



The EU Batteries Regulation (EU) 2023/1542 Region: EU

WHY IS THIS ALERT IMPORTANT?

If your company manufactures, produces, imports, or distributes any type of battery placed within the European Union (EU) market or is involved in waste batteries management within the EU, you are legally obligated to comply with Regulation (EU) 2023/1542 (the Regulation). The Regulation was published on 28 July 2023, entered into force on 17 August 2023, and will apply from 18 February 2024. The regulation will be implemented stepwise as stated in the different Articles.

This Regulatory Alert outlines the requirements for sustainability, safety, labeling, marking, and information needed to place batteries on the market or use within the EU, as specified in the Regulation. It also sets out the requirements for extended producer responsibility, collection and treatment of waste batteries, and reporting.

INTENDED AUDIENCE

This Regulatory Alert is intended for IAEG members and their suppliers who manufacture, produce, import, or distribute any type of battery placed on the EU market, or are involved in the collection and treatment of waste batteries within the EU.

EXECUTIVE SUMMARY

Regulation (EU) 2023/1542, also known as the Batteries Regulation, aims to improve the safety and minimize the environmental impact of batteries throughout their life cycle. The Regulation sets out rules on sustainability, safety, storage, labeling, marking, and information requirements to allow the placing on the market or putting into service of batteries. It also sets out minimum requirements for extended producer responsibility, collection and treatment of waste batteries, supply chain due diligence, and reporting. The requirements apply to all categories of batteries as described in the Applicability section of this alert.

BACKGROUND ON REGULATION

As a vital part of the European Commission's plans to achieve the EU Green Deal, the Circular Economy Action Plan, and the New Industrial Strategy, batteries are essential in today's tertiary economy. Regulation (EU) 2023/1542 builds on Directive 2008/98/EC, also known as the Waste Framework Directive, which establishes a legal framework for waste management in the EU to ensure the protection of human health and the environment. Starting from 18 August 2025, the Regulation will also replace the existing EU Battery Directive (Directive 2006/66/EC) that regulates the placing on the market, labeling, take-back, and disposal of all types of batteries and accumulators in the EU and sets limits for hazardous elements such as mercury and cadmium present in batteries and accumulators. The main objective of the Regulation is to further prevent and reduce the adverse effects of batteries on the environment.



APPLICABILITY

As stated in Article 1 of the Regulation, the requirements apply to all categories of batteries, namely portable batteries, starting, lighting and ignition batteries (SLI batteries), light means of transport batteries (LMT batteries) (e.g., electric bikes, e-mopeds, and e-scooters), electric vehicle batteries and industrial batteries, irrespective of their shape, volume, weight, design, material composition, chemistry, use or purpose. Batteries designed to be or incorporated into or added to products are also in scope. Exemptions apply to batteries incorporated into or specifically designed to be incorporated into equipment used for security purposes in the EU Member States and equipment designed to be sent into space.

The Regulation applies to all battery manufacturers, producers, importers, and distributors in the EU.

RELEVANT DATES

17 August 2023	In force, Regulation (EU) 2023/1542	
18 February 2024	Application, Regulation (EU) 2023/1542	
18 August 2024	Application, Article 17 (conformity assessment procedures) – Chapter VI (obligations of economic operators ¹ other than the obligations in Chapters VII and VIII), except for Article 17(2) that shall apply from 12 months after the date of the first publication of the list referred to in Article 30(2)	
18 February 2025	Guidelines publication date regarding the application of the due diligence requirements	
18 February 2025	Repeal of the current EU Battery Directive (Directive 2006/66/EC)	
18 August 2025	Application, Chapter VIII (management of waste batteries)	
18 August 2025	Application, Chapter VII (obligations of economic operators as regards battery due diligence policies)	
18 February 2027	Application, Article 11 (removability and replaceability of portable batteries and LMT batteries)	

REGULATORY OBLIGATIONS

In accordance with Article 5 of the Regulation, the sustainability and safety requirements set out in Articles 6, 7, 8, 9, 10, 12 and the labeling and information requirements set out in Chapter III must be met before placing batteries on the EU market.

Chapter II: Sustainability and safety requirements

Article 6 in conjunction with Annex I mandates that batteries, whether included or not included in appliances, light means of transport, or other vehicles, must not contain more than:

¹ Economic operator means the manufacturer, the authorized representative, the importer, the distributor or the fulfilment service provider or any other natural or legal person who is subject to obligations in relation to the manufacture, preparation for re-use, preparation for repurposing, repurposing or remanufacturing of batteries, the making available or the placing of batteries on the market, including online, or the putting of batteries into service in accordance with the Regulation.



- » 0.0005% mercury (EC No. 231-106-7; CAS No. 7439-97-6) and its compounds (expressed as mercury metal) by weight
- » 0.002% cadmium (EC No. 231-152-8; CAS No. 7440-43-9) and its compounds (expressed as cadmium metal) by weight
- » from 18 August 2024: 0.01% lead (EC No. 231-100-4; CAS No. 7439-92-1) and its compounds (expressed as lead metal) by weight in portable batteries, effective 18 August 2024
- » for portable zinc-air button cells effective 18 August 2028

The above-stated requirements are in addition to the restrictions set out in Annex XVII to Regulation (EC) No 1907/2006 and in Article 4(2), point (a), of Directive 2000/53/EC.

Article 7 requires a declaration of carbon footprint for each battery model per manufacturing plant for electric vehicle batteries, rechargeable industrial batteries with a capacity greater than 2 kilowatt hours (kWh), and LMT batteries. The carbon footprint declaration must accompany the battery until it becomes accessible via the QR code [Article 13(6)]. Per Article 7:

- » the carbon footprint declaration must contain the following information:
 - administrative information about the manufacturer
 - information about the battery model
 - information about the geographic location of the battery manufacturing plant
 - the carbon footprint of the battery, calculated as kilograms of carbon dioxide equivalent per one kWh of the total energy provided by the battery over its expected service life
 - the carbon footprint of the battery differentiated according to life cycle stage as described in point 4 of Annex II
 - a web link giving access to a public version of the study supporting the carbon footprint values referred to in the immediate two points above
 - the identification number of the EU declaration of conformity of the battery
- » the carbon footprint declaration will apply from the following dates:
 - 18 February 2025 for electric vehicle batteries
 - 18 February 2026 for rechargeable industrial batteries except those with exclusively external storage
 - 18 August 2028 for LMT batteries
 - 18 August 2030 for rechargeable industrial batteries with external storage

In addition, the Regulation will gradually introduce carbon footprint performance classes and maximum life cycle carbon footprint threshold. The details can be found in Article 7.



Article 8 mandates the utilization of technical documentation mentioned in Annex VIII. The technical documentation will be needed to demonstrate that electric vehicle batteries, SLI batteries, and industrial batteries with a capacity greater than 2 kWh (except those with exclusively external storage) contain a minimum percentage share content (see Table 1) of cobalt, lithium, nickel, and lead that has been recovered from battery manufacturing waste or post-consumer waste. This applies to each battery model per year and per manufacturing plant.

Starting from 18 August 2031	Starting from 18 August 2036
Cobalt: 16%	Cobalt: 26%
Lead: 85%	Lead: 85%
Lithium: 6%	Lithium: 12%
Nickel: 6%	Nickel: 15%

Table 1: The specified minimum percentage shares

Starting from 18 August 2028, **Article 9** requires portable batteries (excluding button cells) of general use to meet the minimum values for the electrochemical performance and durability parameters set out in Annex III.

Starting from 18 August 2024, **Article 10** requires rechargeable industrial batteries having a capacity greater than 2 kWh, LMT batteries, and electric vehicle batteries to be accompanied with documentation containing values for the electrochemical performance and durability parameters mentioned in Part A of Annex IV. The European Commission (EC) is required to adopt delegated acts, as per Article 89, to supplement this Regulation. These acts will establish minimum values for electrochemical performance and durability parameters outlined in Part A of Annex IV, applicable to rechargeable industrial batteries exceeding 2 kWh capacity (excluding those with exclusively external storage) and LMT batteries, respectively. Rechargeable industrial batteries exceeding 2 kWh in capacity (excluding those with exclusively external storage) must adhere to the minimum values specified in the adopted delegated acts starting from 18 August 2027. LMT batteries must comply with these values starting from 18 August 2028.

Starting from 18 February 2027, **Article 11** requires batteries to be readily removable and replaceable by the enduser at any time during the lifetime of a product that incorporates portable batteries, with accompanying instructions and safety information on the use, removal, and replacement of the batteries. This only applies to entire batteries, not to individual cells or other parts included in the batteries.

Starting from 18 August 2024, **Article 12** mandates that the technical documentation referenced in Annex VIII must demonstrate the safety of stationary battery energy storage systems (SBESS) during their normal operation and use. The documentation must include the following:

- » proof that SBESS has passed safety testing for the parameters laid out in Annex V
- » an evaluation of potential safety hazards associated with SBESS that are not covered in Annex V, along with evidence that such hazards have been successfully identified, minimized, and tested
- » instructions on how to mitigate the identified hazards if they occur, such as fire or explosion

Chapter III and Annex VI: Labeling, marking, and information requirements

Starting from 18 August 2026, or 18 months after the entry into force on an implementing act published under **Article 13**(10), whichever is latest, batteries must bear a label containing the information in Part A of Annex VI; other labeling obligations apply for specific battery types from this date (see Article 13(2) and Article 13(3)).



Starting from 18 August 2025, Article 13(4) requires all batteries to be marked with the "separate collection symbol" in Part B of Annex VI. starting from 18 February 2027, Article 13(6) requires all batteries to be marked with a QR code in accordance with Part C of Annex VI.

Article 13(5) mandates all batteries containing more than 0.002% cadmium or more than 0.004% lead to be marked with the chemical symbol for the metal concerned: Cd or Pb.

Chapter IV: Conformity of batteries

Article 18 requires manufacturers to create an EU declaration of conformity for batteries, affirming compliance with specific requirements outlined in Articles 6 to 10 and Articles 12, 13, and 14. The declaration should follow the structure outlined in Annex IX, incorporate elements from Annex VIII modules, and be regularly updated. It must be translated into the relevant language(s) and presented in electronic format, with a paper format available upon request. In cases involving multiple EU acts, a single declaration is necessary, specifying the acts and their references. Manufacturers bear responsibility for ensuring compliance by drafting the declaration. Consolidation of individual declarations from different EU acts is allowed, aiming to alleviate administrative burdens for economic operators, contingent on compliance with paragraph 3 provisions.

Batteries covered by this Regulation must be CE-marked in order to comply with conformity requirements. According to **Article 19**, the CE marking shall be subject to the general principles set out in Article 30 of <u>Regulation</u> (EC) No 765/2008. In addition, Article 20 sets out the rules and conditions for affixing the CE marking.

Chapter VI: Obligations of economic operators other than the obligations in Chapters VII and VIII

Article 38 outlines the obligations of manufacturers concerning batteries. These obligations are also applicable to importers and distributors. The specified manufacturers' obligations include but are not limited to the following:

- » manufacturers must ensure that batteries comply with specified design and labeling requirements as per Articles 6 to 10 and Articles 12 and 14, providing clear instructions and safety information in a language easily understood by end-users
- » batteries are to be marked and labelled in accordance with Article 13
- » before market placement, technical documentation as per Annex VIII must be prepared, and a conformity assessment procedure must be conducted; the EU declaration of conformity and CE marking are mandatory after a successful assessment
- » manufacturers are required to retain technical documentation and the EU declaration of conformity for ten years, ensuring series production batteries remain compliant with the regulation, considering changes in production processes or battery characteristics; each battery must bear a model identification and contact details of manufacturers should be provided on the battery or its packaging
- » manufacturers must grant access to data for parameters in Annex VII within the battery management system
 - in case of non-compliance, manufacturers are obligated to take corrective actions, withdraw, or recall the battery and inform the relevant market surveillance authority
 - cooperation with national authorities is essential, providing necessary information in electronic and paper formats upon request
- » economic operators engaged in preparation for re-use, preparation for repurposing, repurposing, or remanufacturing, and subsequently placing such modified batteries on the market or into service, are deemed manufacturers under the scope of this Regulation



Additionally, the obligations assigned to manufacturers are mostly applicable to importers and distributors. Detailed obligations for importers and distributors can be found in **Article 41** and **Article 42**, respectively.

Chapter VII - Obligations of economic operators as regards battery due diligence² policies

Starting from 18 August 2025, economic operators that place batteries on the market or put them into service in the EU must fulfill certain due diligence obligations. These include but are not limited to the following:

- » battery due diligence policies must be applied and maintained per Articles 49, 50, and 52, and verified and periodically audited by a notified body in accordance with Article 51
 - guidelines as regards the application of the due diligence requirements will be published by the EC on 18 February 2025
 - necessary documents verifying the specified obligations fulfillment must be kept for 10 years after the last battery manufactured under the relevant battery due diligence policy has been placed on the market
- » Article 49 specifies that economic operators must adopt and clearly communicate to suppliers and the public due diligence policies relating to the supply of the raw materials listed in point 1 of Annex X³ and associated social and environmental risk categories listed in point 2 of Annex X
- » company's battery due diligence policy standards must implement the standards set out in the internationally recognized due diligence instruments listed in point 4 of Annex X, which includes <u>OECD</u> <u>Due Diligence Guidelines</u>, and the <u>United Nations Guiding Principles on Business and Human Rights</u>

Chapter VII does not apply to economic operators that had a net turnover of less than EUR 40 million in the financial year preceding the last financial year, and that are not part of a group consisting of parent and subsidiary undertakings, which, on a consolidated basis, exceeds the limit of EUR 40 million.

Chapter VIII - Management of waste batteries (applies from 18 August 2025)

According to **Article 55** and **Article 58**, producers are required to register in each Member State where they make a battery available on the market for the first time and must apply for authorization from the competent authority on the fulfillment of their extended producer responsibility obligations. A producer⁴ is required to maintain records, including the origin of purchased batteries and the recipients of sold batteries.

Articles 59, 60, and 61 outline the requirements for the collection of waste portable batteries, waste LMT batteries, waste SLI batteries, waste industrial batteries, and waste electric vehicle batteries by producers or producer responsibility organizations. Key provisions include but are not limited to the following:

- » the establishment of a collection system, free-of-charge collection services, practical arrangements for transportation, and the obligation to treat collected batteries in permitted facilities
- » producers must collaborate with various entities to ensure comprehensive coverage across the Member State, considering factors like population size and accessibility

² Based on the Organization for Economic Co-operation and Development (OECD) definition, due diligence is the process through which an organization identifies, prevents, mitigates, and accounts for how it addresses its actual and potential adverse impacts which can be related to employment, human rights, the environment, bribery, and consumers.

³ They include cobalt, natural graphite, lithium, nickel, and other chemical compounds.

⁴ A producer may encompass the roles of manufacturer, importer, or distributor (including distance contracts).



- » collection targets are set for different timeframes, and end-users are entitled to discard waste batteries at designated points without additional charges or purchase obligations
- » the EC has the authority to adjust collection methodologies and targets by delegated acts if needed

Chapter IX - Digital battery passport

Starting from 18 February 2027, each LMT battery, each industrial battery with a capacity greater than 2 kWh, and each electric vehicle battery that is sold or used must have an electronic record, which is called a "battery passport" (Article 77). The battery passport must contain the information outlined in Annex XIII. The economic operator placing the battery on the market is responsible for ensuring up-to-date, accurate, and complete information in the battery passport. This economic operator has the option to grant written authorization to another operator, allowing them to act on its behalf in this regard. Once the battery has been recycled, the battery passport will no longer be valid.

RISKS TO AEROSPACE AND DEFENSE

Penalties for non-compliance with the Regulation will be determined by Member States by 18 August 2025, as mentioned in Article 93.

AFFECTED REGULATIONS

- » From 18 August 2025, this Regulation repeals <u>Directive 2006/66/EC</u>, subject to the transitional provisions in Article 95. Annex XV outlines how this Regulation corresponds to Directive 2006/66/EC.
- » Regulation (EU) 2019/1020, on the market and surveillance of products from third countries, is amended to include batteries and economic operators affected by this Regulation.
- » <u>Directive 2008/98/EC</u>, the Waste Framework Directive, is amended to ensure that extended producer responsibility schemes established before 4 July 2018 apply to batteries in the scope of this Regulation.

USEFUL LINK

Regulation (EU) 2023/1542

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