doc 9284)	Additional operational controls to mitigate aviation-specific safety risks posed by lithium batteries including: - Any information defined via job card FLTOPSP.043 as necessary to the conduct of safety risk assessments for carriage of cargo including dangerous goods. - A mechanism to ensure transparency of all shipments, including those not subject to full regulation (Section II batteries)	FLTOPSP	Completed	Q4 2021	Jan 2023	Jan 2023
✓	9414	Tech Ins for the ST of DG by Air (Doc 9284)	Provisions to mitigate safety risks posed by lithium batteries packed with or contained in equipment, including monitoring of exceptions (Section II batteries)	FLTOPSP	Completed	Q4 2023	Jan 2025	Jan 2025
✓	10573	Supplement to the Tech Instructions (Doc 9284SU)	Guidance material to assist States in considering the granting of approvals to transport lithium ion batteries at higher states of charge		Completed	Q1 2024	Jan 2025	Jan 2025
✓	10870	Tech Ins for the ST of DG by Air (Doc 9284)	Engage with relevant stakeholders to review, refine and provide a rationale for, as necessary, amendments related to a Watt hour limitation for the carriage of lithium battery powered mobility aids on board of aircraft	FALP FLTOPSP-SCGSWG FLTOPSP-CSSWG	On-schedule	Q4 2027	Mar 2028	Mar 2028
✓	10574	Tech Ins for the ST of DG by Air (Doc 9284)	Assess need for additional mitigation measures based on evolving technology and new data	FLTOPSP-SCGSWG FLTOPSP-CSSWG	Re-scheduled	Q4 2027	Jan 2029	Jan 2029

✓	9412	Tech Ins for the ST of DG by Air (Doc 9284)	Performance-based packaging standard for lithium batteries	AIRP	Re-scheduled	Q4 2029	Jan 2031	Jan 2031
✓	9416	Tech Ins for the ST of DG by Air (Doc 9284)	Simplified provisions to facilitate full compliance		Re-scheduled	Q4 2029	Jan 2031	Jan 2031
✓	9419	Tech Ins for the ST of DG by Air (Doc 9284)	Classification provisions which provide a mechanism to identify and communicate the hazards associated with specific batteries shipped for greater granularity with respect to classification of lithium batteries developed through coordination with the United Nations Economic and Social Council's (ECOSOC)) Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals		Re-scheduled	Q4 2029	Jan 2031	Jan 2031

For Information purposes (to be completed by the Secretariat)

GLOBAL IMPLEMENTATION ACTIONS

Status:	**Priority:**	**Initial Issue Date:**	**Date Approved by ANC:**	**Session / Meeting:**
Approved	High	02 June 2016	26 March 2026	231-8

RATIONALE

- AN-WP/9905.DP1 and SRP PPT
- AN-WP/9722
- AN-WP/9561: Paragraph 2.3
- Minor update to Priority: Approved by ANC on 4 Nov 2021 based on AN-WP/9538 DP2 (AN-Min 218-7)
- AN-WP/9405: Some contribution to completion of WPEs on job card, but all still on-going. Most dependent on completion of performance based standards (WPE9412 (SAE)) and improved hazard communication (WPE 9419 (UN working group)). WPEs 9418 and 9417 will be addressed through DGP.005.
- AN-WP/9262: WPE No. 9415 has been superseded by new job card on lithium batteries carried by passengers, crew and the operator

DGP.009.01	Safe carriage of battery-powered mobility aids
Source	DGP/30 Recommendation 4/1
Problem Statement	Safety risks associated with the carriage of battery-powered mobility aids on aircraft must be mitigated while supporting the travel needs of persons with disabilities and reduced mobility
Specific Details	Lithium battery-powered mobility aids provide essential independence and mobility for persons with disabilities or reduced mobility, including when travelling by air. For many passengers, these devices are not optional equipment, but an integral part of daily life and a prerequisite for accessible travel. However, the lithium batteries that power them can pose risks to aviation safety, particularly if they are poorly manufactured, damaged, improperly handled or involved in a thermal runaway event. The level of risk may increase as battery energy capacity increases. New mobility aids are being developed and manufactured with larger and more powerful batteries to support improved performance, longer range and greater user independence. While these developments provide significant benefits for persons with disabilities or reduced mobility, they also introduce additional safety considerations for air transport, particularly in relation to the potential severity of a battery fire or thermal runaway event on board an aircraft. Operators face a difficult balancing challenge: they must manage aviation safety risks associated with lithium battery-powered mobility aids while respecting the travel needs and rights of persons with disabilities or reduced mobility. They have introduced various risk mitigation measures, resulting in inconsistent requirements worldwide that can create uncertainty and additional barriers for passengers travelling with battery-powered mobility aids. These challenges led the Dangerous Goods Panel to conduct a safety risk assessment before considering how they could be addressed. The safety risk assessment identified several vulnerabilities in the current system for the safe carriage of battery-powered mobility aids on aircraft. These include acceptance and inspection procedures, communication and operator inspection limitations, mobility aid design, handling and stowage, and fire detection, suppression and protection limitations. Addressing these vulnerabilities, while respecting the needs of persons with disabilities or reduced mobility, will require multidisciplinary expertise and engagement with external stakeholders, including mobility aid manufacturers and representatives of persons with disabilities or reduced mobility. To support this work, the Air Navigation Commission, based on Recommendation 4/1 from the thirtieth meeting of the Dangerous Goods Panel, supported the establishment of an inter-panel working group involving the DGP, the FLTOPSP Safe Carriage of Goods Specific Working Group, the FLTOPSP Cabin Safety Specific Working Group and the Facilitation Panel to address the vulnerabilities identified through the assessment, as well as the needs of passengers with reduced mobility.
GANP/GASP Link	GASP Goal 1 Target 1.3
Expected Benefits	Improved safety, consistency and accessibility in the air transport of battery-powered mobility aids.
Reference Documents	DGP/30 Report, Agenda Item 4
Primary Expert Group:	Dangerous Goods Panel (DGP)

	WPE No.	Document Affected or Actions Needed	Description of Amendment proposal or Action	Supporting Expert Group	Status	Expected dates:		
						Delivery	Effective	Applicability
✓	10874	Actions	Review findings from safety risk assessment contained in DGP/30 report and consider measures that could be implemented to mitigate identified vulnerabilities	FLTOPSP-SCGSWG FLTOPSP-CSSWG FALP	On-schedule	Q4 2026	-	
✓	10875	Actions	Engage with mobility aid manufacturers and representatives of persons with disabilities or reduced mobility to identify limitations that might impact choice of mitigation measures	FLTOPSP-SCGSWG FLTOPSP-CSSWG FALP	On-schedule	Q1 2027	-	
✓	10875	Technical Instructions	Incorporate mitigating measures in the Technical Instructions	FLTOPSP-SCGSWG FLTOPSP-CSSWG FALP	On-schedule	Q4 2027	Jan 2029	Jan 2029
For Information purposes (to be completed by the Secretariat)								
GLOBAL IMPLEMENTATION ACTIONS								

Status:	**Priority:**	**Initial Issue Date:**	**Date Approved by ANC:**	**Session / Meeting:**
	To be determined			

RATIONALE

— END —