

U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration 1200 New Jersey Avenue, SE Washington, DC 20590

September 30, 2025

Eva Glimsche ABS All Battery Service GmbH Sperberstr. 50e – 81827 Munich, Germany

Reference No. 25-0069

Dear Ms. Glimsche:

This letter is in response to your May 16, 2025 email requesting clarification of international regulations applicable to the state of charge requirements for electric vehicles as it relates to the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the new state of charge requirements for electronic vehicles. Specifically, you reference packing instruction 952 of the International Air Transportation Association for Dangerous Goods Regulations (IATA DGR) and ask, for vehicles with batteries > 100Wh subject to the special provision, if only "drive batteries" (*i.e.*, drive train batteries powering the electric motor) are required to meet the state of charge requirement. Furthermore, you ask how to determine or manipulate the state of charge if the requirement applies to all batteries on the vehicle (*e.g.*, a powered tablet that is part of the vehicle entertainment system).

Your email references the IATA DGR. Please note that PHMSA does not officially recognize the IATA DGR for purposes of transporting hazardous materials. Therefore, PHMSA cannot offer an interpretation of the IATA DGR. However, § 171.22 of the HMR authorizes use of the International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI), provided shipments offered under the ICAO TI conform to the applicable requirements of §§ 171.23 and 171.24. Though not currently incorporated by reference in the HMR, the 2025-2026 ICAO TI has provisions in its own Packing Instruction 952 similar to IATA DGR Packing Instruction 952, which both apply to battery-powered vehicles. In accordance with this edition of the ICAO TI, beginning January 1, 2026, the state of charge (or indicated battery capacity) provision, as it applies to lithium and sodium ion batteries in vehicles, is required only of those batteries with a Watt-hour (Wh) rating in excess of 100 Wh.

The ICAO TI indicates that batteries not more than 100 Wh should (*i.e.*, is recommended) meet the state of charge or indicated battery capacity provision. Furthermore, it is the opinion of this Office that this state of charge requirement for vehicles only applies to the drive train (*i.e.*, motive power) batteries that power the electric motor.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

Dirk DerKinderen

Chief, Standards and Development Branch

Standards and Rulemaking Division

 From:
 INFOCNTR (PHMSA)

 To:
 Baker, Yul (PHMSA)

 Cc:
 Hazmat Interps

Subject: FW: SoC for vehicles in air transport from 2026 onwards [Interpretation Request]

Date: Friday, May 16, 2025 13:35:41

Hi Yul,

Please see the below interpretation request.

Let me know if you need anything,

-Breanna

From: Eva Glimsche <eva.glimsche@lithium-battery-service.de>

Sent: Friday, May 16, 2025 7:27 AM

To: INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov> **Subject:** SoC for vehicles in air transport from 2026 onwards

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dear PHMSA team,

today we received the following questions from one of our customers:

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Hi DG Team,

just received the following request from a customer:

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We would like to tap into your expertise:

We have been looking closely at the new 'state of charge' requirement in the current IATA DGR for VA952.

We have the following understanding and questions:

- From 1 January 2026: Vehicles with batteries >100Wh must meet the charge status requirement (VA952, section (b) 4. (ii) (a)).
- o Are we correct in understanding that this refers exclusively to drive batteries?
- o If so, does this mean that section (b) 4. (ii) (b) refers exclusively to vehicles with drive batteries <=100Wh? This would then only apply to 'toy vehicles'.
- o If not, this would mean that all installed batteries >100Wh must meet the charge

status requirement. This raises the following question for us:

- § The state of charge of some batteries cannot be read/determined and cannot be manipulated from the outside, as the state of charge is controlled by control units (e.g. battery management for 12V/48V on-board batteries). How should we proceed in this case?
- o If not, would this also mean that all installed batteries <=100Wh should meet the charge status requirement? This raises the following question for us:
- § The charge status of some batteries cannot always be determined or manipulated from outside (e.g. the tablet is automatically charged in the rear seat entertainment system when it is in the holder). How should this be handled?

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I would say that the SoC reduction is for the traction battery only. Are you of the same opinion?

Please provide me with a written interpretation.

Looking forward to hearing from you.

Best regards,

Eva

Eva Glimsche
ABS All Battery Service GmbH
Sperberstr. 50e – 81827 Munich - Germany
Office +49 - 89 - 43579624
Mobile +49 - 171 – 4958177
eva.glimsche@lithium-battery-service.com
www.lithium-battery-service.com

CEO: Eva Glimsche and Jürgen Werny

Registered office: Munich

Commercial Register: Amtsgericht München (district court Munich) HRB 296612

Social Media

We sure enjoy keeping in touch! You can do so via Facebook, Linkedin, Pinterest, Tumblr, Twitter or Xing.

Newsletter

You want to receive updates on new and changed regulations on the transport of lithium cells and batteries?

Via this link you can sign up for our newsletter service:

https://www.lithium-batterie-service.de/en/newsletter/

Here you can meet us Online:

https://www.lithium-batterie-service.de/en/learning-opportunities/