

(English version)

**Question for written answer E-002923/24
to the Commission
Ondřej Krutílek (ECR)
(12 December 2024)**

Subject: Connectors for e-bike chargers

Manufacturers and importers of e-bikes and other light electric vehicles (LEVs), such as scooters and unicycles, are supplying EU consumers with dozens of types of connectors for chargers for lithium batteries with identical voltages. A number of chargers with the same function are therefore entering the market that are not mutually compatible.

Most e-bikes are equipped with a charger that does not meet the safety standards laid down in technical standard EN 50604-1:2016/A1:2021, requiring two-way communication between the battery electronics and the charger.

In 2023, the International Electrotechnical Commission (IEC) drafted two technical standards for LEVs to ensure safe charging through communication between the charger and the battery (IEC TS 62196-4:2022 and IEC TS 61851-3-4:2023). The application of both standards, binding from September 2025, will be conditional on the conformity of the manufactured e-bikes with the EN 15194:2017/A1:2023 standard for electrically power assisted cycles (EPACs).

Unfortunately, the July 2024 report entitled Assessment of harmonised standards for ‘common chargers’ (Daniel Hinchliffe and others) does not offer sufficient answers in my opinion.

1. What steps will the Commission take to ensure a smooth transition to these new standards?
2. Does the Commission believe that the new standards will allow the market to move naturally towards partial or full harmonisation of charging connector types, bringing benefits both for consumers and the environment?
3. Does the Commission plan to raise awareness of this issue among European manufacturers, who produce the majority of e-bikes sold in the EU?

Submitted: 12.12.2024

**Answer given by Ms Roswall on behalf of the European Commission
(11 February 2025)**

Electrically powered assisted cycles (EPACs) are subject to the Machinery Directive ⁽¹⁾ as regards their safety. The harmonised standard EN 15194:2017+A1:2023 on EPACs was cited in the Official Journal on 15 May 2024 ⁽²⁾ with a transitional period of 24 months, to allow the industry to gradually implement the new provisions including those on interoperability.

Manufacturers of e-bikes will have to respect the harmonised standard in order to benefit from the presumption of conformity. Although harmonised standards are not mandatory, the presumption of conformity is a powerful incentive encouraging manufacturers to comply with them.

With respect to the harmonisation of charging connector types for e-bikes and other light electric vehicles, the standards address the communication aspects between vehicles and the electricity grid, but are not sufficient to ensure the physical interoperability between charging points and vehicle connectors.

Following Article 94(6) of the Batteries Regulation ⁽³⁾, the Commission conducted in 2024 a study ⁽⁴⁾ ‘Assessment of harmonised standards for “common chargers” for rechargeable batteries powering light means of transport and specific categories of electrical and electronic equipment covered by Directive 2012/19/EU’.

The study describes the fragmentation that exists in the market for battery-operated light means of transport with respect to their charging interoperability and the different market-led alternatives that are emerging.

The Commission is currently reflecting how to further promote interoperability for battery-operated light means of transport and intends to adopt a report in the first half of 2025.

⁽¹⁾ Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC, OJ L 157, 9.6.2006, p. 24.

⁽²⁾ Commission Implementing Decision (EU) 2024/1329 of 13 May 2024 amending and correcting Implementing Decision (EU) 2023/1586, OJ L, 2024/1329, 15.5.2024.

⁽³⁾ 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.

⁽⁴⁾ <https://op.europa.eu/en/publication-detail/-/publication/0f8e257e-8526-11ef-a67d-01aa75ed71a1/language-en>