



## DGCA Aviation Safety Circular (2026-01)

***Subject: International restrictions on carriage of lithium batteries on board aircraft (Passengers/Crew)***

**Effective Date:** 01-Feb-2026

**Distribution:** All Stakeholders

### **1. Purpose**

To standardize and enforce the international passenger/crew restrictions for carriage of:

- Portable Electronic Devices (PED)
- Portable Medical Electronic Devices (PMED)
- Spare lithium batteries (including power banks)

These restrictions are based on battery Watt-hour (Wh) rating (lithium-ion) or lithium metal content (g) (non-rechargeable).

***Note:*** Lithium batteries are not 'banned' outright. Carriage is permitted only under the conditions and limits in this circular, and spare batteries/power bank are prohibited in checked baggage.

### **2. Applicability**

This circular applies to all:

- AOC holders / air operators (passenger and cargo operations where passenger baggage is handled).
- Check-in, boarding gate, ground handling, security screening support staff.
- Cabin crew and load control staff (as applicable to passenger baggage).

### **3. Legal/Regulatory Basis**

This Circular is issued pursuant to DGCA's regulatory/oversight responsibilities.



#### 4. References

- ICAO, Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284)
- FAA, “Lithium Batteries in Baggage” (24-Sep-2025) – passenger baggage safety summary.
- IATA, passenger guidance (PED/PMED/spares; Wh/g thresholds; smart baggage; e-cigarettes).

#### 5. Definitions

- PED: “Portable Electronic Device (e.g., phone, tablet, laptop, camera)”.
- PMED: “Portable Medical Electronic Device (e.g., medically required portable equipment)”.
- Spare battery: “A battery not installed in equipment, including loose batteries and removable battery packs”.
- Power bank: “A device whose primary purpose is to supply power to another device; treated as a spare battery”.
- Battery rating (Wh vs Ah) – how to determine Wh:

For passenger provisions, lithium battery limits are expressed in Watt-hours (Wh) (lithium-ion) or lithium content (g) (lithium metal). Many consumer products display capacity in mAh/Ah. Where Wh is not shown, it shall be calculated as:

- $Wh = Ah \times V$
- $Wh = (mAh \times V) \div 1000$

Examples:

- 10,000 mAh at 3.7 V  $\rightarrow (10,000 \times 3.7) \div 1000 = 37 \text{ Wh} (\leq 100 \text{ Wh})$
- 20,000 mAh at 3.7 V  $\rightarrow (20,000 \times 3.7) \div 1000 = 74 \text{ Wh} (\leq 100 \text{ Wh})$

**Note 1:** If the battery voltage (V) is not marked, staff shall treat the item as “rating unknown” and apply the operator’s approval / escalation process.

**Note 2:** Important: Many powers banks display mAh based on internal cell voltage (~3.6–3.7V). Do not use the USB output voltage (e.g., 5V) unless the manufacturer explicitly states the rating is at 5V.”



## 6. Mandatory passenger/crew carriage rules (to be enforced):

### 6.1 Carriage conditions by battery size (table):

(Wh) rating or lithium metal content	Configuration	Carry-on baggage	baggage	Operator approval
$\leq 100 \text{ Wh} / \leq 2 \text{ g lithium metal}$	In equipment (PED or PMED)	Yes (max 15 PED/PMED (1))	Yes	No
	Spare battery(ies)	Yes (max 20 spare batteries (2))	No	No
$> 100 \text{ Wh to} \leq 160 \text{ Wh}$	In equipment (PED or PMED)	Yes	Yes	Yes
	Spare battery(ies)	Yes (max 2 spare batteries)	No	Yes
$> 160 \text{ Wh}$	<b>Must be prepared and carried as cargo in accordance with the Dangerous Goods Regulations</b>			
<i>(Lithium metal &gt; 2 g to <math>\leq 8 \text{ g}</math> (PMED only)</i>	In equipment (PED or PMED)	Yes	Yes	Yes
	Spare batteries for PMED	Yes (max 2 spare batteries)	No	Yes

- (1) Each person is limited to a maximum of 15 PED. The operator may approve the carriage of more than 15 PED).
- (2) Each person is limited to a maximum of 20 spare batteries of any type. The operator may approve the carriage of more than 20 batteries).

## 7. Specific prohibitions and handling requirements

### 7.1 Devices in checked baggage (when permitted)

Devices containing lithium batteries (e.g., phones, tablets, laptops, cameras) should be kept in accessible carry-on baggage whenever practicable.

If a PED is placed in checked baggage:

- Protect from damage and prevent unintentional activation .
- Must be completely switched off (not sleep/hibernation).



### 7.2 Spare batteries (including power banks)

- Spares must be individually protected against short circuit (original packaging or insulated terminals; e.g., tape / separate bag / pouch).
- Carry-on only (spares are not permitted in checked baggage).
- If carry-on baggage is checked at the gate or planeside, all spare lithium batteries, portable rechargers/power banks, and electronic cigarettes/vaping devices shall be removed from the baggage and kept with the passenger in the aircraft cabin.
- Power banks are considered spare batteries and are restricted to carry-on baggage only.
- Damaged, defective, leaking, swollen, or recalled lithium batteries, or recalled devices containing lithium batteries, **shall not** be carried in either carry-on or checked baggage.

### 7.3 Electronic cigarettes / personal vaporizers.

Must be carried in carry-on baggage only and should remain accessible. Recharging on board is not permitted; measures must be taken to prevent accidental activation and to protect the device/battery from damage and short circuits.

### 7.4 Smart luggage (baggage with integrated lithium batteries):

If the baggage has a lithium battery (other than button cells):

- If it will be checked: battery must be removed and carried in cabin; OR the baggage must be carried in cabin .
- Forbidden if the battery is designed to charge other devices and cannot be removed.

## 8. Required operator actions

Each operator shall:

1. Implement check-in and gate procedures to prevent spare batteries (including power banks) and e-cigarettes/vapes from being placed in checked baggage, including gate/planeside checked bags (items must be removed and kept in the cabin).
2. Ensure staff are briefed to deny carriage of damaged/defective/recalled lithium batteries and recalled devices containing lithium batteries.
3. Include the Wh / g thresholds and the operator-approval cases in passenger communications (website, pre-flight messages, counter signage) .



4. Passenger communications shall instruct passengers to keep battery-powered devices in accessible carry-on baggage where practicable and to keep spares/power banks/e-cigs accessible for rapid response in case of smoke/fire.
5. Ensure staff guidance covers: device shutdown requirements, spare battery protection, e-cigarette rules, and smart luggage battery removability.
6. Operators shall provide check-in/gate staff with a simple Wh conversion job-aid (mAh/Ah to Wh) and an escalation point for “unknown rating” items.

/ DGCA President

**Abdullah F. Alrajhi**

Acting / Deputy Director General  
for Aviation Safety, Air Transport & Aviation Security