

**CECAPI-CAPIEL interpretation of EU batteries regulation 2023/1542 article 11:
Removability and replaceability of portable batteries and LMT batteries for industrial
instrumentation & control equipment.**

Article 11 applies from 18th February 2027 and requires that PORTABLE BATTERIES¹ are readily removable by end-users without having to buy specialised tools. CECAPI and CAPIEL are fully supportive of the regulation's intention to extend product lifecycles by ensuring that equipment using batteries as a source of power are designed so that end-users can replace them, noting that INDUSTRIAL BATTERIES² are not subject to article 11.

However, protecting people is paramount and there are critical applications where it would compromise safety for untrained personnel to maintain equipment in this way. The Regulation provides partial derogations under Article 11(2), where it is sufficient that portable batteries are removable and replaceable by independent trained professionals:

- 11(2)a Safety equipment in wet environments to maintain waterproof integrity.
- 11(2)b Medical devices to protect patients.
- 11(2)f Industrial equipment for use in flammable atmospheres (products within the scope of 2014/34/EU ATEX).
- 11(2)c-h Additional derogations for specific products, added by the commission using Delegated Acts [article 11(4)].

and a full derogation under Article 11(3), where Article 11(1) does not apply.

- 11(3) For products that collect and supply data as their main function, where continuity of power supply and a permanent connection is required for data integrity considerations (see §1).
- 11(3) Safety critical devices where a permanent connection is required for the safety of the user and correct functioning of the appliance (see §2).

The decision tree in the annex is a simple way to follow the derogations.

1. Data integrity considerations

There are many types of equipment that collect and supply data as their main function, e.g. laboratory and process control equipment. In these applications, there are often small button or coin cells, soldered or welded to Printed Circuit Boards [PCBs] as back-up power for volatile memory or microchip clock functions. They are designed and manufactured in this way to ensure a permanent and reliable connection for data integrity reasons until treated as WEEE at the end of its life. They maintain critical data, such as test results or manufacturing data for traceability reasons, which needs to be maintained when the main power source is interrupted. Disconnection or incorrect fitment of back-up cells would compromise this. These small cells are not the main source of power for the equipment.

¹'PORTABLE BATTERY' means a battery that is sealed, weighs 5 kg or less, is not designed specifically for industrial use and is neither an electric vehicle battery, an LMT battery, nor an SLI battery.

²'INDUSTRIAL BATTERY' means a battery that is specifically designed for industrial uses, intended for industrial uses after having been subject to preparation for repurposing or repurposing, or any other battery that weighs more than 5 kg and that is neither an electric vehicle battery, an LMT battery, nor an SLI battery;

Commission guidelines (C/2025/214) published on the 10th January 2025 on the removability and replaceability of portable batteries clarifies this on page 8 under ‘Data integrity considerations’:

A similar case is batteries whose main function is to power a volatile memory itself or deliver backup functions in the internal clock of a device, such as CMOS (Complementary Metal-Oxide Semiconductor) batteries found in digital cameras, processors, sensors, and medical devices regardless of their class under Regulations (EU) 2017/745 and (EU) 2017/746 (e.g. blood glucose monitors or devices for dialysis treatments). In this case, continuity of power supply is also deemed necessary for data integrity reasons.

Therefore, it is the conclusion of CECAPI and CAPIEL members, that for small back-up cells described in the applications above, where a permanent, robust connection is necessary for data integrity, usually on a PCB within the equipment enclosure, the derogation described in clause 3 of article 11 [Data integrity considerations] applies.

It is worth noting that for products which have auxiliary clock real-time clock (RTC) functions for timing, alarms, notifications, etc... but the primary function is not data collection & transmission, this derogation 11(3) does not apply (as described in the DG Environment report).

2. Safety considerations

There are ‘safety-critical’ devices in electrical installations, permanently connected to mains power, where the functioning of the safety device may be compromised if end-users removed or replaced portable back-up batteries incorrectly, creating potentially hazardous situations when the main power source is interrupted. These batteries are designed and have proved to last significantly longer than the lifetime of the device.

Commission guidelines (C/2025/214) published on the 10th January 2025 on the removability and replaceability of portable batteries clarifies this on page 8 under ‘Safety considerations’:

Therefore, in smoke alarms which are designed for at least 10 years of uninterrupted operation matched by a battery with the same service life, and where continuity of power supply and a permanent connection between the product and the respective portable battery is required to ensure the safety of the user and the appliance, it is considered that the portable battery does not need to be removable and replaceable by the end-user.

Therefore, it is the conclusion of CECAPI and CAPIEL members, that for portable batteries described in the applications above, where the correct functioning of the safety device could be compromised if end-users removed or replaced these batteries incorrectly, the derogation described in item 3 of article 11 [Safety considerations] applies.

¹‘PORTABLE BATTERY’ means a battery that is sealed, weighs 5 kg or less, is not designed specifically for industrial use and is neither an electric vehicle battery, an LMT battery, nor an SLI battery.

²‘INDUSTRIAL BATTERY’ means a battery that is specifically designed for industrial uses, intended for industrial uses after having been subject to preparation for repurposing or repurposing, or any other battery that weighs more than 5 kg and that is neither an electric vehicle battery, an LMT battery, nor an SLI battery;

Disclaimer

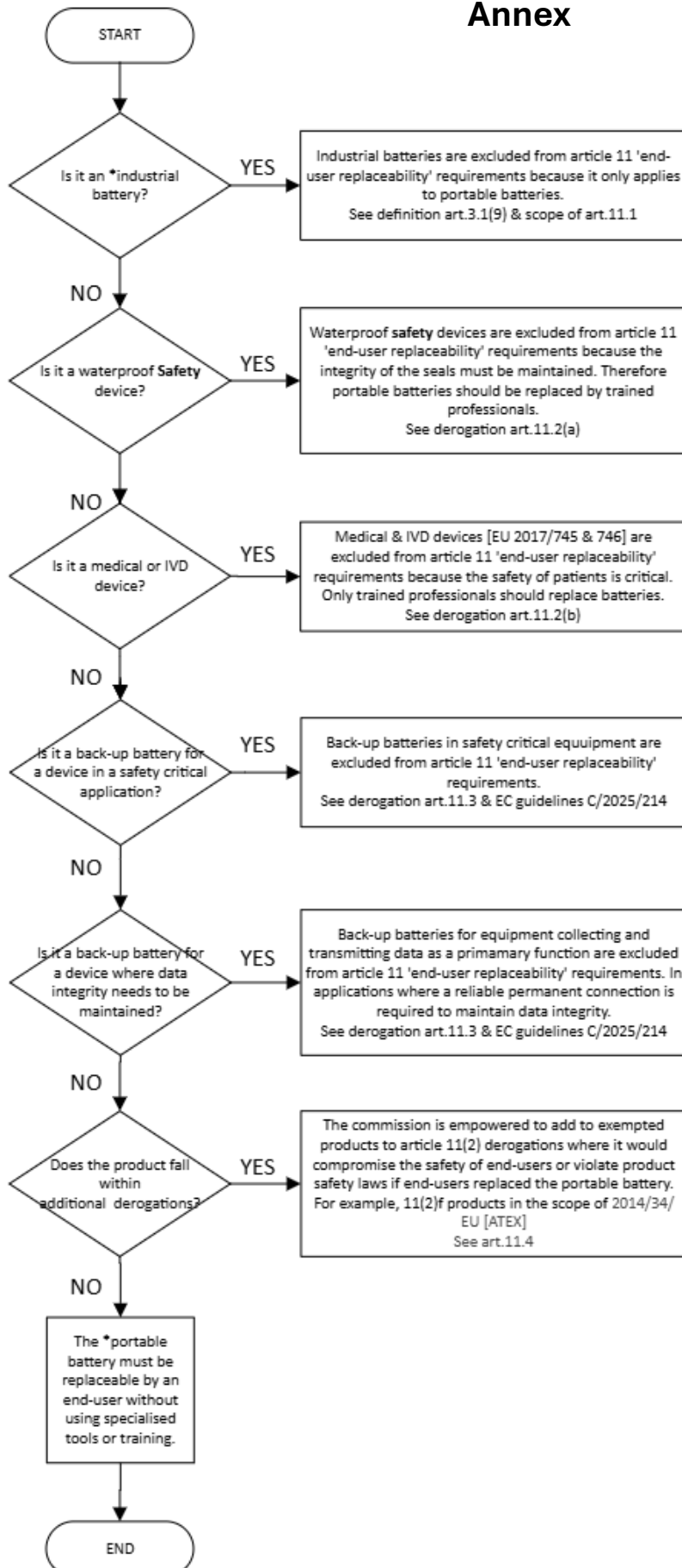
This document reflects the current technical interpretation and views of CECAPI and CAPIEL members based on extensive manufacturing experience and publicly available sources, including Regulation (EU) 2023/1542 and related Commission guidance.

It is provided for information purposes only and does not constitute legal advice. The decision tree and examples are illustrative and not exhaustive. Final interpretation of EU law rests with the Court of Justice of the European Union, and future EU guidance or delegated acts may change this interpretation.

References:

- a. [Regulation - 2023/1542 - EN - Batteries Regulation - EUR-Lex](#)
- b. The commission art.11 guidance: [EUR-Lex - 52025XC00214 - EN - EUR-Lex](#)
- c. The JRC article 11 report: [JRC Publications Repository - Technical input for the Guidelines on removability and replaceability of portable and Light Means of Transport batteries.](#)
- d. DG environment report on derogation applications: [Technical support to the adoption of delegated acts and Commission reports related to the new Batteries Regulation between 2024 and 2027 – Task 1 Report](#)

Annex



ABOUT US:

The scope of CECAPI covers all the equipment and components for electrical installations for residential and commercial use. It includes but is not limited to components for electrical installations and appliances (such as plugs, sockets, boxes, switches, fuses), cable management systems, home and building electronic systems products, intercom and video-intercom, circuit breakers and residual current devices.

CAPIEL is the Coordinating Committee for the Associations of Manufacturers of Switchgear and Controlgear equipment for industrial, commercial and similar use in the European Union.