

(English version)

**Question for written answer E-002584/26
to the Commission
Manuela Ripa (PPE)
(23 June 2026)**

Subject: Harmonised charging and battery systems for light means of transport (LMTs)

The use of LMTs, such as e-bikes and e-scooters, is steadily increasing across the EU. However, market fragmentation caused by a multitude of manufacturer-specific charging ports, chargers and battery systems hinders interoperability, imposes unnecessary costs on consumers and generates avoidable electronic waste.

Taking into account Recital 41 of Regulation (EU) 2023/1542 ⁽¹⁾ concerning batteries and waste batteries (Batteries Regulation), the interoperability of chargers is a key instrument for waste prevention. Recital 41 states that the regulation should require the Commission to assess how harmonised standards can be introduced for common chargers, specifically for LMT batteries.

As no concrete proposals have been submitted so far, we ask the Commission the following questions:

1. Since the entry into force of the Batteries Regulation, what concrete steps has the Commission taken to assess or prepare harmonised charging or battery systems for LMT batteries?
2. Does the Commission intend to introduce EU-wide mandatory standards or interoperability requirements for the charging interfaces of light electric vehicles, and if so, what is the expected timeline?
3. How does the Commission assess the impact of non-interoperable charging and battery systems on e-waste generation, consumer costs, and the development of public charging infrastructure across the EU?

Submitted: 23.6.2026

**Answer given by Ms Roswall on behalf of the European Commission
(1 September 2026)**

As the Commission stated in its reply to Written Question E-004909/25 ⁽¹⁾, it has been monitoring the situation of charging interoperability of light means of transport (LMT) since the adoption of the Batteries Regulation ⁽²⁾.

Following an obligation in Article 94(6) of the regulation, a study ⁽³⁾ on this topic was published in 2024. The study revealed that while the LMT market is fragmented in terms of charging interoperability, there are different use cases which require different approaches.

At the same time, the study acknowledged that different chargers to operate rechargeable LMT are associated with environmental and social costs from resource consumption during production and waste generation at end of life.

In recent years, a number of industry-led initiatives have been emerging which hold the potential to improve the interoperability of LMT across different brands.

These include solutions based on the market implementation of open international charging standards, although with different business models. The uptake of these solutions is promising but so far limited.

At this stage, considering ongoing market developments, it would be premature to launch regulatory and/or standardisation activities around the charging interoperability of LMTs, including the potential mandate of a single charging plug interface.

The Commission services will continue to monitor the market situation closely.

¹ Regulation (EU) 2023/1542 of the European Parliament and of the Council of 12 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC (OJ L 191, 28.7.2023, p. 1, ELI: <http://data.europa.eu/eli/reg/2023/1542/oj>).

⁽¹⁾ https://www.europarl.europa.eu/doceo/document/E-10-2025-004909-ASW_EN.html.

⁽²⁾ Regulation (EU) 2023/1542 of the European Parliament and of the Council of 12 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC, OJ L 191, 28.7.2023, p. 1-117.

⁽³⁾ <https://op.europa.eu/en/publication-detail/-/publication/0f8e257e-8526-11ef-a67d-01aa75ed71a1/language-en>.